

Appendix A: Proposal Package Checklist

1. Electronic Submission of Proposal to:
 - a. ebids_proposals@dpp.vi.gov
 - b. Subject line contains- **Company's Name- Solicitation Number and Due Date.**
 - c. File format: PDF- in a single PDF file that include each of the following:
 - i. Introductory Cover Letter;
 - ii. Executive Summary with Key Staff
 - iii. Title Page
 - iv. Table of Contents
 - v. Firm Background and Experience
 - vi. Current Business License
 - vii. Current Tradename Registration Certificate
 - viii. Certificate of Good Standing
 - ix. Certificate of Resolution/Memorandum Authorizing Signatory on Company letterhead
 - x. Copy of SAM.GOV registration
 - xi. Proof of DUNs number registration
 - xii. Articles of Incorporation/Articles of Organization/Limited Partnership Agreement
 - xiii. Staffing;
 - xiv. Subcontractors
 - xv. Firm background and Experience;
 - xvi. Project Approach;
 - xvii. Acknowledgement of Addenda, if any;
 - xviii. Exceptions to the Terms and Conditions Specified in the RFP and General Contract Provisions;
 - xix. Insurance Requirements;
 - xx. Reference letters;
 - xxi. Cost proposal;
 - xxii. Appendix A: Proposal Package Checklist;
 - xxiii. Appendix B: Cost Proposal
 - xxiv. Appendix C: Respondent's Qualification Statement/Minimum Qualification Question
 - xxv. Appendix D: Certification of Information
 - xxvi. Appendix E: Women and Minority Owned Business Enterprises Participation Plan
 - xxvii. Appendix F: GVI Non-Collusive Affidavit

- xxviii. Appendix G: Debarment Certification Form
- xxix. Appendix H: Acknowledgment of any Addenda
- xxx. Appendix I: Virgin Islands Housing Finance Authority Conflict of Interest
- xxxi. Appendix J: General Contract Terms and Provisions
- xxxii. HUD General Provisions
- xxxiii. Attachment 1- HUD Rider
- xxxiv. Attachment 2: Utility Scope of Work/Maps/
- xxxv. Attachment 3 Underground Distribution
- xxxvi. Attachment 4 Construction Standards

Appendix B: Cost Proposal

The Respondent shall complete and submit a cost proposal. The proposed cost shall provide a fixed price for all services associated with each deliverable of the Project. Please use the attached Bid Sheet.

COST PROPOSAL BASE BID SHEET

**Design and Engineering Related to Donoe Bypass Improvements
Project**

The undersigned Respondent proposes to furnish all labor, tools, materials, equipment, miscellaneous supplies and incur any other overhead costs as may be required to perform the scopes of work, subject to all the conditions as set forth in the project scope of work.

<u>Description of Work</u>	<u>Lump Sum Cost</u>
Survey ¹	\$ _____
Environmental / NEPA ²	\$ _____
Electrical Distribution ³	\$ _____
Roadway ⁴	\$ _____
FEMA HMGP Phase 1 ⁵	\$ _____
TOTAL BID AMOUNT⁶	\$ _____

Notes:

1. Includes providing a complete existing conditions analysis, Topographic Survey, Land/Parcel Survey and establish the public Right-Of-Way.
2. Includes the preparation of an environmental assessment along with all required studies, public notices, public meetings, and reports.
3. Includes engineering and preparation of PS&E related to the Donoe Underground Project (attachment 2)
4. Includes engineering and preparation of PS&E related to the roadway improvements along Routes 39 and 40 not included in other bid items.
5. Includes technical feasibility study, cost effectiveness analysis, environmental review, and the preparation of PS&E for the proposed mitigation work.
6. The total sum of items of work and includes all work required to complete the project.

NAME: _____
OWNER, PRESIDENT OR CEO

COMPANY: _____

SIGNATURE: _____

Appendix C: Respondent's Qualification Statement

Respondent's Qualification Statement

Name of License Holder: _____
Name of Company/DBA (if any): _____
Legal Status: (check one) Corporation LLC Sole Proprietorship Partnership
Business Location (office): _____
Mailing Address: _____
Telephone Number: _____ Fax Number: _____ Email: _____
Website address (if any): _____

Type of License(s) _____
Number of Architectural & Engineering Services completed in the last 5 Years _____, Average value of these Contracts \$ _____
Do you have plan to use Subcontractors? Yes No If yes, company _____

Have you ever failed to complete a project, been fired, sued by one of your clients and/or found in default of contract terms? Yes No
If yes, explain on another sheet, of other means were used to resolve the issue and the circumstances and the outcome.
Are there or have there been any; Claims, Arbitration, Judgments or Liens against you? Yes No
If yes, explain on another sheet, the circumstances and outcome.

List three non-GVI references that can be contacted for their input concerning your abilities:

- 1) Client Name _____ Contact Number _____
- 2) Client Name _____ Contact Number _____
- 3) Client Name _____ Contact Number _____

List your current Projects under Contract (Project Title or Clients Name), Value (Contract Value) and Percentage of Completion:

- 1) Client Name _____ Value: _____ % _____
- 2) Client Name _____ Value: _____ % _____
- 3) Client Name _____ Value: _____ % _____

(If you have more contracts, please list on separate sheet)

Respondent shall certify that the above information is true and shall grant permission to the GVI to contact the above-named person or otherwise verify the information provided.

Name and Title of Authorized Representative: _____

Signature

Date

Minimum Qualifications Questionnaire

MINIMUM QUALIFICATIONS QUESTIONNAIRE	
Criteria	Description / Location in Proposal
The ability and resources to perform the scope of services, including at least ten (10) years' experience in providing design services similar to those called for in the scope of services; provide references of specific projects as part of the proposal.	
Consultant shall have served as lead design contractor overseeing consultants of various disciplines and have experience managing multidisciplinary teams on large scale roadway projects completed within the ten (10) years immediately preceding this RFP.	
Experience with programs that utilize FEMA or Federal funding and the ability and resources to ensure compliance with all applicable funding requirements.	
While experience working within the Virgin Islands is preferred it is not required; however, comparable experience working with roadway design in excess of Fifty million dollars is required.	

By: _____ Date: _____

Name: _____ Title: _____

Contractor Name: _____

Appendix D: Certification of Information

The undersigned, on behalf of the company named below, hereby represents and certifies to the best of their knowledge that:

1. The information contained in the enclosed response is accurate and truthful as it relates to this Request for Proposal for Design Professional Services.
2. Compliance to all applicable laws, regulation, or ordinances of applicable Federal, State, and other governmental or regulatory agencies, which have jurisdiction, will continually be maintained.
3. Unless fully disclosed in the response, the information submitted was not prepared in conjunction or cooperation with any other company and or individual.
4. The firm named below unconditionally accepts all terms and conditions listed in this request for proposal, unless fully disclosed in the response.
5. They have examined the Request for Proposal, drawings, and related documents, and hereby submit the following Proposal for Design Professional Services and doing all things necessary for the satisfactory completion of the work in accordance with said documents required for the analysis and design of renovations and expansions at the project premises.
6. The individual signing this form is an officer of the firm and is authorized to sign agreements on behalf of the company.
7. They agree to commence work under this contract within five (5) days of receipt of written "Notice to Proceed" from GVI and to substantially complete the entire work of the contract as specified.
8. This proposal shall hold for and may not be withdrawn for a period of thirty (30) calendar days from the Proposal due date.
9. They have received of all addenda to the Request for Proposal, all of the provisions and requirements of which addenda have been taken into consideration in preparation of this Proposal.
10. No claim will be made on account of any increased wage, scale, material prices, taxes, insurance, cost indexes, or material prices.
11. GVI reserves the right to reject any or all bids and to waive any formality in the bidding.

Date: _____

Signed: _____

Name: _____

Title: _____

Name of Firm: _____

Organized as a (mark one):

_____ Sole Proprietorship _____ Partnership _____ Corporation Under the Law of

the State of: _____

Legal Address: _____

Telephone: _____

Facsimile: _____

Web: _____

If a corporation, indicate the state of incorporation, if a partnership, enumerate all partners. Current, valid Insurance Certificates and Union Cards for all trades are required for this project, and must be forwarded to the Vice President, Territorial Capital Projects for file record following award.

Appendix E: Women & Minority Owned Business Enterprise Participation Plan

E.1 Subcontractor Participation Plan

Check one: Initial Plan Amended Plan

The purpose of this form is to ensure that appropriate planning and consideration go into the subcontractor utilization process, and to serve as documentation of your commitment to comply with MWBE requirements for this project. Please complete and sign this form and submit with the proposal package.

I affirm the following statements are true and accurate:

1. I have read and understand the MWBE requirements of the project.
2. I will make and thoroughly document good faith efforts to meet MWBE requirements.
3. This Subcontractor Participation Plan lists all subcontractors I intend to use, including non-MWBE firms. I understand the Intent to Perform as Subcontractor form, which verifies subcontractors have been contacted and intend to participate in this project, must be submitted for each contractor with this form.
4. I understand that I must submit an amended Subcontractor Participation Plan if there are any changes to the information provided herein.
5. Upon request, I will provide Virgin Islands State Division of Homeland Security and Emergency Services (DHSES) with proof of payments made to subcontractors.
6. **FOR CONSTRUCTION CONTRACTS ONLY.** I must submit a separate Subcontractor Participation Plan for each direct subcontractor listed below who will retain second-tier subcontractors. Each direct subcontractor plan should be received prior to the date that subcontractor commences work on the project. If a direct subcontractor on this form is not subcontracting out part of its work, it must submit a Self-Perform Statement in lieu of a plan.

Authorized Person

Date

Subcontractor Information

Business Name	MWBE Certified (Y/N)	Award Amount	Services to be Provided	Anticipated Start Date

E.2 Intent to Perform as Subcontractor

Respondent/ Prime Contractor		Subcontractor	
Name		Name	
Address		Address	
Phone		Phone	
Federal Id Number		Federal Id Number	
Contract/RFP Number			
Projected Start Date			
Projected Completion Date			
Work to be Performed			
Price of Work to be Performed			

Certification

The Contractor hereby commits to hiring the Subcontractor, and the Subcontractor hereby affirms its intent to participate on the project. The Contractor must notify Roy University Medical Center of any changes to the information provided herein. By signing below, each party certifies that the above information is true and accurate. Providing false or misleading information shall be grounds for the application of any applicable criminal and/or civil penalties for perjury.

 Contractor Signature

 Date

 Contractor Title

 Subcontractor Signature

 Date

 Subcontractor Title

E.3 Self-Perform Statement

This project has Minority and Women Owned Business Enterprise (MWBE) goals. Any subcontracting must be reported by filling out the Subcontractor Participation Plan and submitting to your Prime Contractor. If your business will be self-performing all of the work assigned under this contract, an authorized representative must sign below and submit to your Prime Contractor. Signing below is an acknowledgment that if circumstances change and subcontracting does occur, a Subcontractor Participation Plan must be submitted immediately else payment may be withheld.

I have read and understand the above state, and I affirm that business (name of business) _____ will be executing 100 percent of the work assigned to it by (Prime Contractor) _____ under the _____ (Project Location name) Redevelopment Project, and thus will not be subcontracting any work.

Authorized Signature

Date

Print Name

Title

Appendix F:

**GOVERNMENT OF THE VIRGIN ISLANDS
DEPARTMENT OF PROPERTY AND PROCUREMENT**

NON-COLLUSION AFFIDAVIT

— 0 —

..... being duly sworn, deposes and says that –

(1) He is [owner, partner, officer, representative, or agent] of.....

..... the bidder that has submitted that attached bid;

(2) He is duly informed respecting the preparation and contents of the attached bid and of all pertinent circumstances respecting such bid;

(3) Such bid is genuine and is not a collusive or sham bid;

(4) Neither the said bidder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit or cost element of the price or the bid price of any other bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against The Government of the Virgin Islands or any person interested in the proposed contract; and

(5) The price or prices quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

Signature of Affidavit

SUBSCRIBED AND SWORN to before me this....., day of

Notary Public

Appendix G:

**GOVERNMENT OF THE VIRGIN ISLANDS
DEPARTMENT OF PROPERTY AND PROCUREMENT**

DEBARMENT CERTIFICATION FORM

Certification Regarding Debarment, Suspension and Ineligibility

- (1) The Respondent certifies, by submission of this solicitation, that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in any federal or local programs in the Territory or any Federal department or agency.
- (2) Signing this Certification without disclosing all pertinent information about a debarment or suspension shall result in rejection of the offer or cancellation of a contract. The GVI may also exercise any other remedy available by law.
- (3) Where the Respondent is unable to certify to any of the statements in this certification, such Respondent shall attach an explanation to this solicitation.

Name and Title of Authorized Representative:

Signature

Date

Subscribed and sworn to before me on the Island of _____, this _____ day
of _____, 2020, by _____ of legal age,

(Trade or Corporation)

and personally, known to me.

(SEAL)

Notary Public

Appendix H- Acknowledgment of any Addenda

RESPONDENT

Name: _____

Address: _____

Tax Identification #: _____

RESPONDENT 'S CONTACT PERSON

Name: _____

Title: _____

Telephone: _____

SCHEDULE OF ADDENDA

(I) or (We) acknowledge receipt of the Addenda to the RFP Package hereinafter named, for the project(s) included in this RFP and declare that (I) or (We) accept these Addenda and that every change is included in this proposal.

Addendum Number _____ Date _____

Addendum Number _____ Date _____

Addendum Number _____ Date _____

Addendum Number _____ Date _____

RESPONDENT 'S AUTHORIZED REPRESENTATIVE

Name: _____

Title: _____

Signature: _____ Date: _____

Appendix I- Virgin Islands Housing Finance Authority Conflict of Interest

By signing this form, the Respondent certifies that, to the best of its knowledge and belief, there are no relevant facts or circumstances that could give rise to an organizational or personal conflict of interest, for the organization or any of its staff, and that the Respondent, subcontractor, employee, or consultant has disclosed all such relevant information if such a conflict of interest appears to exist to a reasonable person with knowledge of the relevant facts (or if such a person would question the impartiality of the Respondent, subcontractor, employee, or consultant).

Conflicts may arise in but not limited to the following situations:

- a. Unequal access to information. A potential respondent, subcontractor, employee, or consultant has access to non-public information through its performance on a government contract for disaster recovery services in the Virgin Islands.
 - b. Biased ground rules. A potential respondent, subcontractor, employee, or consultant has worked, in one government contract, or program, on the basic structure or ground rules of another government contract for disaster recovery services in the Virgin Islands.
 - c. Impaired objectivity. A potential respondent, subcontractor, employee, or consultant, or member of their immediate family (spouse, parent, or child) has financial or other interests that would impair, or give the appearance of impairing, impartial judgment in the evaluation of government programs, in offering advice or recommendations to the government, or in providing technical assistance or other services to recipients of Federal funds as part of its contractual responsibility.
- 1) Proposer must provide the disclosure described above on any actual or potential conflict of interest (or apparent conflict of interest) regardless of their opinion that such a conflict or potential conflict (or apparent conflict of interest) would not impair their objectivity.
 - 2) In a case in which an actual or potential conflict (or apparent conflict of interest) is disclosed, the VIHFA will take appropriate actions to eliminate or address the actual or potential conflict, including but not limited to mitigating or neutralizing the conflict, when appropriate, through such means as ensuring a balance of views, disclosure with the appropriate disclaimers, or by restricting or modifying the work to be performed to avoid or reduce the conflict. In this clause, the term “potential conflict” means reasonably foreseeable conflict of interest.
 - 3) The Respondent, subcontractor, employee, or consultant agrees that if “impaired objectivity”, or an actual or potential conflict of interest (or apparent conflict of interest) is discovered after the award is made, it will make a full disclosure in writing to the contracting officer. This disclosure shall include a description of actions that the Proponent has taken or proposes to take to avoid, mitigate, or neutralize the actual or potential conflict (or apparent conflict of interest).

The Respondent, _____, hereby certifies that, to the best of its knowledge and belief, there are no present or currently planned interests (financial, contractual, organizational, or otherwise) relating to the work to be performed under the contract or task order resulting from Request for Proposal No. **RFP-045-T-2020 (P)** that would create any actual or potential conflict of interest (or apparent conflicts of interest) (including conflict of interest for immediate family members: spouses, parents, children) that would impinge on its ability to render impartial, technically sound, and objective assistance or advice or result in it being given an unfair competitive advantage. In this clause, the term “potential conflict” means reasonably foreseeable conflict of interest. The Respondent further certifies

RFP-045-T-2020 (P)

Department of Public Works

Design Services for Improvements to Donoe Bypass

that it has and will continue to exercise due diligence in identifying and removing or mitigating, to the VIHFA's satisfaction, such conflict of interest (or apparent conflict of interest).

