

**United States Virgin Islands  
Housing Finance Authority  
Community Development Block Grant- Disaster Recovery  
(CDBG-DR)  
Construction and Rehabilitation Management  
Policies and Procedures**

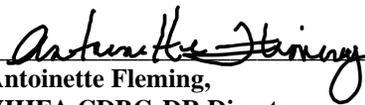
**September 22, 2020**

Prepared by:

Virgin Islands Housing Finance Authority



The policies stated in this manual are current as of September 22, 2020. This Manual represents the current version of the Virgin Islands Housing Finance Authority’s (VIHFA) policies which shall provide general guidance for the operation of the CDBG-DR programs. All manuals will be reviewed periodically and will be updated. Therefore, you are strongly urged to visit our website [www.vihfa.gov/disaster-recovery](http://www.vihfa.gov/disaster-recovery) to ensure that you have the latest version.

<b>SUBJECT: Construction and Rehabilitation Management Policies and Procedures</b>	
<b>Version Number</b>	1.0
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**Table 1: CDBG-DR Construction and Rehabilitation Standards Version Control**

Version Number	Date Revised	Description
1.0 (DRAFT)	09/16/2020	Version 1- Draft of Construction and Rehabilitation Management Policy and Procedures

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## **1.0 INTRODUCTION**

The Construction and Rehabilitation Management Policy and Procedures adopted by the Virgin Islands Housing Finance Authority for the Community Development Block Grant-Disaster Recovery (VIHFA CDBG-DR) Program ('Program') shall apply to the Housing Rehabilitation and Reconstruction projects supported by CDBG-DR funds.

All CDBG-DR assisted construction initiatives must undergo an environmental review process and meet all applicable local codes, ordinances, USVI Construction Information for Stronger Homes Guidelines, USVI Green Building requirements; include repairs or modifications that increase resiliency, Housing Quality Standards ( HQS ) requirements, correct health, safety and building code violations to achieve decent, safe and sanitary housing, and flood related repairs.

All repairs or modifications will be made using standard grade materials. VIHFA CDBG-DR will not provide additional funding for costs related to the use of higher-grade materials. The cost estimates for standard grade materials may or may not be comparable in quality to those used by the applicant to complete work at home prior to the program.

## 2.0 POLICY

### 2.1 Version Policy

Version history and dates of publication are tracked in the table above. Substantive changes that reflect a policy change will result in the issuance of a new version with a new primary version number; future policy changes and publications will result in additional revision versions.

Non-substantive changes, such as minor wording and editing or clarification of existing policy that does not affect the interpretation or applicability of the policy, will be included in minor Version updates; such changes will result in a sub-Version numbers, such as 2.1, 2.2, etc.

#### 2.1.2 Policy Change Control Board

Policy changes for the U.S. Virgin Islands Housing Finance Authority's CDBG-DR Program are considered through a change control process, which includes a Policy Change Control Board (PCCB). The PCCB is composed of the CDBG-DR Legal Counsel, the Senior Policy Manager, the Planning and Construction Assistant Director, and at least one Subject Matter Expert, and other program staff members representing Program leadership, as needed.

When policy clarifications, additions, or deletions are needed to more precisely define the rules by which the Program will operate, Program staff will submit a Policy Change Request Form or a Request for Decision Form for internal review by the PCCB. Within the PCCB, two members will separately perform a review to verify that all relevant information and any supporting documentation are included in the request. Upon PCCB concurrence by these two members that the request raises a policy issue, rather than a process issue, the Policy Change Request Form or Request for Decision is forwarded to the Policy Change Control Board for consideration. The requests are compiled and brought before the entire PCCB for a final policy change determination.

The PCCB meets as needed, to consider all pending requests but may meet as frequently as necessary to consider critical policy decisions. The schedule for PCCB meetings is expected to move to a lower frequency as the Program matures.

### 3.0 ACRONYMS AND DEFINITIONS

- **Americans with Disabilities Act (ADA)** – A civil rights law that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public.
- **Asbestos Containing Material (ACM)** - A mineral fiber that has been used commonly in a variety of building construction materials for insulation and as a fire-retardant.
- **Base Flood Elevation (BFE)** –Is the recommended elevation of the lowest floor of a building based on FEMA coastal studies.
- **Builder Assignment Method** – The process of assigning qualified builders to reconstruct damaged or destroyed homes without requiring a separate bidding process.
- **Carbon monoxide (CO)**- Is a colorless, odorless gas which at high levels can cause serious illness and death.
- **Change Order** - Changes in the original scope of work agreed on by the Contractor and VIHFA.
- **Construction Management** - A qualified management firm contracted by the VI CDBG-DR program to perform inspections, prepare damage assessments/estimates, estimates cost of repairs and perform quality control of their own deliverables prior to submitting the work product to the Territory.
- **Construction Manager** – Person or designee who is responsible for construction management operations to include initial inspections, estimating the cost of repairs, contracting with reconstruction/rehabilitation contractors, construction management with progress and final inspections.
- **Construction Scoping Documents** – documents consisting of design plans, specifications and/ or estimated cost of repair used by contractors to reconstruct or rehabilitate an eligible structure.
- **Construction Standards** – The Standards that meet the Virgin Islands Building Code, the HUD Housing Quality Standards (as established in 24 CFR 982.401), and/or the most current ADA Standards for Accessible Design and Uniform Federal Accessibility Standards (UFAS).
- **Damage Assessment**- Inspection to determine the total amount of repairs required for the home that is being evaluated.
- **Damage Assessor (DA)** –Trained professionals in assessing preliminary but accurate onsite evaluation of damage or loss caused by a natural event. Damage assessors

record the extent of damage, what can be replaced, restored, or salvaged, and time required for their execution in compliance with Program allowances.