Name and Title of Authorized Representative

Signature

Date

RFP-045-T-2020 (P)
Department of Public Works
Design Services for Improvements to Donoe Bypass

Appendix J- General Contract Terms and Conditions for each Project

CONTRACT FOR PROFESSIONAL SERVICES

THIS AGREEMENT is made this _____ day of _____, 20____, in the Territory of the Virgin Islands, by and between the Government of the Virgin Islands, Department of Property and Procurement, on behalf of the [User Agency] (hereinafter referred to as "Government") and [Insert Contractor/Company name as it appears on the formation documents (i.e. articles of incorporation)] (hereinafter referred to as "Contractor").

WITNESSETH:

WHEREAS, the Government is in need of the services of a Contractor to [Insert summary of scope of services], which duties and responsibilities are more particularly described in Addendum I (Scope of Services) attached hereto; and

WHEREAS, the Government solicited the services under RFP No. _____; and

WHEREAS, the Contractor represents that it is willing and capable of providing such services; and

NOW, THEREFORE, in consideration of the mutual covenants herein contained, and intending to be legally bound by this written instrument, the parties hereto do covenant and agree as follows:

1. SERVICES

The Contractor will provide the services described in Addendum I (Scope of Services) attached hereto and made a part of this contract.

2. TERM

This Contract shall commence upon the execution of this Contract by the Commissioner of the Department of Property and Procurement and shall terminate [insert NUMBER OF DAYS or years in words and numerals] thereafter. The Government in its sole discretion, shall have the option to renew this Contract for a period of one (1) additional year subject to the same terms noted herein, by providing the Contractor with sixty (60) days written notice of the Government's election to renew.

3. COMPENSATION

The Government, in consideration of the satisfactory performance of the services described in Addendum I (Scope of Services), agrees to pay Contractor a sum not to exceed [insert value of contract in words] [(\$insert value of contract in numerals)] in accordance with the provisions set forth in Addendum II (Compensation) attached hereto and made a part of this contract.

4. TRAVEL EXPENSES

Inclusive of the compensation for services as specified in Paragraph 3 (Compensation) above, the Government agrees to pay documented transportation, subsistence, lodging and other travel expenses, while in travel status, for trips which have been authorized in writing, in advance, by the Government. These costs shall be advanced or reimbursed on the same basis as is applicable to non-contract employees of the

Government, or as agreed to by an addendum to this Contract, however, said costs and expenses shall not exceed _____ N/A (\$ N/A).

5. RECORDS

The Contractor when applicable, will present documented precise records of time and/or money expended under this Contract.

6. PROFESSIONAL STANDARDS

The Contractor agrees to maintain the professional standards applicable to its profession and to consultants doing business in the United States Virgin Islands.

7. DOCUMENTS, PRINTOUTS, ETC.

All documents, books, records, instructional materials, programs, printouts and memoranda of every description derived therefrom and pertaining to this Contract shall become the property of the Government and shall be turned over to it at the termination of this Contract. The above described materials shall not be used by Contractor or by any other person or entity except upon the written permission of the Government.

8. LIABILITY OF OTHERS

Nothing in this Contract shall be construed to impose any liability upon the Government to persons, firms, associations, or corporations engaged by Contractor as servants, agents, or independent contractors, or in any other capacity whatsoever, or make Government liable to any such persons, firms, associations, or corporations for the acts, omissions, liabilities, obligations and taxes of Contractor of whatsoever nature, including but not limited to unemployment insurance, gross receipt, excise, and social security taxes for Contractor, its servants, agents or independent contractors.

9. ASSIGNMENT

The Contractor shall not subcontract or assign any part of the services under this Contract without the prior written consent of the Government.

10. INDEMNIFICATION

Contractor agrees to indemnify, defend and hold harmless Government from and against any and all loss, damage, liability, claims, demands, detriments, costs, charges and expenses (including attorney's fees) and causes of action of whatsoever character which Government may incur, sustain or be subjected to, arising out of or in any way connected to the services to be performed by Contractor under this Contract and arising from any cause, except the sole negligence of Government.

11. INDEPENDENT CONTRACTOR

The Contractor shall perform this Contract as an independent contractor and nothing herein contained shall be construed to be inconsistent with this relationship or status.

12. GOVERNING LAW

This Contract shall be governed by the laws of the United States Virgin Islands and jurisdiction shall remain in the United States Virgin Islands.

13. WAIVERS AND AMENDMENTS

No waiver, modification or amendment of any term, condition, or provision of this Contract shall be valid or of any force or effect unless made in writing, signed by the parties hereto or their duly authorized representatives, and specifying with particularity the nature and extent of such waiver, modification or amendment. Any such waiver, modification or amendment in any instance or instances shall in no event be construed to be a general waiver, modification or amendment of any of the terms, conditions or provisions of this Contract, but the same shall be strictly limited and restricted to the extent and occasion specified in such signed writing or writings.

14. ENTIRE AGREEMENT

This agreement constitutes the entire agreement of the parties relating to the subject matter addressed in this Agreement. This agreement supersedes all prior communications, contracts, or agreements between the parties with respect to the subject matter addressed in this agreement, whether written or oral.

15. RIGHT TO WITHHOLD

If work under this Contract is not performed in accordance with the terms hereof, Government will have the right to withhold out of any payment due to Contractor, such sums as Government may deem ample to protect it against loss or to assure payment of claims arising therefrom, and, at its option, Government may apply such sums in such manner as Government may deem proper to secure itself or to satisfy such claims. Government will immediately notify the Contractor in writing in the event that it elects to exercise its right to withhold.

No such withholding or application shall be made by Government if and while Contractor gives satisfactory assurance to Government that such claims will be paid by Contractor or its insurance carrier, if applicable in the event that such contest is not successful.

16. CONDITION PRECEDENT

This Contract shall be subject to the availability and appropriation of funds and to the approval of the Commissioner of the Department of Property and Procurement.

17. TERMINATION

Either party will have the right to terminate this Contract with or without cause on [insert number of days in words] [(insert number of days in numerals)] days written notice to the other party specifying the date of termination.

18. PARTIAL TERMINATION

The performance of work under this Contract may be terminated by the Government, in part, whenever the Government shall deem such termination advisable by providing [insert number of days in words] [(insert number of days in numerals)] days written notice to the Contractor. This partial termination shall be effected by delivering to the Contractor a Notice of Partial Termination specifying the extent to which the term and/or duties under this Contract are terminated and the date upon which such termination becomes effective. The Contractor shall be entitled to receive payment for services provided to the date of termination, including payment for the period of the [insert number of days in words] [(insert number of days in numerals)] day notice.

19. NON-DISCRIMINATION

No person shall be excluded from participating in, be denied the proceeds of or be subject to discrimination in the performance of this Contract on account of race, creed, color, sex, religion, disability or national origin.

20. CONFLICT OF INTEREST

- (a) Contractor covenants that it has no interest and will not acquire any interest direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Contract.
- (b) Contractor further covenants that it is:
 - (1) not a territorial officer or employee (i.e., the Governor, Lieutenant Governor, member of the Legislature, or any other elected territorial official; or an officer or employee of the legislative, executive or judicial branch of the Government or any agency, board, commission or independent instrumentality of the Government, whether compensated on a salary, fee or contractual basis); or
 - (2) a territorial officer or employee and, as such, has:
 - (i) familiarized itself with the provisions of Title 3, Chapter 37 of the Virgin Islands Code, pertaining to conflicts of interest, including the penalties provision set forth in section 1108 thereof;
 - (ii) not made, negotiated or influenced this Contract, in its official capacity; and
 - (iii) no financial interest in the Contract as that term is defined in section 1101(1) of said Code chapter.

21. EFFECTIVE DATE

The effective date of this Contract shall be the day of execution of the Contract by the Commissioner of the Department of Property and Procurement.

22. NOTICE

Any notice required to be given by the Terms of this Contract shall be deemed to have been given when the same is sent by certified mail, postage prepaid or personally delivered, addressed to the parties as follows:

GOVERNMENT

Anthony D. Thomas
Commissioner
Department of Property and Procurement
8201 Sub Base, Suite 4
St. Thomas Virgin Islands 00802

[NAME & TITLE]
[USER AGENCY]
[AGENCY'S PHYSICAL ADDRESS]
[AGENCY'S MAILING ADDRESS]
[CITY. STATE. ZIP CODE]

CONTRACTOR

[NAME]
[TITLE]
[NAME OF COMPANY]
[PHYSICAL ADDRESS]
[MAILING ADDRESS]
[CITY, STATE, ZIP CODE]

23. LICENSURE

The Contractor covenants that it has:

- (a) obtained all of the applicable licenses or permits, permanent, temporary or otherwise as required by Title 27 of the Virgin Islands Code; and
- (b) familiarized itself with the applicable provisions of Title 27 of the Virgin Islands Code pertaining to professions and occupations.

24. OTHER PROVISIONS

Addenda I, II and III attached hereto are a part of this Contract and are incorporated herein by reference.

25. DEBARMENT CERTIFICATION

By execution of this contract, the contractor certifies that it is eligible to receive contract awards using federally appropriated funds and that it has not been suspended or debarred from entering into contracts

with any federal agency. The Contractor shall include this provision in each of its subcontracts hereunder and shall furnish its subcontractors with the current “LIST OF PARTIES EXCLUDED FROM FEDERAL PROCUREMENT OR NON PROCUREMENT”. In the event the Contractor or any subcontractor misrepresents its eligibility to receive contract awards using federal funds, the Contractor or subcontractor agrees that it shall not be entitled to payment for any work performed under this contract or any subcontract and that the Contractor or subcontractor shall promptly reimburse the Government of the Virgin Islands for any progress payments heretofore made.

26. FALSE CLAIMS

Contractor warrants that it shall not, with respect to this Contract, make or present any claim upon or against the Government of the Virgin Islands, or any officer department, board, commission, or other agency thereof, knowing such claims to be false, fictitious or fraudulent. Contractor acknowledges that making such a false, fictitious or fraudulent claim is an offence under Virgin Islands law.

27. NOTICE OF FEDERAL FUNDING

Contractor acknowledges that this Contract is funded, in whole or in part, by federal funds. Contractor warrants that it shall not, with respect to this Contract, make or present any claim knowing such claim to be false, fictitious, or fraudulent. Contractor acknowledges that making such a false, fictitious, or fraudulent claim is a federal offence.

28. INSURANCE

Contractor shall maintain the following insurance coverages during the term of this Contract

- (a) **COMMERCIAL GENERAL LIABILITY:** Commercial general liability insurance, in a form acceptable to the Government, on a “per occurrence” basis with a minimum limit of not less than **one million dollars (\$1,000,000.00)** for any one person per occurrence for death or personal injury and **one million dollars (\$1,000,000.00)** for any one occurrence for property damage. Insurance policy(ies) shall name the Government of the Virgin Islands as the certificate holder and additional insured via an endorsement.
- (b) **PROFESSIONAL LIABILITY:** Professional liability insurance, in a form acceptable to the Government, which covers the services being performed under this Contract, with policy limits of not less than **one million dollars (\$1,000,000.00)** per claim. The Government shall be listed thereon as a certificate holder.
- (c) **WORKERS’ COMPENSATION:** Contractor shall supply current coverage under the Government Insurance Fund or other form of coverage.
- (d) **COMMERCIAL AUTOMOBILE LIABILITY (when applicable):** Respondent shall carry automobile liability insurance, including all owned, non-owned, scheduled, and hired autos with the following minimum limits and coverage of Single Limit - \$1,000,000.00

IN WITNESS WHEREOF, the parties have hereunto set their hands on the day and year first above written.

WITNESSES: GOVERNMENT OF THE VIRGIN ISLANDS

[NAME] [TITLE] Date

[USER AGENCY]

Anthony D. Thomas, Commissioner Date

Department of Property and Procurement

CONTRACTOR

[NAME] [TITLE] Date

[NAME OF COMPANY]

(Corporate seal, if Contractor is a corporation)

APPROVED AS TO LEGAL SUFFICIENCY
DEPARTMENT OF JUSTICE BY: _____ Date _____

PURCHASE ORDER NO. _____

CERTIFICATE OF APPROVAL

I hereby certify that this is a true and exact copy of Contract No. _____ entered into between the Department of Property and Procurement and [insert contractor's name].

Anthony D. Thomas, Commissioner
Department of Property and Procurement

RFP-045-T-2020 (P)
Department of Public Works
Design Services for Improvements to Donoe Bypass

Addendum I (include each addenda on a separate sheet of paper)

Scope of Work

Addendum II

Compensation

Addendum III

HUD General Provisions (“HUD RIDER”)

The following terms and conditions apply to any contract for which any portion of the funding is derived from a grant made by the United States Department of Housing and Urban Development (“HUD”). In addition, Contractor/Subcontractor shall comply with the Federal Labor Standards Provisions set forth in Form HUD-4010, available at <http://www.hud.gov/offices/adm/hudclips/forms/files/4010.pdf>.

1. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

2. STATUTORY AND REGULATORY COMPLIANCE

Contractor/Subcontractor shall comply with all laws and regulations applicable to the Community Development Block Grant-Disaster Recovery funds appropriated by the Disaster Relief Appropriations Act, 2017 (Pub. L. 115-56) and the Bipartisan Budget Act of 2018 (“BBA”), (Pub. L. 115-123), including but not limited to the applicable Office of Management and Budget Circulars, which may impact the administration of funds and/or set forth certain cost principles, including the allowability of certain expenses.

3. BREACH OF CONTRACT TERMS

VIHFA reserves its right to all administrative, contractual, or legal remedies, including but not limited to suspension or termination of this contract, in instances where the Contractor or any of its subcontractors violate or breach any contract term. If the Contractor or any of its subcontractors violate or breach any contract term, they shall be subject to such sanctions and penalties as may be appropriate. The duties and obligations imposed by the contract documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

4. REPORTING REQUIREMENTS

The Contractor/Subcontractor shall complete and submit all reports, in such form and according to such schedule, as may be required by VIHFA. The Contractor/Subcontractor shall cooperate with all VIHFA efforts to comply with HUD requirements and regulations pertaining to reporting, including but not limited to 24 C.F.R. §§ 85.40-41 (or 84.50-52, if applicable) and 570.507.

5. ACCESS TO RECORDS

The State, the U.S. Department of Housing and Urban Development, the Comptroller General of the United States, or any of their duly authorized representatives, shall have, at any time and from time to time during normal business hours, access to any work product, books, documents, papers, and records of the Subcontractor which are related to this contract, for the purpose of inspection, audits, examinations, and making excerpts, copies and transcriptions.

6. MAINTENANCE/RETENTION OF RECORDS

All records connected with this contract will be maintained in a central location and will be maintained for a period of at least 3 years following the date of final payment and close-out of all pending matters related to this contract.

7. SMALL AND MINORITY FIRMS, WOMEN’S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

The Contractor/Subcontractor will take necessary affirmative steps to assure that minority firms, women’s business enterprises, and labor surplus area firms are used in subcontracting when possible. Steps include:

- i. Placing qualified small and minority businesses and women’s business enterprises on solicitation lists;
- ii. Assuring that small and minority businesses, and women’s business enterprises are solicited whenever they are potential sources;
- iii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women’s business enterprises;
- iv. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women’s business enterprises; and
- v. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.

8. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, “Rights to Inventions Made by Nonprofit Organizations and Small

Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by HUD.

9. ENERGY EFFICIENCY

The Contractor/Subcontractor shall comply with mandatory standards and policies relating to energy efficiency issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

10. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

The Contractor/Subcontractor shall comply with the provisions of Title VI of the Civil Rights Act of 1964. No person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

11. SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974

The Contractor/Subcontractor shall comply with the provisions of Section 109 of the Housing and Community Development Act of 1974. No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title. Section 109 further provides that discrimination on the basis of age under the Age Discrimination Act of 1975 or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, is prohibited.

12. SECTION 504 OF THE REHABILITATION ACT OF 1973

The Contractor/Subcontractor shall comply with section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 94), as amended, and any applicable regulations.

The Contractor/Subcontractor agrees that no qualified individual with handicaps shall, solely on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives Federal financial assistance from HUD.

13. AGE DISCRIMINATION ACT OF 1975

The Contractor/Subcontractor shall comply with the Age Discrimination Act of 1975 (42 U.S.C. § 6101 *et seq.*), as amended, and any applicable regulations. No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

14. DEBARMENT, SUSPENSION, AND INELIGIBILITY

The Contractor/Subcontractor represents and warrants that it and its subcontractors are not debarred or suspended or otherwise excluded from or ineligible for participation in Federal assistance programs subject to 2 C.F.R. part 2424.

15. CONFLICTS OF INTEREST

The Contractor/Subcontractor shall notify VIHFA as soon as possible if this contract or any aspect related to the anticipated work under this contract raises an actual or potential conflict of interest (as defined at 2 C.F.R. Part 215 and 24 C.F.R. § 85.36 (or 84.42, if applicable)). The Contractor/Subcontractor shall explain the actual or potential conflict in writing in sufficient detail so that the State is able to assess such actual or potential conflict. The Contractor/Subcontractor shall provide VIHFA any additional information necessary for VIHFA to fully assess and address such actual or potential conflict of interest. The Contractor/Subcontractor shall accept any reasonable conflict mitigation strategy employed by VIHFA, including but not limited to the use of an independent subcontractor(s) to perform the portion of work that gives rise to the actual or potential conflict.

16. SUBCONTRACTING

When subcontracting, the Contractor/Subcontractor shall solicit for and contract with such Contractor/subcontractors in a manner providing for fair competition. Some of the situations considered to be restrictive of competition include but are not limited to:

- (i) Placing unreasonable requirements on firms in order for them to qualify to do business,
- (ii) Requiring unnecessary experience and excessive bonding,
- (iii) Noncompetitive pricing practices between firms or between affiliated companies,
- (iv) Noncompetitive awards to consultants that are on retainer contracts,
- (v) Organizational conflicts of interest,
- (vi) Specifying only a *brand name* product instead of allowing an *equal* product to be offered and describing the performance of other relevant requirements of the procurement, and
- (vii) Any arbitrary action in the procurement process.

The Contractor/Subcontractor represents to VIHFA that all work shall be performed by personnel experienced in the appropriate and applicable profession and areas of expertise, taking into account the nature of the work to be performed under this contract.

The Contractor will include these HUD General Provisions in every subcontract issued by it so that such provisions will be binding upon each of its subcontractors as well as the requirement to flow down such terms to all lower-tiered subcontractors.

17. ASSIGNABILITY

The Contractor/Subcontractor shall not assign any interest in this contract and shall not transfer any interest in the same (whether by assignment or novation) without prior written approval of VIHFA.

18. INDEMNIFICATION

The Contractor/Subcontractor shall indemnify, defend, and hold harmless VIHFA and its agents and employees from and against any and all claims, actions, suits, charges, and judgments arising from or related to the negligence or willful misconduct of the Contractor/Subcontractor in the performance of the services called for in this contract.

19. COPELAND “ANTI-KICKBACK” ACT (Applicable to all construction or repair contracts)

Salaries of personnel performing work under this contract shall be paid unconditionally and not less often than once a month without payroll deduction or rebate on any account except only such payroll deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland “Anti-Kickback Act” of June 13, 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Title 18 U.S.C. § 874; and Title 40 U.S.C. § 276c). The Contractor shall comply with all applicable “Anti-Kickback” regulations and shall insert appropriate provisions in all subcontracts covering work under this contract to ensure compliance by subcontractors with such regulations and shall be responsible for the submission of affidavits required of subcontractors thereunder except as the Secretary of Labor may specifically provide for variations of or exemptions from the requirements thereof.

20. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

(Applicable to construction contracts exceeding \$2,000 and contracts exceeding \$2,500 that involve the employment of mechanics or laborers)

The Contractor/Subcontractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-330) as supplemented by Department of Labor regulations (29 C.F.R. part 5).

All laborers and mechanics employed by contractors or subcontractors shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety

Standards Act, and the contractors and subcontractors shall comply with all regulations issued pursuant to that act and with other applicable Federal laws and regulations pertaining to labor standards.

21. DAVIS-BACON ACT

(Applicable to construction contracts exceeding \$2,000 when required by Federal program legislation)

The Contractor/Subcontractor shall comply with the Davis Bacon Act (40 U.S.C. §§ 276a to 276a-7) as supplemented by Department of Labor regulations (29 C.F.R. part 5).

All laborers and mechanics employed by contractors or subcontractors, including employees of other governments, on construction work assisted under this contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act.

22. TERMINATION FOR CAUSE (Applicable to contracts exceeding \$10,000)

If, through any cause, the Contractor/Subcontractor shall fail to fulfill in a timely and proper manner his obligations under this contract, or if the Contractor/Subcontractor shall violate any of the covenants, agreements, or stipulations of this contract, VIHFA shall thereupon have the right to terminate this contract by giving written notice to the Contractor/Subcontractor of such termination and specifying the effective date thereof, at least five (5) days before the effective date of such termination. In such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports prepared by the Contractor/Subcontractor under this contract shall, at the option of VIHFA, become VIHFA's property and the Contractor/Subcontractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder. Notwithstanding the above, the Contractor/Subcontractor shall not be relieved of liability to VIHFA for damages sustained by VIHFA by virtue of any breach of the contract by the Contractor/Subcontractor, and the VIHFA may withhold any payments to the Contractor/Subcontractor for the purpose of set-off until such time as the exact amount of damages due to the VIHFA from the Subcontractor is determined.

23. TERMINATION FOR CONVENIENCE (Applicable to contracts exceeding \$10,000)

The VIHFA may terminate this contract at any time by giving at least 30 days' notice in writing to the Contractor/Subcontractor. If the contract is terminated by VIHFA as provided herein, the Contractor/Subcontractor will be paid for the time provided and expenses incurred up to the termination date.

24. SECTION 503 OF THE REHABILITATION ACT OF 1973 (Applicable to contracts exceeding \$10,000)

The Contractor/Subcontractor shall comply with section 503 of the Rehabilitation Act of 1973 (29 U.S.C. § 793), as amended, and any applicable regulations.

Equal Opportunity for Workers With Disabilities

A. The Contractor/Subcontractor will not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor/Subcontractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with disabilities without discrimination based on their physical or mental disability in all employment practices, including the following:

- i. Recruitment, advertising, and job application procedures;
- ii. Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;
- iii. Rates of pay or any other form of compensation and changes in compensation;
- iv. Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
- v. Leaves of absence, sick leave, or any other leave;
- vi. Fringe benefits available by virtue of employment, whether or not administered by the Subcontractor;
- vii. Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
- viii. Activities sponsored by the contractor including social or recreational programs; and
- ix. Any other term, condition, or privilege of employment.

B. The Contractor/Subcontractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the act.

C. In the event of the Contractor/Subcontractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the act.

D. The Contractor/Subcontractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, provided by or through the contracting officer. Such notices shall state the rights of applicants and employees as well as the Contractor's/Subcontractor's obligation under the law to take affirmative action to employ

and advance in employment qualified employees and applicants with disabilities. The Contractor/Subcontractor must ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor/Subcontractor may have the notice read to a visually disabled individual or may lower the posted notice so that it might be read by a person in a wheelchair).

E. The Contractor/Subcontractor will notify each labor organization or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor/Subcontractor is bound by the terms of section 503 of the Rehabilitation Act of 1973, as amended, and is committed to take affirmative action to employ and advance in employment individuals with physical or mental disabilities.

F. The Contractor/Subcontractor will include the provisions of this clause in every subcontract or purchase order in excess of \$10,000, unless exempted by the rules, regulations, or orders of the Secretary issued pursuant to section 503 of the act, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Contractor/Subcontractor will take such action with respect to any subcontract or purchase order as the Deputy Assistant Secretary for Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

25. EXECUTIVE ORDER 11246

(Applicable to construction contracts and subcontracts exceeding \$10,000)

The Contractor/Subcontractor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60).

During the performance of this contract, the Contractor/Subcontractor agrees as follows:

A. The Contractor/Subcontractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor/Subcontractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

B. The Contractor/Subcontractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by Contracting Officer setting forth the provisions of this non-discrimination clause. The Contractor/Subcontractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

C. The Contractor/Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor/Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

D. The Contractor/Subcontractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers representative of the contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

E. The Contractor/Subcontractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.

F. The Contractor/Subcontractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

G. In the event of the Contractor's/Subcontractor's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Contractor/Subcontractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order 11246 and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

H. Contractor/Subcontractor shall incorporate the provisions of A through G above in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor so that such provisions shall be binding on such contractor/subcontractor. The Contractor/Subcontractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance, provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor/Subcontractor may request the United States to enter into such litigation to protect the interests of the United States.

26. CERTIFICATION OF NONSEGREGATED FACILITIES (Applicable to construction contracts exceeding \$10,000)

The Contractor/Subcontractor certifies that it does not maintain or provide for its establishments, and that it does not permit employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for employees any segregated facilities at any of its establishments, and it will not permit employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor/Subcontractor agrees that a breach of this certification is a violation of the equal opportunity clause of this contract.

As used in this certification, the term “segregated facilities” means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason.

The Contractor further agrees that (except where it has obtained for specific time periods) it will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause; that it will retain such certifications in its files; and that it will forward the preceding notice to such proposed subcontractors (except where proposed subcontractors have submitted identical certifications for specific time periods).

27. CERTIFICATION OF COMPLIANCE WITH CLEAN AIR AND WATER ACTS (Applicable to contracts exceeding \$100,000)

The Contractor and all its subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 U.S.C. § 1857 *et seq.*, the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 *et seq.*, and the regulations of the Environmental Protection Agency with respect thereto, at 40 C.F.R. Part 15 and 32, as amended, Section 508 of the Clean Water Act (33 U.S.C. § 1368) and Executive Order 11738.

In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall furnish to the owner, the following:

- A. A stipulation by the Contractor or subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the Excluded Party Listing System pursuant to 40 C.F.R. 32 or on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 C.F.R. Part 15, as amended.
- B. Agreement by the Subcontractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 U.S.C. § 1857 c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 U.S.C. § 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

C. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the Excluded Party Listing System or the EPA List of Violating Facilities.

D. Agreement by the Contractor that he will include, or cause to be included, the criteria and requirements in paragraph (A)through (D) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the government may direct as a means of enforcing such provisions.

28. LOBBYING (Applicable to contracts exceeding \$100,000)

The Contractor/Subcontractor certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor/Subcontractor, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor/Subcontractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(3) The Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

29. BONDING REQUIREMENTS
(Applicable to construction and facility improvement contracts exceeding \$100,000)

The Contractor/Subcontractor shall comply with VIHFA bonding requirements, unless they have not been approved by HUD, in which case the Contractor/Subcontractor shall comply with the following minimum bonding requirements:

- (1) *A bid guarantee from each bidder equivalent to five percent of the bid price.* The “bid guarantee” shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.
- (2) *A performance bond on the part of the Contractor/Subcontractor for 100 percent of the contract price.* A “performance bond” is one executed in connection with a contract to secure fulfillment of all the Contractor’s/Subcontractor’s obligations under such contract.
- (3) *A payment bond on the part of the Contractor/Subcontractor for 100 percent of the contract price.* A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

30. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968 (As required by applicable thresholds)

A. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD’s regulations in 24 C.F.R. part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The *Contractor/Subcontractor* agrees to send to each labor organization or representative of workers with which the *Contractor/Subcontractor* has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers’ representative of the Contractor’s commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The *Contractor* agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 C.F.R. part 135, and agrees to take appropriate action,

as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 C.F.R. part 135. The Contractor will not subcontract with any subcontractor where the subcontractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 C.F.R. part 135.

E. The *Contractor/Subcontractor* will certify that any vacant employment positions, including training positions, that are filled: (1) after the *contractor/subcontractor* is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 C.F.R. part 135 require employment opportunities to be directed, were not filled to circumvent the *Contractor/Subcontractor's* obligations under 24 C.F.R. part 135.

F. Noncompliance with HUD's regulations in 24 C.F.R. part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible: (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

31. FAIR HOUSING ACT

Contractor/Subcontractor shall comply with the provisions of the Fair Housing Act of 1968 as amended. The act prohibits discrimination in the sale or rental of housing, the financing of housing or the provision of brokerage services against any person on the basis of race, color, religion, sex, national origin, handicap or familial status. The Equal Opportunity in Housing Act prohibits discrimination against individuals on the basis of race, color, religion, sex or national origin in the sale, rental, leasing or other disposition of residential property, or in the use or occupancy of housing assisted with Federal funds.

32. Federal Funding Accountability and Transparency Act (FFATA)

The Federal Funding Accountability and Transparency Act of 2006 (FFATA), as amended, was signed with the intent of reducing wasteful government spending and providing citizens with the ability to hold the government accountable for spending decisions. 2 C.F.R. § Part 170 outlines the requirements of recipients' in reporting information on subawards and executive total compensation under FFATA legislation. Any non-Federal entity that receives or administers Federal financial assistance in the form of: grants, loans, loan guarantees, subsidies, insurance, food commodities, direct appropriations, assessed and voluntary contributions; and/or other financial assistance transactions that authorize the non-Federal entities' expenditure of Federal fund, is subject to these requirements.

Prime contract awardees and prime grant awardees are required to report against subcontracts and subgrants awarded in the FFATA Subaward Reporting System (FSRS), the reporting tool for Federal prime awardees. This information reported will then be displayed on a public and searchable website: www.USASpending.gov.

33. Procurement

The Uniform Guidance procurement requirements (2 C.F.R. § Part 200, Subpart D) went into effect on July 1, 2018. These requirements are applicable to CDBG-DR funded projects, or as provided by 83 Federal Register 5844 VI A(1)(b)(2) permits a state grantee to elect to follow its own procurement policy. These policies and procedures ensure that Federal dollars are spent fairly and encourage open competition at the best level of service and price.

34. Change Orders to Contracts

Change orders are issued when the initial agreed upon pricing or work to be completed requires modification. First, the contractor must complete a Change Order Request Form. This form and supporting documentation must be delivered to the Project Manager for review. Each change order must have a cost analysis. Once the Project Manager approves the change order, it is returned to the contractor for execution. Change orders are only invoiced on the final draw and categorized as “change order.” The amount listed on the invoice must match the previously approved amount and must be cost reasonable. The Project Manager is responsible for verifying cost reasonableness. Verification documentation for cost reasonableness becomes an attachment to the change order.

35. Environmental Review

Every project undertaken with Federal funds, and all activities related to that project, is subject to the provisions of the National Environmental Policy Act of 1969 (NEPA), as well as to the HUD environmental review regulations at 24 C.F.R. § Part 58- ENVIRONMENTAL REVIEW PROCEDURES FOR ENTITIES ASSUMING HUD ENVIRONMENTAL RESPONSIBILITIES. The primary purpose of this Act is to protect and enhance the quality of our natural environment. The HUD environmental review process must be completed before any Federal funds can be accessed for program-eligible activities.

The primary objectives of the HUD environmental review are to identify specific environmental factors that may be encountered at potential project sites, and to develop procedures to ensure compliance with regulations pertaining to these factors. The HUD environmental review is designed to produce program specific environmental review procedures in a program that can vary greatly in terms of scope of work.

36. Lead Based Paint

All housing units assisted using CDBG-DR funds must comply with the regulations regarding lead-based paint found at 24 C.F.R. § Part 35- LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES.

37. Environmental Review Record

The Environmental Officer is responsible for maintaining a written record of the environmental review process. The ERR for all programs contains all the governmental review documents, public notices and written determinations or environmental findings required by 24 C.F.R. § Part 58- ENVIRONMENTAL REVIEW PROCEDURES FOR ENTITIES ASSUMING HUD ENVIRONMENTAL RESPONSIBILITIES as evidence of review, decision making and actions pertaining to a project of a recipient.

38. Flood Insurance Requirements

Grantees and subrecipients of Federal funding must ensure that procedures and mechanisms are put into place to monitor compliance with all flood insurance requirements as found in the Flood Disaster Protection Act of 1973, 24 C.F.R. § 570.605- NATIONAL FLOOD INSURANCE PROGRAM and 24 C.F.R. § 570.202- ELIGIBLE REHABILITATION AND PRESERVATION ACTIVITIES.

39. Duplication of Benefits

CDBG-DR funding intends to address the unmet needs of a community. The funds are supplemental to primary forms of assistance, including private insurance and FEMA funds. To avoid duplicative assistance and potential de-obligation of funding, Subrecipient must utilize all possible funding sources before applying CDBG-DR dollars to a project. CDBG-DR programs are typically implemented after temporary disaster assistance programs, such as FEMA Individual Assistance which are not intended to make someone whole.

The Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. §5121 et seq., established the requirements for Duplication of Benefits (DOB) analysis.

40. Anti-Fraud, Waste and Abuse Checks

The Anti-Fraud, Waste and Abuse (AFWA) check is designed to identify discrepancies and risk-relevant issues in Applicant-provided information that may be indicative of fraud, waste, and/or abuse.