- **Damage Repair Verification Estimate (AA).** The Authorized Allowance Estimate (AA) is the estimate to determine natural disaster damage repairs that have already been completed to a home.
- **Davis Bacon Wage Requirements** - A United States federal law that establishes the requirement for paying the local prevailing wages on public works projects. It applies to “contractors and subcontractors performing on federally funded or assisted contracts in excess of \$2,000 for the construction, alteration, or repair (including painting and decorating) of public buildings or public works.
- **Demolition** – Clearance and proper disposal of dilapidated buildings, structures and lot improvements.
- **Duplication of Benefits (DOB)** – The Robert T. Stafford Disaster Assistance and Emergency Relief Act (“Stafford Act”) prohibits any person, business concern, or other entity from receiving financial assistance from CDBG Disaster Recovery funding with respect to any part of a loss resulting from a major disaster as to which damaged property has already received financial assistance under any other program or from insurance or any other source. The Territory will allow for the most permissive current interpretation provided by HUD in determining Duplication of Benefits.
- **Estimate-** A detailed line item report associated with a line item cost for either work already completed or work remaining (prospective work).
- **Estimated Cost of Repairs (ECR)** – An estimated cost of the repairs necessary for a structure that was damaged as a result of natural disasters. The ECR will also include costs associated with health and safety issues and associated code violations, and other needed repairs consistent with VIHFA CDBG-DR policies.
- **Environmental Protection Agency (EPA)** - An agency of the U.S. federal government which was created for the purpose of protecting human health and the environment by writing and enforcing regulations based on laws passed by Congress.
- **Federal Emergency Management Agency (FEMA)** -An agency of the United States Department of Homeland Security, initially created by Presidential Reorganization Plan No. 3 of 1978 and implemented by two Executive Orders on April 1, 1979. The agency's primary purpose is to coordinate the response to a disaster that has occurred in the United States and that overwhelms the resources of local and state authorities. The governor of the state, commonwealth, or territory in which the disaster occurs must declare a state of emergency and formally request from the president that FEMA and the federal government respond to the disaster.
- **Ground-Fault Circuit Interrupter (GFCI)** -A fast-acting circuit breaker designed to shut off electric power in the event of a ground-fault within as little as 1/40 of a second. It works by comparing the amount of current going to and returning from equipment along the circuit conductors.

- **Household** – A household is defined as all persons occupying the same housing unit, regardless of their relationship to each other. The occupants could consist of a single family, two (2) or more families living together, or any other group of related or unrelated persons who share living arrangements. For housing activities, the test of meeting the low to moderate income objective is based on the calculations from household income certifications.
- **Housing Quality Standards (HQS)** - Defines "standard housing" and establish the minimum criteria for the health and safety of program participants. Current HQS regulations consist of 13 key aspects of housing quality, performance requirements, and acceptability criteria to meet each performance requirement. 24 CFR 982.401
- **Housing and Urban Development (HUD)** - A Cabinet department in the Executive branch of the United States federal government. Although its beginnings were in the House and Home Financing Agency, it was founded as a Cabinet department in 1965, as part of the "Great Society" program of President Lyndon Johnson, to develop and execute policies on housing and metropolises.
- **International Energy Conservation Code (IECC)** - Encourages energy conservation through efficiency in envelope design, mechanical systems, lighting systems and the use of new materials and techniques.
- **International Residential Code (IRC)** -A comprehensive, stand-alone residential code that creates minimum regulations for one- and two-family dwellings of three stories or less. It brings together all building, plumbing, mechanical, fuel gas, energy and electrical provisions for one- and two-family residences. The IRC also provides a prescriptive approach (i.e., a set of measures) and a performance approach (i.e., energy modeling) for determining compliance.
- **Lead Based Paint (LBP)** –A substance added in house paint mostly in structures built on or before 1978. Lead is a highly toxic metal that may cause a range of health problems, especially in young children.
- **Manufactured Housing Unit (MHU)** – A structure, transportable in one or more sections which, in the traveling mode is eight body-feet or more in width, or forty body-feet or more in length, or when erected on site, is at least 320 square feet, and which is built on a permanent chassis and is designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning, and electrical systems contained therein.
- **Minimum Property Standards (MPS)** - Establishes certain minimum standards for buildings constructed under HUD housing programs. This includes new single-family homes, multi-family housing and health care type facilities.
- **New Construction** – A replacement home that substantially exceeds the original footprint on the existing lot (if permitted) or the construction of a new home in a new location.

- **Photograph Log Sheet** – Method by which all relevant photography of site-specific conditions and construction are documented and include at a minimum the applicant’s name, address and applicant identification number with a description of what the picture documents.
- **Personally Identifiable Information (PII)** - Information that can be used on its own or with other information to identify, contact, or locate a single person, or to identify an individual in context.
- **Quality Assurance:** The process in which reviews the quality of products or services to ensure that they meet standards as stated.
- **Quality Control (QC)** – The process which reviews the quality of all factors involved in production.
- **Reconstruction:** Demolition and rebuilding of a residential structure, including a modular housing unit, on the same lot and in substantially the same footprint and manner as the previous housing unit (whether demolished with CDBG-DR assistance, or demolished prior to Program application). This activity also includes replacing an existing substandard site-built, modular housing, or manufactured housing unit (MHU). The number of units may not be increased, and the total square footage of the reconstructed structure may not be substantially increased beyond the original principal residence square footage. However, the number of rooms within a unit may be increased or decreased based on the applicant’s current household size.
- **Reconstruction Estimate.** An estimate for reconstruction rather than repair of a property that was destroyed or cannot be feasibly repaired.
- **Rehabilitation** - The labor, materials, tools, and other costs of improving buildings, other than minor or routine repairs. The term includes where the use of a building is changed to an emergency shelter and the cost of this change and any rehabilitation costs does not exceed 75 percent of the value of the building before the change in use.
- **Right of Entry (ROE)-** A document which authorizes the VI CDBG-DR Program staff and contractors to have the right of access to enter and onto a program applicant’s property/home in order to perform inspections.
- **Standardized Plans and Specifications** - Plans and specifications describe the location and design features and the construction requirements in enough detail to allow for accurate pricing and to provide for the construction of the project without significant change orders and claims.
- **Stick-built-** Housing construction that consist of all assembly is completed on the project site.

- **Total Project Cost-** The sum of qualified expenditures plus all other cost necessary to acquire land, construct and make construction improvements in accordance with the plans and specifications to complete the project.
- **Uniform Plumbing Code (UPC)-** a model code developed by the International Association of Plumbing and Mechanical Officials to govern the installation and inspection of plumbing systems as a means of promoting the public's health, safety and welfare.

## 4.0 ELIGIBLE CONSTRUCTION ACTIVITIES AND REPAIRS

### 4.1 Eligible Construction Activities

The Construction and Rehabilitation Policies and Procedures adopted by the Virgin Islands Housing Finance Authority for the Community Development Block Grant – Disaster Recovery (CDBG-DR) Program shall apply to all Housing Rehabilitation and Reconstruction projects with CDBG-DR funds. The Construction and Rehabilitation Policies and Procedures define a standard and code compliance level for the construction and rehabilitation necessary to correct health, safety and building code violations to achieve decent, safe and sanitary housing.

The following priorities will serve as the basis for decisions regarding the eligibility of specific items within the allowable Program budgets. However, repair or replacement is dictated by damage and Program policy, not merely by allowance.

1. Mandatory work items resulting from damage caused by Hurricanes Irma and Maria, and any future nature disasters necessary to bring the property into compliance with the:
  - International Residential Code (IRC) applicable to the location, and
  - USVI Construction Information for Stronger Homes Guidelines.
  - HUD’s Housing Quality Standards (HQS), including room additions and improvements to address occupancy guidelines.
2. Other necessary items to mitigate environmental issues such as:
  - Noise abatement, and
  - Cleanup of environmental contamination, and
  - Abatement and disposal of lead-based paint (LBP), and
  - Abatement and disposal of asbestos containing materials (ACM)
  - Cleanup of mold, and mitigation of the causes of mold.
3. Modifications to increase accessibility for occupants who have a verified disability. Modifications, for those with verified disabilities, include all HUD required ADA improvements to meet HUD established HQS standards, to the maximum extent possible, in existing units designated for Rehabilitation. The HUD required ADA unit specifications shall be required in all designs for Reconstruction projects, for those with verified disabilities. The HUD required ADA provisions include, but are not limited to the following:
  - At least one 36” entrance door (preferably the main entrance) is on an accessible route served by a ramp or no-step entrance
  - Each interior door is at least a standard 32” door, unless the door provides access only to a closure of less than 15 square feet
  - All door handles are to be lever door handles.
  - Each hallway has a width of at least 36” and is level, with ramped or beveled changes at each door threshold
  - Each bathroom wall is reinforced for potential installation of grab bars
  - Each electrical panel, light switch or thermostat is not higher than 48” above the floor
  - Each electrical plug or other receptacle is at least 15” above the floor
  - If the applicable building codes do not prescribe another location for the breaker boxes, each breaker box is located not higher than 48” above the floor inside the building
  - Toilet seats are to be 1’4” – 1’7” above the floor
  - Design a minimum of 2’6” wide x 4’ open floor area with an out-swinging door in at least one-half bath and preferably one full bathroom

4. Other items which may adversely impact the health or safety of residents such that improvements to basic structural elements; mechanical, electrical, and plumbing systems, etc. are warranted to meet HUD Housing Quality Standards.
5. Those items which are code deficiencies, but are not threatening health or safety, or that are incipient violations such as major systems in danger of failure, i.e., water heater that is properly vented, but is within a year or two of its life expectancy or roof within three years of life expectancy.
6. Items related to conservation of water or energy, i.e., low flow toilets, energy efficient light fixtures, energy efficient appliances, etc.

## 4.2 Eligible Repairs

The CDBG-DR Program’s intention is to provide our clients with the best possible home rehabilitation or home reconstruction services. The unit repairs are intended to ameliorate any damages evident in the homes that have a causal relationship to Hurricanes Irma and Maria or any future natural disasters. All rehabilitation and reconstruction repairs shall be required to ensure that the homes meet HUD Minimum Property Standards for Housing, Housing Quality Standards and the USVI Construction Information for Stronger Homes Guide. Any damage evident in the home that has a causal relationship to the flood Hurricanes Irma or Maria are eligible for inclusion in the estimate.

### 4.2.1 Minimum Property Standards

#### Green Building Standard

The Virgin Islands has determined that it is appropriate to utilize a modified Green Building Standard for the rehabilitation of one & two-family homes (1-2 units) and small rental properties (3-20 units).

Historic averages for high and low temperatures by month in the USVI, coupled with the fact that there is no need for space heating or cooling equipment, dictates modifications from typical Green Building requirements for building envelope insulation, air sealing, and ventilation.

Monthly Averages & Records - °F   °C						
Date	Average Low	Average High	Record Low	Record High	Average Precipitation	Average Snow
January	72°	85°	63° (1996)	93° (1996)	2.38"	0"
February	73°	85°	62° (1972)	93° (1996)	1.48"	0"
March	73°	86°	56° (1972)	94° (1994)	1.42"	0"
April	74°	87°	62° (2001)	96° (1996)	2.74"	0"
May	76°	88°	66° (1974)	97° (1996)	3.06"	0"
June	78°	89°	67° (1972)	99° (1996)	2.53"	0"
July	78°	90°	57° (1999)	98° (1994)	2.85"	0"
August	78°	90°	59° (1999)	99° (1994)	3.74"	0"
September	78°	90°	64° (1972)	98° (1993)	5.58"	0"
October	77°	89°	66° (2007)	97° (1994)	5.42"	0"
November	75°	87°	52° (1999)	95° (1995)	5.23"	0"
December	74°	86°	62° (1972)	92° (1995)	2.96"	0"

The Virgin Islands does not appear to fall within the EPA's Radon Zone 1 or 2, although there is very little information available on EPA's Region 2 website related to the prevalence of radon in the U.S. Virgin Islands. Therefore, Radon testing will not be employed in this program.

The VIHFA Green Building Standards for rehabilitation are intended to promote energy efficiency and green building practices for residential rehabilitation projects.

For specific Green Building requirements see the "Exterior and Interior Lighting," "Plumbing," "Pump/Water Heater" and "Paint" standards included below.

All rehabilitation projects shall meet the requirements of the "HUD Green Building Retrofit Checklist" in Appendix 6.