41. Affirmatively Furthering Fair Housing

The Fair Housing Act of 1968, as amended, 42 U.S.C. §3601, et seq., dictates that grantees are required to administer all programs and activities related to housing and urban development in a manner to affirmatively further the policies of the Fair Housing Act. Per the regulations of 24 C.F.R. § 570.601 and in accordance with Section 104(b)(2) of the Housing and Community Development Act of 1974, as amended, 42 U.S.C. §5301 et seq., for each community receiving a grant under Subpart D of this part, the certification that the grantee will affirmatively further fair housing shall specifically require the grantee to

take meaningful actions to further the goals identified in the grantee's Assessment of Fair Housing (AFH) plan, conducted in accordance with the requirements of 24 C.F.R. § §§5.150-5.180 (Affirmatively Furthering Fair Housing) and take no action that is materially inconsistent with its obligation to affirmatively further fair housing.

42. Drug Free Workplace

The Drug-Free Workplace Act of 1988, as amended, 41 U.S.C. §81, as implemented by 24 C.F.R. § Part 24 Subpart F, §§983.251-983.262, requires that any grantee other than an individual must certify that it will provide a drug-free workplace. Any grantee found in violation of the requirements of this act may be subject to suspension of payments under the grant, suspension or termination of the grant or suspension or debarment of the grantee.

43. Timely Distribution of Funds

The Supplemental Appropriations for Disaster Relief Requirements, 2017 (Pub. L. 115-56), approved September 8, 2017 (Appropriations Act), as amended, requires that funds provided under the Act be expended within two (2) years of the date that HUD obligates funds to a grantee unless otherwise authorized via waiver of this requirement by the Office of Management and Budget (OMB). The OMB waived the two (2) year expenditure requirement under 83 FR 40314; however, the provision to expend one hundred percent (100%) of the total allocation of CDBG-DR funds on eligible activities within six (6) years of HUD's initial obligation of funds remains in effect. The six (6) year expenditure period commences with the initial obligation of funds provided under 83 FR 5844. Additionally, per 83 FR 5844, the provisions at 24 C.F.R. § 570.494 and 24 C.F.R. § 570.902, regarding timely distribution and expenditure of funds, are waived and an alternative requirement was established.

Furthermore, consistent with 31 U.S.C §1555 and OMB Circular No. A-11 (2017), if the Secretary of HUD or the President of the United States determines that the purposes for which the appropriation was made have been carried out and no disbursement has been made against the appropriation for two (2) consecutive fiscal years, any remaining unobligated balance shall be canceled and will be made unavailable for obligation or expenditure for any purpose.

44. Property Management and Distribution

Regulations governing property management and distribution of real property, equipment, financial obligations and return of un-obligated cash post program closeout can be found in 24 C.F.R. § 570.506, 2 C.F.R. § 200.310, 2 C.F.R. § 200.343 and 2 C.F.R. § 200.344(b). The standards of 24 C.F.R. § 570.506 apply to any real property under a CDBG award recipient's control acquired in whole or in part with CDBG funds in excess of \$25,000.00. The recipient may not change the use or planned use of the property without proper notification to affected citizens and allowable time for comment by them. If the property is not a building for general government conduct, the use of the property may be changed with citizen approval if it either meets one of the national objectives as defined in 24 C.F.R. § 570.208 or if not, the recipient may either retain or dispose of the property for the changed use if the recipient's CDBG program is reimbursed in the amount of the current fair market value of the property, less any portion of the value attributable to

expenditures of non-CDBG funds for acquisition of, and improvements to, the property. Following such reimbursement, the property will no longer be subject to any CDBG requirements.

45. Limited English Proficiency

Executive Order No. 13166, signed on August 11, 2000, requires programs, subrecipients, contractors, subcontractors, and/or developers funded in whole or in part with CDBG-DR financial assistance to ensure fair and meaningful access to programs and services for families and individuals with Limited English Proficiency (LEP) and/or deaf/hard of hearing. Fair access is ensured through the implementation of a Language Assistance Plan (LAP), which includes non-English-based outreach, translation services of vital documents, free language assistance services, and staff training. Vital documents are defined as depending on the importance of the program, information, encounter, or service involved, and the consequence to the LEP person if the information in question is not provided accurately or in a timely manner.

46. Personally Identifiable Information

In accordance with 2 C.F.R. § 200.303, regarding internal controls of a non-Federal entity, a grantee must guarantee the protection of all Personally Identifiable Information (PII) obtained. The program will enact necessary measures to ensure PII of all applicants is safeguarded as to avoid release of private information. If a contractor or employee should experience any loss or potential loss of PII, the program shall be notified immediately of the breach or potential breach.

47. Uniform Relocation Act

CDBG-DR funds are subject to the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (URA or Uniform Act), as amended. 49 C.F.R. § Part 24 requires relocation assistance for lower-income individuals displaced as a result of the demolition or conversion of a lower-income dwelling and requires one-for-one replacement of lower-income units demolished or converted to other uses.

48. Residential anti-displacement and relocation assistance plan. Per Section 104(d) of the Housing and Community Development Act of 1974 § 42.325

(a) Certification.

(1) As part of its consolidated plan under 24 CFR part 91, the recipient must certify that it has in effect and is following a residential anti-displacement and relocation assistance plan.

(2) A unit of general local government receiving funds from the State must certify to the State that it has in effect and is following a residential anti-displacement and relocation assistance plan, and that it will minimize displacement of persons as a result of assisted activities. The State may require the unit of general local government to follow the State's plan or permit it to develop its own plan. A unit of general local government that develops its own plan must adopt the plan and make it public.

(b) Plan contents.

- (1) The plan shall indicate the steps that will be taken consistent with other goals and objectives of the program, as provided in parts 92 and 570 of this title, to minimize the displacement of families and individuals from their homes and neighborhoods as a result of any assisted activities.
- (2) The plan shall provide for relocation assistance in accordance with § 42.350.
- (3) The plan shall provide one-for-one replacement units to the extent required by § 42.375.

49. Complaints and Appeals

Citizen comments on VIHFA's published Action Plan, any substantial amendments to the Action Plan, performance reports and/or other issues related to the general administration of CDBG-DR funds are welcomed throughout the duration of the grant. The Citizen Participation Plan is posted as a stand-alone document at www.vihfa.gov. Complaints regarding fraud, waste, or abuse of government funds shall be addressed to the HUD Office of Inspector General Fraud Hotline by phone: 1-800-347-3735 or email: hotline@hudoig.gov.

50. Monitoring

As per CDBG regulation, 24 C.F.R. § 570.501(b), grantees of CDBG-DR funds are responsible for carrying out their programs to meet compliance with CDBG Program, statutory and regulatory requirements, including monitoring their project administrators, contractors and subcontractors. As such, throughout the application, planning, design, and implementation phase of the program, VIHFA will conduct internal monitoring of processes, procedures, policy, applications, planning, design, construction, and other applicable phases.

51. Procurement of Recovered Materials

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

RFP-045-T-2020 (P)
Department of Public Works
Design Services for Improvements to Donoe Bypass

Attachment 1- HUD General Provisions

HUD GENERAL PROVISIONS (“HUD RIDER”)

The following terms and conditions apply to any contract for which any portion of the funding is derived from a grant made by the United States Department of Housing and Urban Development (“HUD”). In addition, Contractor/Subcontractor shall comply with the Federal Labor Standards Provisions set forth in Form HUD-4010, available at <http://www.hud.gov/offices/adm/hudclips/forms/files/4010.pdf>.

1. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.

2. STATUTORY AND REGULATORY COMPLIANCE

Contractor/Subcontractor shall comply with all laws and regulations applicable to the Community Development Block Grant-Disaster Recovery funds appropriated by the Disaster Relief Appropriations Act, 2017 (Pub. L. 115-56) and the Bipartisan Budget Act of 2018 (“BBA”), (Pub. L. 115-123), including but not limited to the applicable Office of Management and Budget Circulars, which may impact the administration of funds and/or set forth certain cost principles, including the allowability of certain expenses.

3. BREACH OF CONTRACT TERMS

VIHFA reserves its right to all administrative, contractual, or legal remedies, including but not limited to suspension or termination of this contract, in instances where the Contractor or any of its subcontractors violate or breach any contract term. If the Contractor or any of its subcontractors violate or breach any contract term, they shall be subject to such sanctions and penalties as may be appropriate. The duties and obligations imposed by the contract documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

4. REPORTING REQUIREMENTS

The Contractor/Subcontractor shall complete and submit all reports, in such form and according to such schedule, as may be required by VIHFA. The Contractor/Subcontractor shall cooperate with all VIHFA efforts to comply with HUD requirements and regulations pertaining to reporting, including but not limited to 24 C.F.R. §§ 85.40-41 (or 84.50-52, if applicable) and 570.507.

5. ACCESS TO RECORDS

The State, the U.S. Department of Housing and Urban Development, the Comptroller General of the United States, or any of their duly authorized representatives, shall have, at any time and from time to time during normal business hours, access to any work product, books, documents, papers, and records of the Subcontractor which are related to this contract, for the purpose of inspection, audits, examinations, and making excerpts, copies and transcriptions.

6. MAINTENANCE/RETENTION OF RECORDS

All records connected with this contract will be maintained in a central location and will be maintained for a period of at least 3 years following the date of final payment and close-out of all pending matters related to this contract.

7. SMALL AND MINORITY FIRMS, WOMEN’S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

The Contractor/Subcontractor will take necessary affirmative steps to assure that minority firms, women’s business enterprises, and labor surplus area firms are used in subcontracting when possible. Steps include:

- vi. Placing qualified small and minority businesses and women’s business enterprises on solicitation lists;
- vii. Assuring that small and minority businesses, and women’s business enterprises are solicited whenever they are potential sources;
- viii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women’s business enterprises;
- ix. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women’s business enterprises; and
- x. Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce.

8. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

Contracts or agreements for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by HUD.

9. ENERGY EFFICIENCY

The Contractor/Subcontractor shall comply with mandatory standards and policies relating to energy efficiency issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).

10. TITLE VI OF THE CIVIL RIGHTS ACT OF 1964

The Contractor/Subcontractor shall comply with the provisions of Title VI of the Civil Rights Act of 1964. No person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.

11. SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974

The Contractor/Subcontractor shall comply with the provisions of Section 109 of the Housing and Community Development Act of 1974. No person in the United States shall on the grounds of race, color, national origin, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with funds made available under this title. Section 109 further provides that discrimination on the basis of age under the Age Discrimination Act of 1975 or with respect to an otherwise qualified handicapped individual as provided in Section 504 of the Rehabilitation Act of 1973, as amended, is prohibited.

12. SECTION 504 OF THE REHABILITATION ACT OF 1973

The Contractor/Subcontractor shall comply with section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 94), as amended, and any applicable regulations.

The Contractor/Subcontractor agrees that no qualified individual with handicaps shall, solely on the basis of handicap, be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under any program or activity that receives Federal financial assistance from HUD.

13. AGE DISCRIMINATION ACT OF 1975

The Contractor/Subcontractor shall comply with the Age Discrimination Act of 1975 (42 U.S.C. § 6101 *et seq.*), as amended, and any applicable regulations. No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance.

14. DEBARMENT, SUSPENSION, AND INELIGIBILITY

The Contractor/Subcontractor represents and warrants that it and its subcontractors are not debarred or suspended or otherwise excluded from or ineligible for participation in Federal assistance programs subject to 2 C.F.R. part 2424.

15. CONFLICTS OF INTEREST

The Contractor/Subcontractor shall notify VIHFA as soon as possible if this contract or any aspect related to the anticipated work under this contract raises an actual or potential conflict of interest (as defined at 2 C.F.R. Part 215 and 24 C.F.R. § 85.36 (or 84.42, if applicable)). The Contractor/Subcontractor shall explain the actual or potential conflict in writing in sufficient detail so that the State is able to assess such actual or potential conflict. The Contractor/Subcontractor shall provide VIHFA any additional information necessary for VIHFA to fully assess and address such actual or potential conflict of interest. The Contractor/Subcontractor shall accept any reasonable conflict mitigation strategy employed by VIHFA, including but not limited to the use of an independent subcontractor(s) to perform the portion of work that gives rise to the actual or potential conflict.

16. SUBCONTRACTING

When subcontracting, the Contractor/Subcontractor shall solicit for and contract with such Contractor/subcontractors in a manner providing for fair competition. Some of the situations considered to be restrictive of competition include but are not limited to:

- (viii) Placing unreasonable requirements on firms in order for them to qualify to do business,
- (ix) Requiring unnecessary experience and excessive bonding,
- (x) Noncompetitive pricing practices between firms or between affiliated companies,
- (xi) Noncompetitive awards to consultants that are on retainer contracts,
- (xii) Organizational conflicts of interest,
- (xiii) Specifying only a *brand name* product instead of allowing *an equal* product to be offered and describing the performance of other relevant requirements of the procurement, and
- (xiv) Any arbitrary action in the procurement process.

The Contractor/Subcontractor represents to VIHFA that all work shall be performed by personnel experienced in the appropriate and applicable profession and areas of expertise, taking into account the nature of the work to be performed under this contract.

The Contractor will include these HUD General Provisions in every subcontract issued by it so that such provisions will be binding upon each of its subcontractors as well as the requirement to flow down such terms to all lower-tiered subcontractors.

17. ASSIGNABILITY

The Contractor/Subcontractor shall not assign any interest in this contract and shall not transfer any interest in the same (whether by assignment or novation) without prior written approval of VIHFA.

18. INDEMNIFICATION

The Contractor/Subcontractor shall indemnify, defend, and hold harmless VIHFA and its agents and employees from and against any and all claims, actions, suits, charges, and judgments arising from or related to the negligence or willful misconduct of the Contractor/Subcontractor in the performance of the services called for in this contract.

19. COPELAND “ANTI-KICKBACK” ACT (Applicable to all construction or repair contracts)

Salaries of personnel performing work under this contract shall be paid unconditionally and not less often than once a month without payroll deduction or rebate on any account except only such payroll deductions as are mandatory by law or permitted by the applicable regulations issued by the Secretary of Labor pursuant to the Copeland “Anti-Kickback Act” of June 13, 1934 (48 Stat. 948; 62 Stat. 740; 63 Stat. 108; Title 18 U.S.C. § 874; and Title 40 U.S.C. § 276c). The Contractor shall comply with all applicable “Anti-Kickback” regulations and shall insert appropriate provisions in all subcontracts covering work under this contract to ensure compliance by subcontractors with such regulations and shall be responsible for the submission of affidavits required of subcontractors thereunder except as the Secretary of Labor may specifically provide for variations of or exemptions from the requirements thereof.

20. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

(Applicable to construction contracts exceeding \$2,000 and contracts exceeding \$2,500 that involve the employment of mechanics or laborers)

The Contractor/Subcontractor shall comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. §§ 327-330) as supplemented by Department of Labor regulations (29 C.F.R. part 5).

All laborers and mechanics employed by contractors or subcontractors shall receive overtime compensation in accordance with and subject to the provisions of the Contract Work Hours and Safety Standards Act, and the contractors and subcontractors shall comply with all regulations issued pursuant to that act and with other applicable Federal laws and regulations pertaining to labor standards.

21. DAVIS-BACON ACT

(Applicable to construction contracts exceeding \$2,000 when required by Federal program legislation)

The Contractor/Subcontractor shall comply with the Davis Bacon Act (40 U.S.C. §§ 276a to 276a-7) as supplemented by Department of Labor regulations (29 C.F.R. part 5).

All laborers and mechanics employed by contractors or subcontractors, including employees of other governments, on construction work assisted under this contract, and subject to the provisions of the federal acts and regulations listed in this paragraph, shall be paid wages at rates not less than those prevailing on similar construction in the locality as determined by the Secretary of Labor in accordance with the Davis-Bacon Act.

25. TERMINATION FOR CAUSE (Applicable to contracts exceeding \$10,000)

If, through any cause, the Contractor/Subcontractor shall fail to fulfill in a timely and proper manner his obligations under this contract, or if the Contractor/Subcontractor shall violate any of the covenants, agreements, or stipulations of this contract, VIHFA shall thereupon have the right to terminate this contract by giving written notice to the Contractor/Subcontractor of such termination and specifying the effective date thereof, at least five (5) days before the effective date of such termination. In such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs, and reports prepared by the Contractor/Subcontractor under this contract shall, at the option of VIHFA, become VIHFA's property and the Contractor/Subcontractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder. Notwithstanding the above, the Contractor/Subcontractor shall not be relieved of liability to VIHFA for damages sustained by VIHFA by virtue of any breach of the contract by the Contractor/Subcontractor, and the VIHFA may withhold any payments to the Contractor/Subcontractor for the purpose of set-off until such time as the exact amount of damages due to the VIHFA from the Subcontractor is determined.