All other materials not specifically described but required for a complete and proper installation of the work, shall be new first quality of their respective kinds, and as selected by the Contractor subject to the approval of the Owner.

### **Appliances**

- All replacement and new appliances shall be ENERGY STAR labeled
- Clothes dryers are to be vented directly to the outdoors, using rigid-type duct work. For rehabs, this is often not possible due to the existing poured wall construction.

**Building Systems** - Acceptable building systems for Reconstruction Projects are as follows:

- Reinforced concrete and/or concrete block throughout
- Reinforced concrete and/or concrete block exterior with frame interior
- Steel frame with masonry exterior
- Steel frame with lath and plaster exterior or other composite material that may be approved by VIHFA
- Other structural material types that may be approved by VIHFA on a case-by-case basis

### **Cabinetry**

- Repair and/or replacement of cabinetwork can solely be allowed within the estimate for kitchens, bathrooms, and laundry rooms.
- Kitchens should have reasonable space for storage and preparation of food.
- Cabinetry shall be sound, with working doors and drawers.
- New countertops shall have plastic laminate covering or an approved solid surface. Counter tops shall be level within a 1/8" in 4'. Seal entire back and edges of countertops at sink cut outs with water-based polyurethane varnish.
- When replacing or repairing kitchen, bathroom and laundry room cabinetry, materials that have sturdy, washable surfaces.
- Cabinets shall be of luan, edai, or Philippine mahogany plywood faced, and edge banded. (No particle wood, or non-treated wood material will be used. Laminate cabinets or PVC cabinets with will be permitted).
- When cabinetry upper or lower require repaired or replacement, both uppers and lower cabinets should be consistent standard grade material, style or type. Cabinetry shall be affixed to the wall with the suitable variety and sort of properly sized screws (wood screws for frame walls and Tapcon style fasteners for concrete/masonry walls).
- Install materials and systems in accordance with manufacturer's instructions and approved submittals.

## **Cistern**

- Cistern must be assessed for mitigation if necessary.
- The supply of clean water that is suitable for consumption and other household uses is of paramount importance. The interior of the cistern should be waterproof using a minimum of two (2) coats of Thoroseal or and approved equal product. Once the cistern has properly cured, it should be filled with 3,000 gallons of potable water.
- The cistern access should be sanitary-sealed.

## **Cleaning**

- Dumpsters will be allowed in the ECR estimate placed in the Main Level, when a significant amount of work is to be completed within the repair estimate and warrants a dumpster.

## **Doors/Locks**

- All main entry doorways shall be at least 3'0" in width. Other sizes may be approved on a case by case basis.
- Interior room doorways shall meet VI Code minimum requirements; however, where handicap accessibility modifications are required, interior room doorway widths shall be no less than 3'0" (36").
- New installation exterior doors shall be flush solid core, paneled, steel, fiberglass or aluminum.
- Doors shall be painted with a minimum of two (2) coats of paint or clear finish on all edges and surfaces.
- Exterior doors at each entrance to the dwelling shall require at least one dead bolt lock with a minimum 1-inch throw and an entry lockset, keyed alike, as per code.
- All program approved doors would be utilized where doorways are exposed to the element and shall complete hardware package (door sweep hinges, closer, locksets, etc.) Door(s) shall be hinged to suit convenience of the Owner and existing exterior door(s). Door shall be minimum 1-1/4" thick and color to be selected by Owner.

## **Electrical**

- Each living area within the unit shall have working outlets and light fixtures and shall be free from electrical hazards.
- All receptacles in Bathrooms, Kitchens, laundry rooms and on the exterior must be Ground-Fault Circuit Interrupter (GFCI) protected.
- Exterior receptacles must be weatherproof.
- At minimum, the dwelling shall meet the current National Electric Code (NEC) standards.

## **Entrances**

- All entries for new construction (front, side, and rear) must have some overhead coverage to ensure that no weather hits directly onto the entry door. In cases where this is not possible, or would be too costly, then partial coverage and protection will be acceptable if the doors which are exposed to the prevailing winds are properly protected from wind-driven rain entering the dwelling. This can also be achieved by recessing the entry door inwardly a minimum of 24".

## **Exterior and Interior Lighting**

- Lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed, including emergency lighting in multifamily.

### **Fire Protection**

- Living units shall have some provisions for safe egress in the event of fire.
- Smoke detectors shall be provided in the hallways and all bedrooms. Smoke detectors shall be hard-wired with battery-back-up.
- A fire egress window shall be provided in each bedroom that does not have a door to the exterior.

### **Floor Finish**

- Dwelling unit's interior floor shall be free from hazardous conditions (to include missing and/or broken floor tiles). Interior floor finish shall be commercial grade vinyl tiles or ceramic tile (5/16" minimum thickness). Bathroom tiles must be either ceramic tile or terrazzo. Whenever possible, and where floor installation is otherwise in good condition, every effort should be made to match existing tile but, where more than 20% of the tiles need replacement and/or no suitable match is available, the entire room may be re-tiled. Where entire room(s) has been re-tiled, Contractor shall be required to provide one (1) box of spare tiles for the owner upon completion, to be used for future repairs.

### **Gutters and Downspouts**

- All gutters and downspouts shall be seamless, pre-finished metal or vinyl, properly hung with necessary downspouts. All gutter and downspouts must be secured to a part of the building. Downspouts and cistern overflows must be directed a minimum of 2' way from building walls, in areas where soil exists beneath the installed downspout and be capable of carrying runoff water away from the foundation. All gutters must have the proper slope as to empty the rainwater from the gutter.

### **Handicap Accessibility**

- Where necessary to accommodate an elderly or physically challenged household member, accessibility modifications shall be made to the greatest extent feasible. Examples of accessibility modifications include access ramps, grab bars, door handles, and accessible bathroom and kitchen fixtures. Handicap accessibility modifications shall be done in accordance American with Disabilities Act Design Guidelines.

### **Handrails**

- Handrails should have intermediate rails or ornamental closures (e.g., balusters, pickets, or solid walls) which would prevent passage of an object that is 4" (102 mm.) or more in diameter, shall not be conducive to climbing, and shall be a minimum of 36" high on horizontal planes.
- Where more than 20% or more of the handrails need replacement and no suitable match is available, the entire railing must be replaced.
- Handrails shall be required for stairways according to the IRC.

### **HVAC Systems**

- HVAC systems are not normally included in residential building construction in the US Virgin Islands; mainly due to the tropical climate that exist for more than 90% of the year.

- Jalousie, awning, casement or any other types windows and ceiling fans are typically utilized to promote air circulation. Air conditioners are not usually installed in federally assisted housing due to the high cost of energy on the Islands.

### **Faucets**

- Kitchen faucet center sets shall be single or double control, as noted in bid sheet, and shall be chrome plated. American Standard or equivalent in quality and design. Kitchen faucet sets shall be equipped with a spray attachment. Kitchen faucets must be water conserving fixtures (2.0 gpm).
- Tub/shower faucet center sets shall be single or double control, as noted in bid sheet, and shall be chrome-plated Moen, American Standard or equivalent in quality and design. Bathtub/shower facets must be water conserving fixture (1.5 gpm)
- Walk in showers shall have a single handle temperature/pressure regulated faucet with a handheld shower spray on a slide bar. Showerheads must be water conserving fixtures (2.0 gpm)
- Laundry faucet sets, over laundry trays, shall be standard double control with spout and connections for washer hoses. Wall or deck mount shall be noted on bid sheet.
- Washing machine connections shall be equipped with shut-off valves installed per the currently adopted Uniform Plumbing Code (UPC).

### **Lead Safe Work Practices**

- This applies to properties built before 1978. If the project involves disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.

### **Lumber**

- Lumber products for exposed sheathing, fascia, rake rafters and similar items shall be framing lumber that is readily available and that meets the current industry standards with minimal knots. Exposed framing lumber shall also be pre-primed on all faces (including end grains), for example, treated Douglas pine #1 and treated Southern pine #1) (where allowed by code). All exterior replacement shall have a minimum of one coat of primer paint.
- Repairs of existing materials shall match the existing material as close as possible. Alternate materials shall be approved by the Owner.
- Where lumber is exposed to weather, in ground contact, or in areas of high relative humidity, provide fasteners with a hot-dip zinc coating.

### **Mold Inspection & Remediation**

- Inspections of the interior and exterior of the building for evidence of moisture problems must be documented to the extent and location of the problems and implement the proposed repairs.

### **Paint**

- Where scope of work entails painting, a minimum of two (2) coats in addition to the appropriate type of primer coat shall be applied. All surfaces to be painted shall be properly prepared to receive finish

coats. Exterior paint shall be latex; interior paint shall be semi-gloss washable enamels in kitchens and baths, satin or flat finish elsewhere. All interior paints and primers must be less than or equal to the following VOC levels: Flats--50 g/L; Non-flats--50 g/L; Floor--100 g/L. [g/L = grams per liter; levels are based on a combination of the Master Painters Institute (MPI) and GreenSeal standard.

## **Plumbing**

- Kitchen and all bathrooms shall have hot and cold running water. At minimum, dwelling shall meet the UPC Uniform Plumbing Code (Section VII).
- When replacing plumbing fixtures, the new fixture must meet the following water conservation specifications: [gpf = gallons per flush; gpm = gallons per minute]
  - Toilets-- 1.28 gpf for single flush, or for dual-flush toilets 1.6 and .9 GPF for its respective high and low flushes, and all toilets must score 1,000 on the MaP test ([www.map-testing.com](http://www.map-testing.com);) )
  - Bathroom lavatory faucets 1.5 gpm
  - Kitchen faucets 2.0 gpm
  - Showerheads 2.0 gpm
  - Urinals 0.5 gpf
- All supply pipes will be either PEX, Polybutylene, PVC or CPVC.
- When replacing or repairing tub and/or shower enclosures, use non-paper-faced backing materials such as cement board, fiber cement board or the equivalent.
- All fixtures shall match existing fixture, when appropriate and feasibly possible.
- All faucet/valves will be handicapped designated when necessary.
- Kitchen sinks shall be 20-gauge stainless steel, double bowl with a depth of 8 inches.
- Provide owner with copies of all equipment warranties.

### **Showers/Tub**

A complete shower/tub enclosure repair/replacement shall include removal of existing wall coverings to stud wall, required structural repairs if any and installation of new material, as per work write-up. Type of finished for shower or tub wall surface material to be noted on work write-up. Ceramic tiles shall be standard 4" or 6" with mortar-backing on shower and tub surrounds.

A complete shower/tub enclosure repair shall also include new thermostatic pressure balance faucet set. If replacement of the shower pan is necessary, it shall be noted on the work write-up. Shower pans shall be molded fiberglass, or another one-piece molded unit. All intersecting joints must be caulked.

Use materials that have durable, cleanable surfaces.

### **Sinks and Basins**

Kitchen sinks shall be 20-gauge stainless steel with self rimming. Type of sink and number of compartments to be noted on work write-up.

Kitchen sink area shall have a 4" ht. min. backsplash of ceramic tiles and a double seal must be provided to prevent water penetration. This shall be accomplished by sealing the backsplash to the countertop and then utilizing a waterproof caulking on the face, filling any gaps, and leaving a slightly coved, even and neat finish.

Drop-in basins for bathrooms vanities shall be porcelain. One-piece molded basins and vanity tops shall be cultured marble/onyx. Type of sink to be noted in work write-up.

All sinks and basins shall include a new strainer, tailpiece, trap, trap arm, stop valves, and water supply lines, and shall be Delta, or American Standard or equivalent in quality and design. Color to be noted on work-write up.

When replacing or repairing sinks/basins use materials that have durable, cleanable surfaces.

#### **Toilets**

Toilets shall include new seat with lid, wax seal, flange bolts, stop valve and water supply line and shall be American Standard or equivalent in quality and design. Toilets shall be Grade A in quality and low water capacity type (1.6 gallon) and at 1.28 gpf.