26. TERMINATION FOR CONVENIENCE (Applicable to contracts exceeding \$10,000)

The VIHFA may terminate this contract at any time by giving at least 30 days' notice in writing to the Contractor/Subcontractor. If the contract is terminated by VIHFA as provided herein, the Contractor/Subcontractor will be paid for the time provided and expenses incurred up to the termination date.

27. SECTION 503 OF THE REHABILITATION ACT OF 1973 (Applicable to contracts exceeding \$10,000)

The Contractor/Subcontractor shall comply with section 503 of the Rehabilitation Act of 1973 (29 U.S.C. § 793), as amended, and any applicable regulations.

Equal Opportunity for Workers With Disabilities

- A. The Contractor/Subcontractor will not discriminate against any employee or applicant for employment because of physical or mental disability in regard to any position for which the employee or applicant for employment is qualified. The Contractor/Subcontractor agrees to

take affirmative action to employ, advance in employment and otherwise treat qualified individuals with disabilities without discrimination based on their physical or mental disability in all employment practices, including the following:

- i. Recruitment, advertising, and job application procedures;
 - ii. Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring;
 - iii. Rates of pay or any other form of compensation and changes in compensation;
 - iv. Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;
 - v. Leaves of absence, sick leave, or any other leave;
 - vi. Fringe benefits available by virtue of employment, whether or not administered by the Subcontractor;
 - vii. Selection and financial support for training, including apprenticeship, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;
 - viii. Activities sponsored by the contractor including social or recreational programs; and
 - ix. Any other term, condition, or privilege of employment.
- B.** The Contractor/Subcontractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the act.
- C.** In the event of the Contractor/Subcontractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the act.
- D.** The Contractor/Subcontractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, provided by or through the contracting officer. Such notices shall state the rights of applicants and employees as well as the Contractor's/Subcontractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants with disabilities. The Contractor/Subcontractor must ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor/Subcontractor may have the notice read to a visually disabled individual or may lower the posted notice so that it might be read by a person in a wheelchair).

- E. The Contractor/Subcontractor will notify each labor organization or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor/Subcontractor is bound by the terms of section 503 of the Rehabilitation Act of 1973, as amended, and is committed to take affirmative action to employ and advance in employment individuals with physical or mental disabilities.
- F. The Contractor/Subcontractor will include the provisions of this clause in every subcontract or purchase order in excess of \$10,000, unless exempted by the rules, regulations, or orders of the Secretary issued pursuant to section 503 of the act, as amended, so that such provisions will be binding upon each subcontractor or vendor. The Contractor/Subcontractor will take such action with respect to any subcontract or purchase order as the Deputy Assistant Secretary for Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

25. EXECUTIVE ORDER 11246

(Applicable to construction contracts and subcontracts exceeding \$10,000)

The Contractor/Subcontractor shall comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60).

During the performance of this contract, the Contractor/Subcontractor agrees as follows:

- I. The Contractor/Subcontractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor/Subcontractor shall take affirmative action to ensure that applicants for employment are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.
- J. The Contractor/Subcontractor shall post in conspicuous places, available to employees and applicants for employment, notices to be provided by Contracting Officer setting forth the provisions of this non-discrimination clause. The Contractor/Subcontractor shall state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- K. The Contractor/Subcontractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor/Subcontractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
- L. The Contractor/Subcontractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers

representative of the contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- M. The Contractor/Subcontractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- N. The Contractor/Subcontractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- O. In the event of the Contractor's/Subcontractor's non-compliance with the non-discrimination clause of this contract or with any of such rules, regulations or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Contractor/Subcontractor may be declared ineligible for further government contracts in accordance with procedures authorized in Executive Order 11246 and such other sanctions as may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- P. Contractor/Subcontractor shall incorporate the provisions of A through G above in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor so that such provisions shall be binding on such contractor/subcontractor. The Contractor/Subcontractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for non-compliance, provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor/Subcontractor may request the United States to enter into such litigation to protect the interests of the United States.

26. CERTIFICATION OF NONSEGREGATED FACILITIES (Applicable to construction contracts exceeding \$10,000)

The Contractor/Subcontractor certifies that it does not maintain or provide for its establishments, and that it does not permit employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for employees any segregated facilities at any of its establishments, and it will not permit employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor/Subcontractor agrees that a breach of this certification is a violation of the equal opportunity clause of this contract.

As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms, and other

storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are, in fact, segregated on the basis of race, color, religion, or national origin because of habit, local custom, or any other reason.

The Contractor further agrees that (except where it has obtained for specific time periods) it will obtain identical certification from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the equal opportunity clause; that it will retain such certifications in its files; and that it will forward the preceding notice to such proposed subcontractors (except where proposed subcontractors have submitted identical certifications for specific time periods).

27. CERTIFICATION OF COMPLIANCE WITH CLEAN AIR AND WATER ACTS (Applicable to contracts exceeding \$100,000)

The Contractor and all its subcontractors shall comply with the requirements of the Clean Air Act, as amended, 42 U.S.C. § 1857 *et seq.*, the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 *et seq.*, and the regulations of the Environmental Protection Agency with respect thereto, at 40 C.F.R. Part 15 and 32, as amended, Section 508 of the Clean Water Act (33 U.S.C. § 1368) and Executive Order 11738.

In addition to the foregoing requirements, all nonexempt contractors and subcontractors shall furnish to the owner, the following:

E. A stipulation by the Contractor or subcontractors, that any facility to be utilized in the performance of any nonexempt contract or subcontract, is not listed on the Excluded Party Listing System pursuant to 40 C.F.R. 32 or on the List of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 C.F.R. Part 15, as amended.

F. Agreement by the Subcontractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended, (42 U.S.C. § 1857 c-8) and Section 308 of the Federal Water Pollution Control Act, as amended, (33 U.S.C. § 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.

G. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the Director, Office of Federal Activities, EPA, indicating that a facility utilized, or to be utilized for the contract, is under consideration to be listed on the Excluded Party Listing System or the EPA List of Violating Facilities.

H. Agreement by the Contractor that he will include, or cause to be included, the criteria and requirements in paragraph (A) through (D) of this section in every nonexempt subcontract and requiring that the Contractor will take such action as the government may direct as a means of enforcing such provisions.

28. LOBBYING (Applicable to contracts exceeding \$100,000)

The Contractor/Subcontractor certifies, to the best of his or her knowledge and belief, that:

(4) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor/Subcontractor, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(5) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the Contractor/Subcontractor shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

(6) The Contractor shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

29. BONDING REQUIREMENTS

(Applicable to construction and facility improvement contracts exceeding \$100,000)

The Contractor/Subcontractor shall comply with VIHFA bonding requirements, unless they have not been approved by HUD, in which case the Contractor/Subcontractor shall comply with the following minimum bonding requirements:

(4) *A bid guarantee from each bidder equivalent to five percent of the bid price.* The "bid guarantee" shall consist of a firm commitment such as a bid bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of his bid, execute such contractual documents as may be required within the time specified.

(5) *A performance bond on the part of the Contractor/Subcontractor for 100 percent of the contract price.* A “performance bond” is one executed in connection with a contract to secure fulfillment of all the Contractor’s/Subcontractor’s obligations under such contract.

(6) *A payment bond on the part of the Contractor/Subcontractor for 100 percent of the contract price.* A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

30. SECTION 3 OF THE HOUSING AND URBAN DEVELOPMENT ACT OF 1968 (As required by applicable thresholds)

H. The work to be performed under this contract is subject to the requirements of section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. § 1701u (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

I. The parties to this contract agree to comply with HUD’s regulations in 24 C.F.R. part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

J. The *Contractor/Subcontractor* agrees to send to each labor organization or representative of workers with which the *Contractor/Subcontractor* has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers’ representative of the Contractor’s commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

K. The *Contractor* agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 C.F.R. part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 C.F.R. part 135. The Contractor will not subcontract with any subcontractor where the subcontractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 C.F.R. part 135.

L. The *Contractor/Subcontractor* will certify that any vacant employment positions, including training positions, that are filled: (1) after the *contractor/subcontractor* is selected but before the contract is executed, and (2) with persons other than those to whom the

regulations of 24 C.F.R. part 135 require employment opportunities to be directed, were not filled to circumvent the *Contractor/Subcontractor's* obligations under 24 C.F.R. part 135.

M. Noncompliance with HUD's regulations in 24 C.F.R. part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

N. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. § 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible: (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

31. FAIR HOUSING ACT

Contractor/Subcontractor shall comply with the provisions of the Fair Housing Act of 1968 as amended. The act prohibits discrimination in the sale or rental of housing, the financing of housing or the provision of brokerage services against any person on the basis of race, color, religion, sex, national origin, handicap or familial status. The Equal Opportunity in Housing Act prohibits discrimination against individuals on the basis of race, color, religion, sex or national origin in the sale, rental, leasing or other disposition of residential property, or in the use or occupancy of housing assisted with Federal funds.

32. Federal Funding Accountability and Transparency Act (FFATA)

The Federal Funding Accountability and Transparency Act of 2006 (FFATA), as amended, was signed with the intent of reducing wasteful government spending and providing citizens with the ability to hold the government accountable for spending decisions. 2 C.F.R. § Part 170 outlines the requirements of recipients' in reporting information on subawards and executive total compensation under FFATA legislation. Any non-Federal entity that receives or administers Federal financial assistance in the form of: grants, loans, loan guarantees, subsidies, insurance, food commodities, direct appropriations, assessed and voluntary contributions; and/or other financial assistance transactions that authorize the non-Federal entities' expenditure of Federal fund, is subject to these requirements.

Prime contract awardees and prime grant awardees are required to report against subcontracts and subgrants awarded in the FFATA Subaward Reporting System (FSRS), the reporting tool for Federal prime awardees. This information reported will then be displayed on a public and searchable website: www.USASpending.gov.

33. Procurement

The Uniform Guidance procurement requirements (2 C.F.R. § Part 200, Subpart D) went into effect on July 1, 2018. These requirements are applicable to CDBG-DR funded projects, or as provided by 83 Federal Register 5844 VI A(1)(b)(2) permits a state grantee to elect to follow its own procurement policy. These policies and procedures ensure that Federal dollars are spent fairly and encourage open competition at the best level of service and price.

34. Change Orders to Contracts

Change orders are issued when the initial agreed upon pricing or work to be completed requires modification. First, the contractor must complete a Change Order Request Form. This form and supporting documentation must be delivered to the Project Manager for review. Each change order must have a cost analysis. Once the Project Manager approves the change order, it is returned to the contractor for execution. Change orders are only invoiced on the final draw and categorized as “change order.” The amount listed on the invoice must match the previously approved amount and must be cost reasonable. The Project Manager is responsible for verifying cost reasonableness. Verification documentation for cost reasonableness becomes an attachment to the change order.

35. Environmental Review

Every project undertaken with Federal funds, and all activities related to that project, is subject to the provisions of the National Environmental Policy Act of 1969 (NEPA), as well as to the HUD environmental review regulations at 24 C.F.R. § Part 58- ENVIRONMENTAL REVIEW PROCEDURES FOR ENTITIES ASSUMING HUD ENVIRONMENTAL RESPONSIBILITIES. The primary purpose of this Act is to protect and enhance the quality of our natural environment. The HUD environmental review process must be completed before any Federal funds can be accessed for program-eligible activities.

The primary objectives of the HUD environmental review are to identify specific environmental factors that may be encountered at potential project sites, and to develop procedures to ensure compliance with regulations pertaining to these factors. The HUD environmental review is designed to produce program specific environmental review procedures in a program that can vary greatly in terms of scope of work.

36. Lead Based Paint

All housing units assisted using CDBG-DR funds must comply with the regulations regarding lead-based paint found at 24 C.F.R. § Part 35- LEAD-BASED PAINT POISONING PREVENTION IN CERTAIN RESIDENTIAL STRUCTURES.

37. Environmental Review Record

The Environmental Officer is responsible for maintaining a written record of the environmental review process. The ERR for all programs contains all the governmental review documents, public notices and written determinations or environmental findings required by 24 C.F.R. § Part 58- ENVIRONMENTAL REVIEW PROCEDURES FOR ENTITIES ASSUMING HUD ENVIRONMENTAL

RESPONSIBILITIES as evidence of review, decision making and actions pertaining to a project of a recipient.

38. Flood Insurance Requirements

Grantees and subrecipients of Federal funding must ensure that procedures and mechanisms are put into place to monitor compliance with all flood insurance requirements as found in the Flood Disaster Protection Act of 1973, 24 C.F.R. § 570.605- NATIONAL FLOOD INSURANCE PROGRAM and 24 C.F.R. § 570.202- ELIGIBLE REHABILITATION AND PRESERVATION ACTIVITIES.

39. Duplication of Benefits

CDBG-DR funding intends to address the unmet needs of a community. The funds are supplemental to primary forms of assistance, including private insurance and FEMA funds. To avoid duplicative assistance and potential de-obligation of funding, Subrecipient must utilize all possible funding sources before applying CDBG-DR dollars to a project. CDBG-DR programs are typically implemented after temporary disaster assistance programs, such as FEMA Individual Assistance which are not intended to make someone whole.

The Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. §5121 et seq., established the requirements for Duplication of Benefits (DOB) analysis.

40. Anti-Fraud, Waste and Abuse Checks

The Anti-Fraud, Waste and Abuse (AFWA) check is designed to identify discrepancies and risk-relevant issues in Applicant-provided information that may be indicative of fraud, waste, and/or abuse.

41. Affirmatively Furthering Fair Housing

The Fair Housing Act of 1968, as amended, 42 U.S.C. §3601, et seq., dictates that grantees are required to administer all programs and activities related to housing and urban development in a manner to affirmatively further the policies of the Fair Housing Act. Per the regulations of 24 C.F.R. § 570.601 and in accordance with Section 104(b)(2) of the Housing and Community Development Act of 1974, as amended, 42 U.S.C. §5301 et seq., for each community receiving a grant under Subpart D of this part, the certification that the grantee will affirmatively further fair housing shall specifically require the grantee to take meaningful actions to further the goals identified in the grantee's Assessment of Fair Housing (AFH) plan, conducted in accordance with the requirements of 24 C.F.R. § §§5.150-5.180 (Affirmatively Furthering Fair Housing) and take no action that is materially inconsistent with its obligation to affirmatively further fair housing.

42. Drug Free Workplace

The Drug-Free Workplace Act of 1988, as amended, 41 U.S.C. §81, as implemented by 24 C.F.R. § Part 24 Subpart F, §§983.251-983.262, requires that any grantee other than an individual must certify that it will provide a drug-free workplace. Any grantee found in violation of the requirements of this act may be subject

to suspension of payments under the grant, suspension or termination of the grant or suspension or debarment of the grantee.

43. Timely Distribution of Funds

The Supplemental Appropriations for Disaster Relief Requirements, 2017 (Pub. L. 115-56), approved September 8, 2017 (Appropriations Act), as amended, requires that funds provided under the Act be expended within two (2) years of the date that HUD obligates funds to a grantee unless otherwise authorized via waiver of this requirement by the Office of Management and Budget (OMB). The OMB waived the two (2) year expenditure requirement under 83 FR 40314; however, the provision to expend one hundred percent (100%) of the total allocation of CDBG-DR funds on eligible activities within six (6) years of HUD's initial obligation of funds remains in effect. The six (6) year expenditure period commences with the initial obligation of funds provided under 83 FR 5844. Additionally, per 83 FR 5844, the provisions at 24 C.F.R. § 570.494 and 24 C.F.R. § 570.902, regarding timely distribution and expenditure of funds, are waived and an alternative requirement was established.

Furthermore, consistent with 31 U.S.C §1555 and OMB Circular No. A-11 (2017), if the Secretary of HUD or the President of the United States determines that the purposes for which the appropriation was made have been carried out and no disbursement has been made against the appropriation for two (2) consecutive fiscal years, any remaining unobligated balance shall be canceled and will be made unavailable for obligation or expenditure for any purpose.

44. Property Management and Distribution

Regulations governing property management and distribution of real property, equipment, financial obligations and return of un-obligated cash post program closeout can be found in 24 C.F.R. § 570.506, 2 C.F.R. § 200.310, 2 C.F.R. § 200.343 and 2 C.F.R. § 200.344(b). The standards of 24 C.F.R. § 570.506 apply to any real property under a CDBG award recipient's control acquired in whole or in part with CDBG funds in excess of \$25,000.00. The recipient may not change the use or planned use of the property without proper notification to affected citizens and allowable time for comment by them. If the property is not a building for general government conduct, the use of the property may be changed with citizen approval if it either meets one of the national objectives as defined in 24 C.F.R. § 570.208 or if not, the recipient may either retain or dispose of the property for the changed use if the recipient's CDBG program is reimbursed in the amount of the current fair market value of the property, less any portion of the value attributable to expenditures of non-CDBG funds for acquisition of, and improvements to, the property. Following such reimbursement, the property will no longer be subject to any CDBG requirements.