#### **Pump/Water Heater**

- Dwelling unit shall have a water pump, tank, and heater. Pump shall have a standard 30-gallon pressure tank. Water heater shall be electric with a minimum capacity of 20 gallons. Upon installation, the water heater shall be set within the range of 100 to 110 degrees Fahrenheit. Pump, tank, and heater shall be securely enclosed to prevent theft or vandalism and exposure to weather elements. When installing domestic water heating system(s), the system(s) shall meet or exceed the efficiency requirements of the ENERGY STAR for Homes' Reference Design. Pipes will be insulated by at least R-4. Solar Water heaters may be installed if economically feasible. Provide adequate drainage for water heaters that includes drains or catch pans with drains piped to the exterior of the dwelling to prevent mold.

#### **Roof**

- New roofs shall be constructed of wood-framing members, engineered wood, metal or wood truss, steel or concrete. Structural members should be of size and type as prescribed by current building code. Roof finish shall be corrugated metal, plywood, or concrete.
- Wood-frame and engineered wood and/or metal truss roofs shall have roof sheathing (5/8" plywood), tar paper and purlins prior to the installation of the corrugated metal. Composite wood products are not used in federally assisted housing in the Virgin Islands. All cut lumber/sheathing shall be pressure treated Southern Pine/ Douglas Fir No.1&2.
- Plywood and concrete roofs should be waterproofed with sealant products such as neoprene-Hypalon, or products of equal quality.
- Roofs should have a minimum slope of 3:12 pitch. The maximum roof pitch should be 5:12, except in historical district where higher pitch may be required by Historical Preservation guidelines.
- All roofs shall have enough guttering and downspouts leading water directly to cistern.
- For Rehabilitation projects, if roof leaks are occurring in specific, limited areas, complete roof replacement may not be warranted, and repairs shall be considered enough. Application of an approved roof coating will be an appropriate method of roof repair.

#### **Smoke and Carbon Monoxide Detectors (CO)**

- Install detectors per the International Residential Code. Smoke detectors shall be in each sleeping room, on each level/story of the dwelling and in the hallway leading to any bedroom, and
- CO detectors will be installed in new homes with any fuel burning appliance, or other device that has the potential to produce dangerous levels of CO gas. These detectors must meet the requirements of the most recent Underwriters Laboratories (UL) 2034 standard or International Approval Services 6-96 standard.
- All smoke detectors must be operational. The contractor will be responsible to test smoke detectors upon installation. There must be at least one working smoke detector on each level of the unit, including the basement. Local codes may have stricter requirements, such as placing a smoke detector outside of each bedroom.

### **Stairs/Railings**

- Entrances should have appropriately sized exterior platforms/landings. Ideally, stairway risers shall be even in height and shall be a minimum of 7 3/4". Stairways having three (3) or more risers should have a handrail of 30- 34 inches in height on at least one side of the stairway. All stairs shall have a non-slip finish.
- Handrails should have intermediate rails or ornamental closures (e.g., balusters, pickets, or solid walls) which would prevent passage of an object that is 4" (102 mm.) or more in diameter, shall not be conducive to climbing, and shall be a minimum of 36" high on horizontal planes.

### **Walls**

- Interior wall finish shall be of cement plaster, gypsum wallboard or any equivalent moisture resistant board. Ceramic tiles or prefabricated fiberglass shall be provided at showers, tubs, bathroom and laundry plumbing walls. Tub and/or shower enclosures shall be constructed of non-paper-faced backing materials such as, concrete blocks, 5/8" treated plywood finished with lathe and cement plaster, fiber cement board, or their approved equivalent.
- Exterior walls shall be of concrete masonry units (i.e., blocks), reinforced concrete, or other structural materials that may be approved by VIHFA on a case-by-case basis. Exterior wall finish shall be cement plaster, stucco, wood shiplap boards or other structural materials that may be approved by VIHFA on a case-by-case basis. Workmanship shall be flawless – leaving an even and neat finish.

### **Windows**

- Windows shall either meet current code or include approved storm rated shutters.
- An egress window shall be provided in each bedroom that does not have a door to the exterior.
- All windows shall have screens that prevent access by insects and are in good condition.

## **4.3 Ineligible Repairs**

The VIHFA has established the Ineligible Repairs listing found below. The following items are currently not eligible to be included in the damage assessment scope are:

- All special construction or materials above standard/economy grade.
- Trash compactors.

- Alarm/Security systems.
- Sound/Entertainment systems (e.g., in-wall speakers, wiring), wireless computer and communication systems, and cable television and telephone connections.
- Light fixtures beyond standard grade.
- Lighting controls beyond standard one- and three-way switches.
- House vacuum systems.
- Specialty roofing replacements.
- Second kitchens in single family homes.
- Jetted tubs.
- Crown molding, wainscoting.
- Wood trim profiles and species beyond standard grade.
- Granite, composite stone, or solid surface.
- Cabinets beyond standard grade.
- Built-in bookshelves, radiator covers, or any item requiring custom millwork.
- Built-in closet systems (closets will be replaced with wire shelving).
- Kitchen sinks and bathroom fixtures beyond standard grade.
- Door hardware beyond standard grade entry hardware for exterior doors and residential grade for interior doors.
- Stone tile floors and walls.
- Solid wood floor replacement
- Carpet
- Wallpaper.
- Skylights.
- Personal property, such as vehicles, furniture, and household goods and clothing.
- Repairs to non-attached buildings, such as pool houses, sheds, chicken coops, dog houses/kennels, beehives, and similar non-residential appurtenances.
- Well house. Out buildings (e.g., sheds, gazebos, trash enclosures, and pool houses).
- Boat ramps and docks.
- Detached garages/carports including those connected via a breezeway.
- Exterior decks and patios, unless to allow for egress on homes being elevated; materials limited to builder's grade composite decking and rail systems.
- Aluminum patio covers, not to include carport covers.
- Aluminum awning.
- Security iron door (will detach and reset only if hindering construction).
- Garage door openers.
- Solar panels and power systems.
- Landscaping
- Irrigation systems, fountains, ponds, exterior showers, etc.
- Swing sets/playground equipment.
- Heating or cooking fuel replacement.
- BBQ grills.
- Sandbags.
- Generators or other similar backup systems.
- Portable heaters.
- Swimming pools, hot tubs, saunas, and associated equipment.
- Additions to an existing structure, unless it is necessary to meet housing and building codes or occupancy standards.
- Contractors purchase of tools or equipment or other similar items.
- Contractors purchase of washers, dryers, dishwashers or removable air conditioning/heating units not attached to the house structure.