45. Limited English Proficiency

Executive Order No. 13166, signed on August 11, 2000, requires programs, subrecipients, contractors, subcontractors, and/or developers funded in whole or in part with CDBG-DR financial assistance to ensure fair and meaningful access to programs and services for families and individuals with Limited English Proficiency (LEP) and/or deaf/hard of hearing. Fair access is ensured through the implementation of a Language Assistance Plan (LAP), which includes non-English-based outreach, translation services of vital

documents, free language assistance services, and staff training. Vital documents are defined as depending on the importance of the program, information, encounter, or service involved, and the consequence to the LEP person if the information in question is not provided accurately or in a timely manner.

46. Personally Identifiable Information

In accordance with 2 C.F.R. § 200.303, regarding internal controls of a non-Federal entity, a grantee must guarantee the protection of all Personally Identifiable Information (PII) obtained. The program will enact necessary measures to ensure PII of all applicants is safeguarded as to avoid release of private information. If a contractor or employee should experience any loss or potential loss of PII, the program shall be notified immediately of the breach or potential breach.

47. Uniform Relocation Act

CDBG-DR funds are subject to the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (URA or Uniform Act), as amended. 49 C.F.R. § Part 24 requires relocation assistance for lower-income individuals displaced as a result of the demolition or conversion of a lower-income dwelling and requires one-for-one replacement of lower-income units demolished or converted to other uses.

48. Residential anti-displacement and relocation assistance plan. Per Section 104(d) of the Housing and Community Development Act of 1974 § 42.325

(a) Certification.

(3) As part of its consolidated plan under 24 CFR part 91, the recipient must certify that it has in effect and is following a residential anti-displacement and relocation assistance plan.

(4) A unit of general local government receiving funds from the State must certify to the State that it has in effect and is following a residential anti-displacement and relocation assistance plan, and that it will minimize displacement of persons as a result of assisted activities. The State may require the unit of general local government to follow the State's plan or permit it to develop its own plan. A unit of general local government that develops its own plan must adopt the plan and make it public.

(b) Plan contents.

(4) The plan shall indicate the steps that will be taken consistent with other goals and objectives of the program, as provided in parts 92 and 570 of this title, to minimize the displacement of families and individuals from their homes and neighborhoods as a result of any assisted activities.

(5) The plan shall provide for relocation assistance in accordance with § 42.350.

(6) The plan shall provide one-for-one replacement units to the extent required by § 42.375.

49. Complaints and Appeals

Citizen comments on VIHFA's published Action Plan, any substantial amendments to the Action Plan, performance reports and/or other issues related to the general administration of CDBG-DR funds are welcomed throughout the duration of the grant. The Citizen Participation Plan is posted as a stand-alone document at www.vihfa.gov. Complaints regarding fraud, waste, or abuse of government funds shall be

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Department of Public Works

Design Services for Improvements to Donoe Bypass

addressed to the HUD Office of Inspector General Fraud Hotline by phone: 1-800-347-3735 or email: hotline@hudoig.gov.

50. Monitoring

As per CDBG regulation, 24 C.F.R. § 570.501(b), grantees of CDBG-DR funds are responsible for carrying out their programs to meet compliance with CDBG Program, statutory and regulatory requirements, including monitoring their project administrators, contractors and subcontractors. As such, throughout the application, planning, design, and implementation phase of the program, VIHFA will conduct internal monitoring of processes, procedures, policy, applications, planning, design, construction, and other applicable phases.

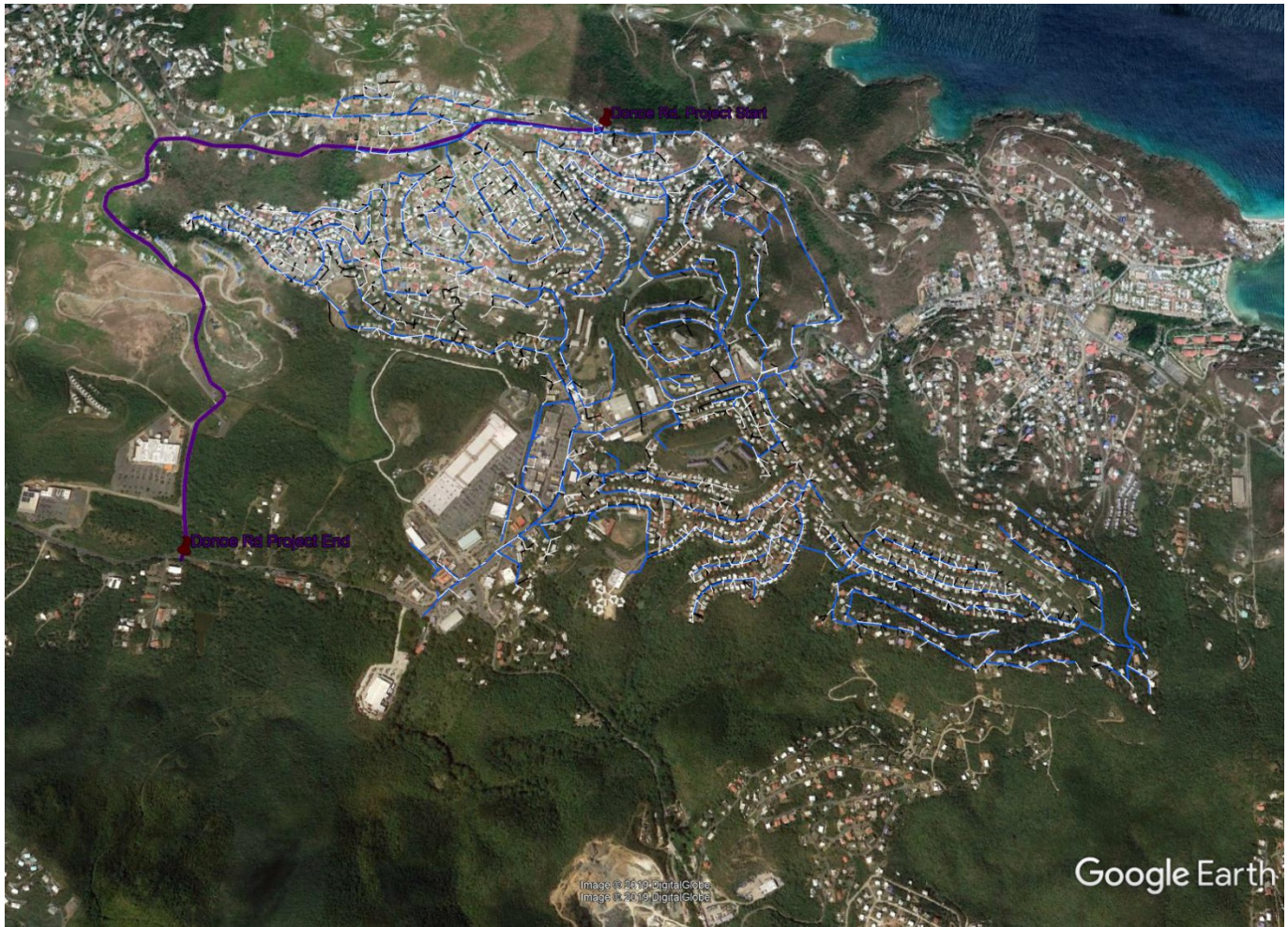
51. Procurement of Recovered Materials

A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

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Attachment 2- Utility Scope of Work/Maps/Underground Distribution/Construction Standards

Donoe Underground Project STT



Submitted by the Virgin Islands Water and Power Authority

Locations of equipment are preliminary and conceptual. Engineers will be responsible for the final location layout.

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Donoe Underground Project

The goal of this project is to mitigate against the destruction and restoration of the distribution system that serves the Donoe Road and Anna's Retreat residential area. In this project the overhead main feeder route along Donoe Road will be replaced with underground infrastructure. Also, all overhead infrastructure in the Anna's Retreat/Tutu residential and commercial areas will be replaced with underground infrastructure. See attached KMZ files for location data and additional information.

Goals:

1. Mitigate against massive destruction and restoration of the electrical system caused by hurricanes or major windstorms.
2. Reduce restoration cost and effort of the electrical system after a hurricane or major windstorms.
3. Improve the reliability and reduce system losses of electric distribution system.
4. Ensure stability of the tourist dependent economy by way of strengthening the electric distribution infrastructure.

Objectives:

1. Bury distribution lines serving Donoe Road and communities feeding off roadway.
2. Replace existing pole mounted transformers with pad-mounted transformers.
3. Remove current aerial lines of the feeder.

Introduction

Power delivery is one of the most important components of the economy. The effect of wide-scale blackouts and local disruptions during a storm prove this. Underground distribution is a vital part of a reliable power delivery system. It reduces the number of faults on a system to a nominal amount. Additionally, underground systems nearly eliminate the need for extensive restoration efforts after major storms.

On a yearly basis, the U.S. Virgin Islands faces a serious threat from hurricanes and other coastal storms, and the resulting shoreline flooding and water surges. Hurricanes and coastal storms also bring extremely high winds which place unusual stresses on buildings, facilities and the aerial electrical system.

Along the Donoe roadway are various businesses and residential communities that would significantly benefit from the upgrade to these electrical infrastructures. The overall game plan is to underground all three phase main lines, three phase laterals, single phase and services.

Objectives

The objectives stated in the initial subsection of the proposal are to prevent the massive destruction and restoration of the electrical system because of a hurricane/tropical storm. Improve the efficiency and performance; reduce system losses of the electrical distribution system. And, ensure adequate electric distribution capacity and space to meet the future needs of the community.

To meet these objectives, the authority has proposed to replace the current aerial overhead distribution system with an underground one. This would entail the design of ducts, cables and manholes underground along Route 39 and 40 picking up all take-offs along Donoe Road.

SCOPE OF WORK

1. Install 6 – 6-inch PVC gray schedule 40 electrical conduits a total of 10,962 ft for Donoe Road main lines.
2. Install 3 – 4-inch PVC gray schedule 40 electrical conduits a total of 8,000 ft for Donoe Road secondary lines.
3. Install 2 – 4-inch PVC gray schedule 40 electrical conduits a total of 112,368 ft for the community main takeoff lines.
4. Install 2 – 4-inch PVC gray schedule 40 electrical conduits a total of 196,626 ft for the community secondary lines.
5. Excavate trench to specified width to accommodate electrical conduits.
6. Encase conduits with 3,000-psi concrete throughout the entire duct bank system.
7. Place electrical warning tapes inside trench at 12 inches below final grade.
8. Repave any remaining portion of trench with black asphalt to final grade (as required).
9. Construct and install manholes as specified on underground construction standards. Install a 3/4" x 10' ground rod in the floor of each manhole with 4" stub-up in the floor.
10. Install standard heavy-duty type H-20 Highway loading manhole covers and they shall be marked "ELECTRIC" or "COMMUNICATION" as required.
11. Electrical Manholes must be 8'x8'x7' (LxWxH). Typical Man-hole design can be provided. Communication Manholes must be 3'x3'x3'. (LxWxH)
12. Test the entire duct system with a 85% minimum conduit size mandrill.
13. All manholes must be constructed with 4,500 psi minimum concrete strength and to support 4,000 pounds minimum vertical load.
14. In as many cases as possible, above ground junctions should be utilized so as to avoid the necessity of having to be submitted to confine space regulations.
15. Build transformer pads and install transformers at the required locations.
16. Hi-Pot test cables at 40kV for 13.8kV feeder and 60 KV for 24.9kV feeders for 15 minutes per phase.
17. Crossing of all roads and driveways shall be restored to their original state, which include but not limited to concrete, asphalt, grass and or any other final grade surface.
18. Acceptance of the work shall be made through VIWAPA's assigned personnel.

19. Provide As-Built Drawings for all changes to design.
20. The Bidder/Contractor will be responsible for replacing any devices damaged, disturbed or removed by the Bidder/Contractor in the course of the project.
21. Grounds around all construction areas should be restored to their original states.
22. Bidder/Contractor shall be responsible for initiating, maintaining and supervising safety precautions and programs in connection with the work. In addition, the Contractor shall ensure that the equipment and material furnished are, at a minimum, in strict compliance with any and/or all of the applicable codes and standards listed below.

EPA -	Environmental Protection Agency
OSHA -	Occupational Safety and Health Administration
NEC -	National Electric Code
NEMA -	National Electric Manufactures Association
RCRA -	Resource Conservation and Recovery Act
TSCA -	Toxic Substance and Control Act
DOT	Department of Transportation
ASTM -	American Society of Testing Materials
AGMA -	American Generator Manufacturer's Association
NESC -	National Electric Safety Code
AWWA -	American Water Works Association
NSI -	National Sanitation Foundation
FP-96 -	Federal Highway Administration

Customers affected by this project will be: 2865



UNDERGROUND TRANSMISSION AND DISTRIBUTION
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UNDERGROUND TRANSMISSION AND DISTRIBUTION

CONSTRUCTION STANDARDS

I. PROCEDURES AND DRAWINGS

I.1 SCOPE

The following standards cover minimum requirements for design of underground electrical transmission and distribution systems to the electrical grid of the Virgin Islands Water and Power Authority (VIWAPA). In all instances, the minimum requirements of the latest edition of the NESC prevail and shall be strictly adhered to.

The application of these standards covers the following areas:

1. Electrical installations to service single family dwellings, multifamily dwellings, shopping centers, etc.
2. Extensions of existing distribution systems.
3. Electrical installations for industrial parks.
4. Electrical installations for resort complexes, parks, along roads or highways, green areas, hotels, commercial buildings, etc.
5. Conversion from aerial to underground lines.
6. Electrical service upgrade.

I.2 PRELIMINARY PROCEDURES

1. Before starting the design of any system, designer shall consult with VIWAPA about the available facilities near the project. A plot plan drawing showing project location should be submitted to VIWAPA for this purpose, as well as a brief description of the project and its estimated electrical demand load, connecting load and connecting point to VIWAPA should be shown. Coordination with VIWAPA is mandatory.
2. VIWAPA will evaluate the particular situation and consult with the designer on a point of connection to the electrical system, the type of service in area, the voltage in area, the main feeder closest to the project, rights-of-way, easements, etc.
3. The designer shall provide clear information about the electrical needs for each residential, commercial and/or industrial load in the project.

II. Drawings and Submittal

Prior to start construction, a drawing package shall be submitted to VIWAPA Engineering Department for approval. This design package shall meet VIWAPA design requirements and include on the following drawings:

- a. Primary distribution system one line diagram with secondary distribution table showing plots to be served by each transformer.
- b. Plot plan showing underground system and equipment locations (transformers, manholes, conduits, switch gear etc.).
- c. Equipment specification (such as relays, transformers, switch gear etc)
- d. Installation details (trench, riser pole, pads, manhole, electric meters etc.).
- e. All drawings shall have a U.S. Virgin Islands certified Electrical Engineer or license Electrician seal.

II.1 Geographic Location Drawings

These drawings shall include sufficient information to locate the exact project site on the Island. Plot plan showing Estate name is required. Adjacent plots shall be shown and labeled.

II.2 Electrical Drawings

- [a] Two (2) copies (D size paper) of the electrical design shall be submitted for VIWAPA approval.
- [b] Indicate the existing transmission and distribution lines, public lighting systems, telephone lines, TV cable, etc. that could interfere with the proposed design or that is near to the location of the project.
- [c] The proposed design of the new electrical system, public lighting system, as well as the location of the facilities needed for the project shall be shown. This includes the location of secondary pedestals, transformers, sectionalizers (which should be numbered), lighting, fixtures, etc.
- [d] The possibility of using the same trenches for other services, such as telephone, TV cable, etc. should be clearly indicated.
- [e] The scale used in the drawings shall be clearly indicated.
- [f] The point of connection of the new system to VIWAPA Feeder lines should be clearly indicated.
- [g] Developer should consult with VIWAPA before ordering any equipment, to be sure these equipment meet VIWAPA standard and requirement.

II.3 Construction Details Drawings

- [a] Drawings shall include all the details necessary to clarify each area of installation.
- [b] When all or part of the construction design departs from these standards, the approval of the new design shall be obtained from VIWAPA before changes are made. The new design shall be clearly detailed in the revised drawings submitted for approval.
- [c] Drawings showing the design details of each part of the installation should indicate all major items such as: trenches, transformers, vaults, secondary pedestals, point of connection to the VIWAPA system, riser poles, secondary lines, service drops, rights of way, etc.