## 5.0 DAMAGE ASSESSMENTS

The VIHFA CDBG-DR has contracted with a construction management firm to provide construction management services for the construction and rehabilitation of damaged homes caused by Hurricanes Irma and Maria. These services include:

- ✚ initial damage assessments
- ✚ estimating the cost of repairs,
- ✚ authorized allowance estimates,
- ✚ coordinating with contractors and construction management, and
- ✚ progress and final inspections.

The damage assessments are made in depth to provide an independent view of the steps that will be taken for the rehabilitation or reconstruction of eligible properties under this program. Initial damage assessments are conducted purely to give an independent view of the work to be carried out for the rehabilitation or reconstruction of eligible properties under this program.

### 5.1 Scheduling an Assessment

The construction management firm will contact the eligible applicant(s) for initial assessment. The location of the property will be verified before the project using GPS coordinates, in addition to the availability of the applicant. If efforts to contact the owner fail, the inspector will decide whether to suspend or terminate the pre-construction process in each case. This effort involves at least three calls at different times of the day.

### 5.2 Arriving at the Site

Each homeowner must have the Right of Entry Form in Appendix 1, executed with CDBG-DR program prior to the inspector entering the home/property. Upon arrival at the site, the site inspector is expected to explain the purpose of the visit.

**DO NOT** take photographs of invoices/estimates, they should be collected in the application process, and must be provided directly to the intake staff. **NEVER** take possession of or keep any physical documentation from the applicant. If the applicant has permits, or photographs of initial flood damage, take a photograph of the information.

### 5.3 Initial Assessment

The construction management firm will allocate assignments to their inspectors based on internal processes and procedures. Once the Inspector receives an assignment, they will create the assignment in the construction management software tool being used.

The inspector, along with the homeowner, will conduct an initial assessment to ascertain and record the damage caused to the property on a Site Assessment Report in Appendix 2, along with photographs to address the following:

- interior and exterior elevations.
- visible signs of mold
- visible signs of relevant damage
- HQS deficiencies
- visible signs of structural damage as practical
- visible evidence of any repairs made to the property
- visible signs of termite damage to wood, sheetrock and other materials
- GPS reading at property line and the house.
- Sketch the floorplan of the eligible home under the main roofline.

The Inspector will also be responsible to document visible signs of site-specific environmental compliance factors to include only:

- Explosive/Flammable Operations
- Contamination/ Toxic Substances

### 5.3.1 Assessment Reports & Allowable Activities (AA)

The home assessment report is a vital part of any home rehabilitation or reconstruction inspection project and the assessor must take care to prepare the report which sums up the findings of the property. The assessor will use the report template to input information pertinent to the house that is being assessed. Photographs and sketches also play an important role in assessing damages to develop the assessment reports to include, Estimated Cost of Repairs (ECR) and Allowable Activities (AA).

### 5.3.2 Allowable Activities (AA).

The Allowable Activities (AA) report is the estimate to determine Hurricanes Irma and Maria damage repairs that have already been completed to a home.

## 5.4 Contractor Requirement

- Obtaining all construction documents necessary to commence work on their assigned home(s).
- Performing construction as specified in a timely manner (work should begin within 30 days of the Notice to Proceed) and subject to penalties for schedule delays (i.e., reduction in assignments, removal from the Program, payment of homeowner displacement expense, reassignment of project to another builder);
- Performing all work in accordance with International Residential Code (IRC) and USVI Construction Information for Stronger Homes
- Disposal of all construction debris at a waste landfill; and
- Performing all work in accordance with regulatory requirements for accessibility;
  
- If the property is in a floodplain, the contractor will ensure the base flood elevation is above the currently published Advisory Base Flood Elevation (ABFE) or the local code requirements, whichever is more stringent
- Disposal of all household hazardous waste in accordance with State and Federal environmental regulations;
- All contractor obligations are contained within the Construction Agreement and signed by the contractor at the Signing Event
- Change Orders shall be submitted in a timely manner demonstrating the labor, materials and equipment necessary for the additional work. Builders profit and overhead is not to exceed 15%.

**REHABILITATION CONTRACTORS** will be responsible and certified to perform the following:

- Lead Based Paint (LBP) encapsulation/remediation in accordance with Department of Housing and Urban Development (HUD), and Environmental Protection Agency (EPA);
- Asbestos containing material remediation in accordance with EPA, National Emissions Standards for Hazardous Air Pollutants (NESHAP) and HUD environmental requirements.
- Hazardous waste materials must be disposed in an approved landfill.

## 5.5 Contractor Responsibilities

The responsibility of a contractor in construction is the execution of the work activities that are required for the completion of the project. The roles and responsibilities of contractors manifest themselves in various aspects of the project. VIHFA CDBG-DR shall not award any contract until the prospective contractor, i.e., low responsive bidder, or successful offeror, has been determined to be responsible. A responsible bidder/offeror must:

- A. Have adequate financial resources to perform the contract, or the ability to obtain them;
- B. Be able to comply with the required or proposed delivery or performance schedule, taking into consideration all the bidders/offers of existing commercial and governmental business commitments.
- C. Have a satisfactory performance record;
- D. Have a satisfactory record of integrity and business ethics;
- E. Have the necessary organization, experience, accounting and operational controls, and technical skills, or the ability to obtain them;
- F. Have the necessary production, construction, and technical equipment and facilities, or the ability to obtain them; and
- G. Be otherwise qualified and eligible to receive an award under applicable laws and regulations, including not be suspended or debarred.

If a prospective contractor is found to be non-responsible, a written determination of non-responsibility shall be prepared and included in the official contract file, and the prospective contractor shall be advised of the reasons for the determination.

## 5.6 Contractor Assignments and Scorecard

The initial assignment of projects to contractors can begin the employment of the Contractor scorecard methodology. All projects are going to be evaluated, and results factored into running composite score and documented on the Contractor Performance Evaluation sheet in Appendix 5. The rating methodology is predicated totally on the amount of Notices to Proceed given to a contractor raised to an exponent that is constructed as the average of all rehab/reconstruction time scores received by the actual contractor.