- [d] A list of major equipment and materials to be used in the project such as switches, transformers, conductor sizes, manholes, splice connection, etc should be on the drawing. Specifications or shop drawings of major equipment shall be submitted also for approval.
- [e] Provide a table showing linear foot distances between major items such as manholes, transformers, switches etc.
- [f] As-built drawings shall be submitted showing the installation of all pad mount transformers, switches and any other equipment; in Auto-Cad no later than 30 days after project completion.

II.4 Drawings Revision and Approval

- [a] VIWAPA shall review and approve all drawings. No work shall start before VIWAPA approved the drawings.
- [b] In the case that VIWAPA determine that minor changes have to be made, these will be annotated on the same drawings. Otherwise, the designer would be notified, and the necessary changes and modifications would be discussed. Revised drawings would then be resubmitted for approval.
- [c] An approved drawing signified that the design in question complies with the requirements of VIWAPA. This approval last for one year from the date of shown on the stamp. If the project has not executed within this period, a new approval shall be required.
- [d] There will be no cost for drawing approval.

III. GENERAL REQUIREMENTS FOR DESIGN AND INSTALLATIONS

III.1 General

III.2 Field of Application

These standards as well as the construction requirements, will be the principal guides for Construction and Inspection of Underground Distribution Systems, and will apply to all systems constructed by private contractors as well as those constructed by VIWAPA. All

systems shall be installed in compliance with the latest edition of National Electrical Safety Code (NESC).

III.3 Parts of the System

Major Underground Distribution System Components include:

- [a] Main feeders
- [b] Sectionalizing units
- [c] Branch feeders
- [d] Lateral circuits
- [e] Transformers with protective devices
- [f] Service drops
- [g] Grounding design
- [h] Riser poles

The electrical design system should be located in the green areas, streets, sidewalk, or along public areas. Only designs with front lot construction into subdivisions will be considered for approval.

IV. Primary Circuits

IV.1 Main Feeders

The main feeders system are three (3) phase, four (4) wires wye with voltage available from VIWAPA system.

IV.2 Conductors

[A] Type

The conductors shall be copper of the concentric neutral type or of the tape shielded (upon approval for some areas) type. When three copper conductors of the concentric neutral type are used, the three neutrals together can be used as the fourth wire to ground. When three tape shielded cables are used, the fourth wire shall be bare copper of the same size as the phase wires (or

4/0 cu max) to be used as the neutral. The use of aluminum conductors is not acceptable by VIWAPA. All tape shielded or concentric neutral types' cables shall meet VIWAPA's fault current requirement at that location. In all cases a minimum of 10,000 amps for five (5) cycles.

[B] Insulation

The insulation of the cable shall be EPR (Ethylene Propylene Rubber) at 133% thickness. Other types of insulation must be approved by VIWAPA.

1. The covered jacket of cable shall be PVC and UV rated.
2. The cable must have the following information written on the external jacket (at a minimum of 10 feet apart):
 - [a] Manufacturer's identification
 - [b] Type of insulation (EPR)
 - [c] Conductor size
 - [d] Type of conductor (copper)
 - [e] Nominal voltage
 - [f] Year manufactured
 - [g] Length in feet at a minimum of 10 feet apart.

[C] Splices and Terminations

All cables must be terminated with preformed terminations for exterior use. Terminations shall be rated at the nominal voltage of the cable or shall be one step higher than the nominal voltage. Splices shall be of the preformed type such as: Elastimold, 3M, Cooper, Joslyn or equivalent products.

IV.3 Installation

- [a] Conductors shall be installed in conduits. **Direct burial cable is not permitted.** All underground cables must be installed in gray PVC conduits schedule 40 or better. VIWAPA requires a

spare conduit of the same size in the same trench. The spare conduit shall have pull cord installed. 3,000 psi concrete over conduits is optional when conduits depth is 3 feet or more.

- [b] The feeders shall be designed and constructed for easy interconnection with other feeder or in a loop system.
- [c] In general, the feeders shall be installed from sectionalizer unit to sectionalizer, transformer to transformer, manhole to manhole or from a pole to a sectionalizing unit without splices. Nevertheless, when long feeders are installed and there is a need for splicing, a pad mounted junction or manholes shall be provided. Every effort should be made to use load-break terminators. The method of pulling the cable shall be by the conductor using a pulling eye.
- [d] PVC Schedule 40 or higher will be used at the concreted section of the duct bank, rigid galvanized metal conduits or aluminum tapped shall be used for risers. Riser conduits shall be protected from vehicle damage with a concrete base with a minimum height of 4 feet above final grade. The spare conduit shall be terminated and capped at a minimum height of 12 inches above the concrete base. Opening for cables shall be sealed.
- [e] The riser conduit shall be installed at a minimum height of 26 feet up the pole or 2 feet above Innovative highest cable. A PVC conduit cap or approved weather-head shall be used at the top of the riser to prevent water entrance.

IV.4 Protection

The Primary Circuit Main Feeders shall be protected with the following protective devices:

- [a] Surge Arresters – Silicon Carbide MOV Types. Pole mounted arresters must be 100% silicon rating of a silicon carbide-MOV type surge arrested shall be not less than 125 percent of the maximum available phase-to-ground voltage at the point of application. Example:

7.6 kv Phase to ground	-----	10 kv arrester
14.4 kv Phase to ground	-----	18 kv arrester
19.9 kv Phase to ground	-----	27 kv arrester

[b] Surge arresters shall be installed at the point of connection to VIWAPA lines and at the open end of the underground feeder, and / or at the end of each transformer tap off. Surge arresters shall be installed on all transformers.

[c] Routing of Surge Arresters Connections.
 Conductors used to connect surge arresters to VIWAPA line and to ground shall not be any longer than necessary and shall avoid unnecessary bends. Arresters installed on riser poles should be installed as close as possible to pot-heads (terminations) for maximum protection.

[d] Surge-Arrester Conductor Size.
 The conductor between the surge-arrester and the line, and conductor between surge-arrester and the ground wires shall be number 6 AWG copper or larger.

[e] Automatic circuit breakers or fuses interrupting current capacity rating should not be less than:

7.6 KV	-----	10,000 amps.
15 KV	-----	10,000 amps.
25 KV	-----	10,000 amps.
34.5 KV	-----	20,000 amps.

In some locations greater ratings are needed due to the available fault current in the system. VIWAPA will provide data upon requested.

[f] Fused elbows shall be used on all taps. Elbows shall be of Elastimold load break type or approved equivalent. Elbow shall

have phase marking. Elbows shall include test points and fault indicators. Fuse sizes shall be coordinated with and approved by VIWAPA. This information shall be included in the design package and submitted to VIWAPA. If fuse size required is greater than 65amp a relay device must be used and set according to VIWAPA approval.

[g]

Interconnections

Grounding conductor of surge arresters protecting distribution transformers that supply secondary voltage, shall be interconnected to the grounding ring

V. SECONDARY CIRCUITS

V.1 System

The underground secondary system shall be single-phase three wires at 120/240 volts, three-phase four wires at 120/208 volts or 277/480 volts. It shall be buried at depth required by the latest edition of the NEC. Secondary lines shall run from transformer to consumer meter base and then to consumer premise. Meters shall be located at the transformer.

V.2 Conductors.

The secondary conductors shall be stranded copper insulated with Flame – Retardant, Moisture and Heat-Resistant Thermoplastic (THW) or THNN rated 600 volts. The neutral shall be of the same size or larger insulated and solidly connected to ground system, the transformer and at the secondary pedestals. All conductors shall be installed in conduit systems. Metered and un-metered conductors shall not be installed in the same raceway. The recommended maximum cable length limit is 600 feet. This will allow 500 feet from the transformer to the property line and up to 100 feet of service conductor to the residence. This will ensure the voltage drop does not exceed 5% from the nominal voltage.

V.3 SIZE

Conductor sizes shall be according to the design requirement of the latest edition of the NEC. The same size of conductors shall be used between transformer and the consumer residence.

V.4 Voltage Regulation

Voltage drop shall not exceed 5% from nominal at the most remote point of any service from a transformer location.

V.5 Service Drop Conduits

- [a] Service drop conduits shall run from the transformer location to each plot of the project without crossing other plots besides the one they serve.
- [b] Service drop conduits shall be installed only through the front of each plot. The 'front' shall be the road side.
- [c] Secondary distribution system shall run along the street, through the green areas in front of the plots or under the sidewalks.
- [d] The developer shall provide facilities for empty plots. These facilities shall consist of a 1 ½ inch diameter PVC minimum conduit, capped at both ends. This conduit shall run from the transformer location to at least 12 inches beyond the property line being serviced.

V.6 Electric Meter

All electric meters shall be installed at the transformer location when practical at a height of 4 to 5 feet from finish grade to the center of meter. Electric load larger than 200 amps must have current transformers (CT) wiring. VIWAPA will provide the CT to the contractor for installation and VIWAPA will install the wires from CT to the meter base. VIWAPA also provide CT cabinets to Contractors when supplies are available.

VI Sectionalizing Units

Sectionalizing units shall be installed at the points of future development with the purpose of providing facilities for interconnection. In the same manner, sectionalizing units shall be provided to disconnect the radial or loop feeders.

VII Pad Mounted Primary Switches

These switches shall be stainless steel (304L) material. Switches are to be bolted to pad with approved stainless steel

bolts. Elbow arresters (MOV Type) shall be installed on both line and load sides of each switch. Fault indicators shall be installed on each switch. Fuses shall be installed on the load side of switch and should be coordinated and approved by VIWAPA. Contractor shall include fuse type and size in the switch specification section of the design drawings. Manufactures of pad mount primary switches are: Cooper Power System, Trayer Engineering Corp. S & C or approved equivalent. For installations requiring over three pad mount transformers, a pad mount switch is mandatory.

VIII Transformers

VIII.1 Type

The transformers shall be stainless steel body (304L), dead front, non-PCB oil-filled, or (environmentally friendly oil), single-phase low profile or three phase pad-mounted or submersible types. All transformers shall have a nameplate indicating the manufacturer's identification, capacity in KVA, frequency rating, impedance, configuration (delta wye) and primary and secondary voltage. Transformer should be equipped with oil submersible fuses, an oil submersible load break high voltage switch and an externally operated tap changer. VIWAPA recommends transformers with low operating losses and copper or aluminum windings. All transformers shall be loop feed configuration. Fault indicators shall be installed on each transformer if more than two transformers are installed from the same feed. These indicators shall reset automatically. Fault indicators shall be approved by VIWAPA prior to purchase and installation.

VIII.2 Voltages

Consult with VIWAPA on the primary voltage of the feeder nearest the project. Secondary voltage shall normally be 120/240 volts single-phase three wire or 120/208 and/or 277/480 volts four wire three-phase. Transformers shall have four taps with (1) 2 ½ % taps above nominal voltage and (3) 2 ½ % taps below nominal voltage on the primary side.

VIII.3 Transformer Losses

Transformers to be used in the project shall have losses better or equal to the average losses shown in the following table (copper winding):

AVERAGE DISTRIBUTION TRANSFORMERS LOSSES

<u>Rating (KVA)</u>	<u>Core Losses (Watts)</u>	<u>Winding Losses (Watts)</u>
10	70	183
15	88	234
37.5	165	463
25	125	340
50	204	598
75	280	850
100	357	1100
167	510	1775
250	705	2600
333	875	3450
500	1225	5080
750	1750	7540
1000	2233	10000
1500	3455	12300
2500	4956	18237
3750	6775	26325
5000	8800	33325

IX. REQUIREMENTS APPLYING TO UNDERGROUND LINES

IX.1 Installation and Maintenance

- A. Developer shall show all underground facilities in the proposed area of installation, on the designed drawings.
- B. Before construction started, all owners of other proximate facilities which may be adversely affected by new construction should be notified so that existing facilities are identified.

IX.2 Accessibility

All parts, which must be examined or adjusted during operation shall be arranged so as to be readily accessible to authorized persons by the provision of adequate working spaces, working facilities, and clearances.

IX.3 Inspection and Tests of Lines and Equipment

- A. Lines and equipment shall be subjected to standard tests to determine that they are in acceptable condition before the system is connected to VIWAPA.
- B. High voltage cables shall be tested for a duration of 15 minutes with High Potential test voltages (Hi Pot Test) indicated in the following tables:

FIELD TEST VOLTAGES FOR CABLES UP TO 69 KV SYSTEM

System Voltage KV RMS (phase-to-phase)	New Installation Test Voltage, KV (Direct Voltage, Conductor to ground)	Maintenance * Test Voltage, KV (Direct Voltage Conductor to ground)
15 -----	55	----- 25
25 -----	80	----- 35
35 -----	100	----- 45
69 -----	170	----- 80

*** This test is performed on existing medium voltage cables that have been installed to the distribution system.**

- C. Low voltage cables (below 600 volts) shall be tested for insulation resistance according to their voltage class. A Megger reading of at least 1 Megohm with 1000 volts dc test voltage is the minimum acceptable.
- D. Prior to energize, the transformers shall be tested for insulation resistance and for transformer turn ratio. The insulation resistance of a transformer shall be at least 1 Megohm per Kilovolt of insulation class, with a minimum of 1 Megohm.
- E. A qualified person must perform these tests in the present of VIWAPA technical staff. Contractor is to inform VIWAPA Technical Department at least 2 working days before the desire test date.
- F. When considered necessary by VIWAPA, cables and equipment shall be subject to these tests to determine required maintenance.
- G. VIWAPA reserve the right to disconnect any underground services after 2 recurring cable failures pending cable replacement.

X. UNDERGROUND CONDUIT SYSTEMS

A. ROUTING

1. General

- a. Conduit systems should be subjected to the least disturbance practical. Conduit systems extending parallel to another subsurface structure should not be located directly over or under the other subsurface structure. If this is not practical, the rule on clearances, as stated in section B below, should be followed.
- b. Conduit alignment should be such that there are no protrusions objects, which would be harmful to the Cable.
- c. When bends are required, the minimum radius shall be sufficiently large to prevent damage to cable being installed in the conduit.

2. Natural Hazards

Routes through unstable soils such as mud, shifting soil, etc., or through highly corrosive soils, should be avoided. If construction is required in these soils, the conduit should be constructed in such a manner as to minimize movement and/or corrosion or both. The use of concrete encasement should be considered as an option here.

3. Highways and Streets

When conduit must be installed longitudinally under the roadway, it should be installed in the shoulder or, in the center of one lane of traffic, if practical.

4. Bridges and Tunnels

The conduit system installed along bridges shall be located so as to minimize the possibility of damage by vehicle traffic. It should be installed where safe access for inspection or maintenance operation can be conducted for both the installed structure and conduit system.

5. Submarine Crossing

Submarine cable should be routed and installed so it will be protected from erosion by tidal action or currents. It should not be located where ships normally anchor.

B. Clearances from other Underground Installations

1. General

The clearance between a conduit system and other underground structures should be as large apart as necessary to permit maintenance of any of the systems without damage to the adjacent structure. A conduit, which crosses over another subsurface structure, shall have a minimum clearance sufficient to prevent damage to either structure. The parties involved should determine these clearances. However, the clearance shall not be less the section B-2 (below).

2. Separation between VIWAPA and Communications Conduit Systems

Minimum separations between communication conduit systems and VIWAPA conduit systems shall be as listed below:

- a. 4 inches of concrete with 12 inches separation in dirt
- b. 4 inches of masonry with 12 inches separation in dirt
- c. 24 inches of well tamped earth.

3. Sewers, Sanitary and Storm.

- a. If conditions require a power conduit to be installed parallel to and directly over a sanitary or storm sewer, it may be done provided both parties are in agreement as to the method.
- b. Where a power conduit run crosses a sewer it shall be designed to have suitable support on each side of the sewer to prevent transferring any direct load onto the sewer and vice versa if the power conduit run under the sewer.

4. Water Lines

Power conduit should be installed as far as in practical (min 24 inches) from a water main in order to protect it from being undermined if the main breaks. Power conduit, which crosses over a water main, shall be designed to have suitable support on each side as required to prevent transferring any direct loads onto the main and vice versa if the power conduit run under the water main.

5. Fuel Lines

Power conduit should have sufficient clearance from fuel lines to permit the use of pipe maintenance equipment. This must be a minimum of 24 inches. Conduit and fuel lines shall not enter the same manhole.

6. Steam Lines

Power conduit should be so installed as to prevent detrimental heat transfer between the steam and conduit systems.

XI EXCAVATION AND BACKFILL

A. The Trench

The bottom of the trench should be undisturbed, tamped, or relatively smooth earth. Where the excavation is in rock, the

conduit should be laid on a protective layer of clean tamped backfill dirt or sand. Trench must be inspected by VIWAPA. The first inspection is done after the installation of primary and secondary conduits. Other inspections will follow.

B. Quality of Backfill

All backfill should be free of material that may damage the conduit system. Backfill within 6 inches of the conduit should be fine fill material, free of any solid material greater than 2 inches in maximum dimension or with sharp edges likely to damage the conduit system. The balance of backfill should be free of solid material not greater than 4 inches in maximum dimension. Backfill material should be adequately compacted to 95 % in layers not greater than 6 inches (caliche or equivalent). VIWAPA recommends the use of flowable fill (low strength concrete rated between 75 psi to 200 psi) as an alternative backfill material.

C. Concrete in Trench

The use of concrete over conduits in the trench is optional once the proper depth is met. Except in federal high ways the minimum depth to conduit system shall maintain a 3 feet dimension from finish grade to top of conduit. If this measurement is not possible, then 3 inches of concrete shall be installed to trench over the conduits for each 12 inches of dept not achieved. Concrete shall have a minimum ultimate 28 days compressive strength of not less than 3,000 psi.

XII. CONDUITS AND JOINTS

A. General

1. Conduit material shall be corrosion resistant and suitable for the intended environment.
2. The construction of the conduit system shall be designed so that a cable fault would not damage the cables in adjacent conduits.
3. The conduit system shall be designed to withstand external forces to which it may be subjected by the surface

loadings. The latest edition of Highway Standard shall be followed.

4. The internal finish of the conduits shall be free of sharp edges or burrs that could damage the cable.

B. Installation

1. Restraint

Conduit, including terminations and bends, should be suitably restrained by backfill, concrete envelope, anchors, or other means to maintain its designed position under stress of installation procedures, cable pulling operations, and other conditions such as settling and hydraulic uplift.

2. Conduits

All conduits between the meter and transformer shall be PVC schedule 40 pipes. All other conduits shall be gray schedule rigid galvanize.

3. Joints

Conduits shall be joined in a manner sufficient to prevent solid matter from entering. Joints shall form a sufficiently smooth interior surface between joining conduit sections so that the cable will not be damaged when pulled past the joint.

4. Externally Coated Pipe

When conditions are such that externally coated pipe is required, the coating shall be corrosion resistant and should be inspected and tested to see that the coating is continuous and intact prior to backfill. Precautions shall be taken to prevent damage to the coating when backfilling

5. Building Walls

Conduits installed through a building wall shall have internal and external seals intended to prevent the entrance of gas into the building insofar as practical. The use of seals may be supplemented by gas venting devices in order to

minimize building up of positive gas pressure in the conduits.

6. Bridges

Conduit passing through a bridge abutment should be installed so as to avoid or resist any shear due to soil settlement. Metallic conduits installed on bridges shall be effectively grounded.

7. Entering Manholes

Conduit shall be installed on compacted soil or otherwise supported when entering a manhole to prevent shear stress on the conduit system at the point of manhole entrance.

XIII. MANHOLES, HANDHOLES and VAULTS

A. STRENGTH

Manholes, handholes and vaults shall be designed to sustain all expected loads which may be imposed upon the structure. The horizontal design loads and vertical design loads shall consist of dead load, live load, equipment load, impact load, load due to water table, and any other load expected to be imposed upon the structure, to occur adjacent to the structure, or both. The structure shall sustain the combination of vertical and lateral loading that produces the maximum shear and bending moments in the structures.

1. In roadway areas, the live load shall consist of the weight of a moving tractor-semi trailer
2. In designing structures not subject to vehicular loading, the minimum live load shall be 300 lb per square foot.
3. Live loads shall be increased by 30% for impact.
4. When hydraulic or other uplift will be encountered, the structure shall either be of sufficient weight or so equipment installed in the structure is not to be considered as part of the structure weight.
5. On Highways, the Federal Highway Administration (FHA) guidelines supersede any conflicting VIWAPA regulations.

6. Concrete strength shall be rated at 4,500 psi minimum at 28 days.

B. DIMENSIONS

Manholes shall meet the following requirement: A clear working space sufficient for performing the necessary work shall be maintained. The horizontal of clear working space shall not be less than 3 ft. The vertical dimensions shall not be less than 6 ft 6 inches, except in manholes where the opening is within 1 ft, horizontally, of the adjacent interior sidewall of the manhole.

C. MANHOLE ACCESS OPENINGS

1. Round access openings in a manhole containing supply cables shall be no less than 30 inches in diameter. Round access openings in any manhole containing communication cables only or manholes containing supply cables and having a fixed ladder that does not obstruct the opening, shall be not less than 24 inches in diameter. Rectangular access openings should have dimensions not less than 26 inches by 22 inches.
2. Openings shall be free of protrusions that will injure personnel or prevent quick egress.

D. COVERS

1. Covers of sufficient weight or proper design shall securely close manholes and handholes so they cannot be easily removed without tools.
2. Covers should be suitably designed or restrained so that they cannot fall into manholes.
3. Strength of cover and their supporting structure shall be at least sufficient to sustain the applicable loads or H20 rated. See Federal Highway Administration (FHA) guidelines and rules.
4. Covers should be labeled "Electric".

E. ACCESS

1. Manholes or hand holes openings shall be located so that safe access can be provided. When in the highway, they should be located outside of the paved roadway when practical. They should

be located outside the area of street intersections and crosswalks whenever practical to reduce the traffic hazards to the men working at these locations.

2. Personnel access openings in manholes or hand holes should be located so that they are not directly over the cable or equipment. Where these openings interfere with curbs, etc., they can be located over the cable if one of the following is provided:
 - a) A conspicuous warning sign.
 - b) A protective barrier over the cable.
 - c) A fixed ladder.

F. LADDER REQUIREMENTS

Fixed ladders shall be corrosion resistant. Portable ladders shall be well supported, strong and in good condition. Portable wood ladders shall not be painted, except with a clear non-conducting coating, nor shall they be longitudinally reinforced with metal. **Portable metal ladders shall not be used near energized parts.**

G. DRAINAGE

Where drainage is into sewers, suitable traps or other means should be provided to prevent entrance of sewer gas into manholes or hand holes.

H. MECHANICAL PROTECTION

Power cables and equipment shall be installed and guarded in such a manner as to avoid damage by objects falling on them.

I. IDENTIFICATION

Manhole and hand-hole covers should have an identifying mark which will indicate ownership and or "Electric".

XIV. SUPPLY CABLE

General: Cable should be capable of withstanding tests applied in accordance to the table shown in section IX.3, B.

- A. The design and construction of conductors, insulation, sheath jacket, and shielding shall include the consideration of mechanical, thermal, environmental, and electrical stresses that are expected during installation and operation.
- B. Cable shall be designed and manufactured to retain specified dimensions and structural integrity during manufacture, reeling, storage, handling and installation.
- C. Cable shall be designed and constructed in such a manner that each component is protected from harmful effects of other components.
- D. The conductor, insulation and shielding shall be designed to withstand the effects of the expected magnitude and duration of fault current, except in the immediate vicinity of the fault.

XV. CABLE IN UNDERGROUND STRUCTURES

A. General 9

- 1. Bending of the power cables during handling and installation shall be controlled to avoid damage. Manufacturer's recommendations may be used as a guide.
- 2. Pulling tensions and sidewall pressures on the power cable should be limited to avoid damage. Manufacturer's specification will state the maximum pulling tension.
- 3. Conduits should be cleaned of foreign material which could damage the power cable before pulling the cables.
- 4. Cable lubricants to be used shall not be detrimental to cable or conduit systems.
- 5. On slopes or vertical runs, consideration should be given to restraining the cables to prevent downhill movement.
- 6. Power, control and communication cables shall not be installed in the same conduit.

B. CABLES IN MANHOLES AND VAULTS

1. Supports

- a. Cable racks supports shall be designed to withstand both live and static loading. Sample manufacture product as Underground Device products.
- b. Supports shall be installed to maintain separation between cables.
- c. Horizontal runs of power cables shall be supported at least 3 feet above the floor and suitably protected. This does not apply to grounding or bonding conductors
- d. The installation should allow cable movement without destructive concentration of stresses. Special protection may be necessary at conduit entrance.

2. IDENTIFICATION

A. General

1. Cables shall be permanently identified by tags or otherwise at each manhole or other access opening of the conduit system. Feeder number and phase marking shall be identified. If the phases are not known, request for help from VIWAPA before labeling.
2. All identification shall be of such quality and located so as to be readable with auxiliary lighting.

XVI GROUNDING AND BONDING

- A. Insulation shielding of cable, concentric neutral and joints shall be effectively grounded.
- B. Cable sheaths or shields and concentric neutral which are connected to ground at a manhole shall be bonded or connected to a common ground.
- C. Bonding and grounding leads shall be copper and of proper size.
- D. All cables connected to ground rods should be cad-welded or compression crimps.
- E. All equipment in manholes must be properly grounded.

- F. Metal riser conduits shall be grounded with a #2 cu wire minimum and connected to the grounding grid system of the transformer pad.
- G. Ground rod shall be installed at all riser poles.
- H. A #2 (minimum) bare conductor shall be installed 12 inches above primary conduits in the trench. This conductor shall be bonded with the grounding grid, transformer ground ring and at the riser pole ground rod.

XVII. RISERS

A. GENERAL

1. A concrete physical impact protection around the riser base is required. Concrete base should extend at least 1 foot below ground level and at least 4 feet minimum above ground. A maximum height of 6 feet can be requested by VIWAPA where the greatest risk of vehicle damage exists.
2. During design and installation, do not exceed the manufacture cable bending radius.
3. Exposed conductive pipes or guards containing supply conductors or cables shall be effectively grounded.
4. Conduits should extend a minimum of 26 feet from final grade, or a minimum of 2 feet above the higher of either Telephone or Cable TV wiring.
5. Conduits standoff should be 12 to 18 inches and installed at 5 feet separation on the pole.
6. Riser conduits **shall NOT** be installed on Main Feeder Poles. Exceptions only in extreme cases, and must be approved by VIWAPA.
7. The installation should be designed to limit water from getting inside riser conduits.
8. Power cables shall be supported in a manner designed to prevent damage to conductors, and/or terminations.
9. Where power cables enter the riser conduits, they shall be installed in such a manner that shall minimize the possibility of damage due to the relative movement of the cable and conduits.

B. RISER POLES – Additional Requirements

1. Risers should be located on poles in the safest available position with respect to climbing space and possible exposure to traffic damage. Riser base should not block sidewalk or expose pedestrians to greater risk of injuries from vehicle traffic.
2. The number, size, and location of riser conduits shall be limited to allow adequate access for Linemen climbing.

XVIII. POWER CABLE TERMINATIONS

A. GENERAL

1. Power cable terminations shall be designed and constructed to withstand the mechanical, thermal, environmental and electrical stresses expected during operation.
2. Cable terminations shall be designed to prevent moisture penetration into the cable.

B. SUPPORT AT TERMINATIONS

1. Cable terminations shall be installed in a manner designed to maintain their installed position.
2. Cables shall be supported or secured in a manner designed to prevent the transfer of damaging mechanical stresses to the termination, equipment, or structure.

C. IDENTIFICATION

Cable phase and feeder number shall be labeled on all terminations. Feeder and phase information can be obtained from VIWAPA.

D. SEPERATIONS and CLERANCES

Adequate electrical clearance of power cable terminations shall be maintained, both between conductors and between conductors and ground, consistent with the type of termination used.

E. GROUNDING

1. All exposed conducting surfaces of the termination devices, other than live parts and equipment to which it is attached, shall be effectively grounded.
2. Any conductive structures supporting cable terminations shall be effectively grounded.

XIX. EQUIPMENT

1. General

Equipment includes: buses, transformer, switches, etc. installed for the operation of electric power system.

2. Design

- a. The expected thermal, mechanical, and environmental conditions at the location shall be considered in the design of all equipment and mountings.
- b. Supporting structures, including racks, hangers, or pads and their foundations shall be designed to sustain all loads and stresses expected to be imposed by the supported equipment including those stresses caused by its operation.
- c. All equipment, including auxiliary devices, shall be designed to withstand the effects of normal, emergency, and fault conditions expected during operation.
- d. Switches shall have a clear indication of contact position, and the handles shall be clearly marked to indicate operating directions.
- e. Enclosures containing fuses and interrupter contacts shall be designed to withstand the effects of normal, emergency, and fault conditions expected during operation.
- f. When tools are to be used to connect or disconnect energized devices, spaces and/or barriers shall be designed to provide adequate clearance from ground or between phases.
- g. Where pad-mounted equipment is not within a fenced or otherwise protected area, access to exposed live parts in excess of 600 volts shall require two separate conscious acts to enter. One shall be the opening of

a door or barrier which is locked otherwise secured against unauthorized entry. The other shall be either the opening or the removal of a second secured door or barrier.

- h. Hazard warning signs should be placed on all sides to all pad mount equipment and to be visible by the general public. Written in both Spanish and English with letters 1 ¼ inch to 2 inches high.

3. Location in Underground Structures

- a. Equipment shall not obstruct personnel access openings in manholes or vaults nor shall it prevent easy egress by men working in the structures containing the equipment.
- b. Equipment shall not be installed closer than 8 inches to the back of fixed ladders and shall not interfere with the proper use of such ladders.
- c. Equipment should be arranged in a manhole or vault to permit installation, operation and maintenance of all items in such structures.
- d. Switching devices which have provision for manual or electrical operation shall be operated from a safe position. This may be accomplished by uses of portable auxiliary devices, temporarily attached.

Equipment shall not interfere with drainage of the structure.

Equipment shall not interfere with the ability to ventilate the structure.

4. Installation

- a. Provisions for lifting, rolling to final position, and mounting shall be adequate for the weight of the device.
- b. Live parts shall be guarded or isolated to prevent contact by persons adjacent to the equipment.
- c. Operating levers, inspection facilities, and test facilities shall be visible and readily accessible when equipment is in final location.
- d. Live parts shall be isolated or protected from exposure to conducting liquids.
- e. Operating controls of supply equipment, readily accessible to unauthorized personnel, shall be secured by bolts, locks or seals.

5. Grounding

- a. Cases and enclosures made of conductive material shall be effectively grounded.
- b. Guards constructed of conductive material shall be effectively grounded.

6. Identification

Where transformers, regulators, or other similar equipment operates in a group, tags, diagrams, or other suitable means shall be used to indicate that fact.

7. Load Classes

Below is a table used to calculate the average amount of load to a typical house base on square feet.

House Size (FT ²)	KVA/House
0 - 1400	4.0
1401 - 2000	5.0
2001 - 4000	7.0
4001 - 7000	10.0
7001 - 10000	15.0
10001 OR MORE	20.0

XX. DRAWING SPECIFICATION ----- SEE ATTACHED

XXI. New Underground Requirements

1. Transformers:

- All transformers shall be stainless steel (304L) material.
- All transformers shall be bolted to pad with approved stainless steel thru bolts.

- Check with WAPA for specifications on transformer losses prior to purchasing.
- Elbow Arresters (MOV Type) shall be installed in all transformers. (See attachment #1)
- Fault indicators shall be installed in each transformer, once more than one transformer is installed. (See Attachment #2)
- All Fault indicators shall reset automatically on current or voltage. Indicators shall be approved by WAPA prior to purchase and installation
- (Fault indicators should be optional)
- Secondary conductors from transformer shall not exceed 400'.

2. Pad Mounted Primary Switches:

- Switches shall be stainless steel (304L) material.
- Switches shall be bolted to pad with approved stainless steel thru bolts.
- Elbow Arresters (MOV Type) shall be installed on both line and load side of each switch.
- Fault indicators shall be installed in each switch.
- (Fault indicator should be optional)
- Fuses shall be installed on the load side of the switch. Fuse sizes shall be coordinated with and approved by WAPA. Contractor shall include fuse type and size in the switch specification section of design drawings.
- Pad-mounted switches shall be manufactured by: 1) Cooper Power, 2) Trayer Engineering Corp., 3) S&C or approved equivalent.
- With installations requiring three or more transformers, pad-mounted primary switch is mandatory.

3. Junctions:

- Fused Elbows shall be used on the taps. Elbows must be manufactured by Elastimold or approved equivalent.

Fuse sizes shall be coordinated with and approved by WAPA. This information shall be included in the design drawings.

- Fault indicators shall be installed on each high voltage cable at each junction.
- (Fault indicators should be optional)

4. Duct Bank:

- A bare #6 copper conductor (Minimum) shall be installed (Direct Buried) along the entire duct bank.
- (Optional)
- The conductor should bond with the transformers' grounding loop and the ground rod at the riser pole.

5. Grounding:

- All connections to ground rods shall be cad-welded or compression crimp. (Burndy etc...)
- A minimum of one (1) Ground rod shall be installed in all manholes. The rod shall be connected to all grounds in the circuit.

6. Design:

- Transformer to transformer/switch designs is preferred, avoiding manholes and hand holes as much as possible.