This methodology puts emphasis on rehab/reconstruction times as a result of these are the program's most significant project metric, though such things as quality of construction and safety are necessary also, and factor into the methodology as demerits when lacking.

### 5.6.1 Contractor Assignment Phases

Contractors assignments will be conducted in a Two-Phase process, based on Scoring and Assignment and Performance as outlined in the Builders Assignment Methodology in Appendix 4.

In the Scoring and Assignment Phase, a contractor will be ranked in order from best composite score to worst. This Phase will end when all contractors have completed their initial three assignments.

Projects are assigned to contractors based on performance scores in the performance Phase. Plans will be selected and assigned according to their order in the process. Performance may vary dramatically based on the average build time score and the number of demerits achieved by the contractor, thus potentially leading to timely changes in the top tier of the scoring. VIHFA reserves the right to modify the assignment process outlined above to meet program requirements.

## 6.0 CONSTRUCTION MANAGEMENT

### 6.1 Design Review

Architect will submit drawings to the Construction Management firm and VIHFA CDBG-DR for review. The Architecture and Engineering Firm (A/E) will comply with project requirements and design requirements as defined in the A/E Services Scope of Work to develop the Construction Bid documents. VIHFA CDBG-DR will formally evaluate the Construction Bid documents. All floor plans for new house construction will be given a standardized floor plan that will include permits, all appurtenances including all utility connections, and related activities necessary to complete the work.

Based on the number of bedrooms and the existing footprint of the damaged home for rehabilitation, the Construction Manager, A/E firm and/or contractor will present a floor plan that meets the requirements for the existing footprints up to the current square footage. On a case by case basis, where the original foundation and infrastructure of the home remain, plans will be developed for that specific site.

The homeowner may work with the Construction Manager to adjust to a plan that works in their circumstances. Applicants, who meet the criteria for accessibility features, may work with the Construction Manager to select standard features to support individual accessibility needs.

### 6.2 Construction Cost Estimates

A construction cost estimate is a summation of all the costs involved in successfully finishing a project, from inception to completion (project duration). A construction cost estimate establishes the base line of the project cost at different stages of development of the project. These project costs can be categorized in several ways and levels of detail. See Appendix 7 for Construction costs for the EnVision Tomorrow program.

### 6.3 Construction Schedule

All construction schedules will be presented by the construction contractor and reviewed during the Pre-Construction meeting. VIHFA CDBG-DR will review the schedule to ensure appropriate durations have been included for all aspects of the construction, to include the following considerations:

- Construction contract period of performance.
- Project milestones
- Substantial Completion (contractor).
- Final completion (all punch list items completed) (contractor) elapsed using the construction management tool which generates all cost based online items

## 6.4 Total Project Cost (TPC)

The Total Project cost will be a combination of the ECR, URA, Environmental Review, and all other cost associated with rehabilitation and/or reconstruction projects under this program.

## 6.5 Design Change Procedures

Any requested programmatic design changes during design phase shall be submitted by the Architect to the Construction Manager in writing describing the scope and justification for the change. The Construction Manager will review the change request and determine the impact on funding, schedule and justification of requested change.

## 6.6 Permitting

Prior to beginning the work, the contractor will be responsible for obtaining all necessary documents for each job site from the CDBG-DR-program. All permits must be secured by the construction management firm for the execution of work under the contract. A copy of the building permit must be provided to the contractor to be displayed in plain view at the worksite. No posted applicant information will contain any Personally Identifiable Information (PII). A permit sign in the front yard or posting in the front window of the home is acceptable. The construction contractor will ensure work performed satisfies all International Residential Code (IRC), International Energy Conservation Code (IECC) and USVI Construction Information for Stronger Homes Guide, and all other federal, state, and local construction, health and safety code requirements upon project completion. Construction Manager or designee will oversee the work of the construction contractor for all construction projects.

## 6.7 Notice to Proceed (NTP)

The Notice to Proceed comes in the form of a letter from VIHFA CDBG-DR to a contractor stating the date the contractor can begin work subject to the conditions of the contract. The performance time of the contract starts from the NTP date.

## 6.8 Request for Information (RFI)

An RFI (request for information) is an essential early stage in any construction agreement, and it may occur and several points during the process. A request for information between a general contractor and a subcontractor who will perform labor, for example, will look different than one between the GC and a materials supplier.

## 6.9 Construction Change Orders

In the event any unforeseen conditions are discovered during construction or inspections, the contractor will request a Change Order, with supporting documentation, and submit to the Construction Manager for review and further determination. Only the VIHFA CDBG-DR can approve change orders.

# 7.0 CONSTRUCTION INSPECTIONS

Construction inspections will be carried out as they proceed to verify compliance with the program requirements. Construction inspectors are charged with ensuring that the construction project is being built according to applicable plans and building codes. The Construction Manager or designee will make available all dates and times for progress and final inspections to the applicant. In cases where the applicant cannot attend final inspection, the VIHFA CDBG-DR can, on their behalf, signoff on the contractor's request for payment. This must be approved by the Planning and Construction Assistant Director. The reason the

applicant refuses to sign must be considered, any legitimate items must be corrected, and attempt to have the homeowner sign again.

## 7.1 Quality Control Inspections

Periodically, inspections for the purpose of quality control will be performed on random samplings by the Construction Manager or designee to determine consistency within the Program and the Quality Control Checklist in Appendix 3, across contractors, and inspectors.

Quality Control inspections between progress payments will not require the presence of the applicant, and do not require scheduling in advance. Unannounced interim inspections by the VIHFA CDBG-DR Construction Management team shall be undertaken as necessary to insure appropriate performance levels by construction contractors.

## 7.2 Progress Inspections

Progress Inspections will be conducted as part of construction management and oversight services. The Construction Manager staff will perform progress inspections for each rehabilitation, reconstruction, and new construction project. Progress inspections will occur at the request of the contractor at predetermined stages during critical construction activities. However, progress inspections will occur after all required inspections have taken place.

Rehabilitation inspections shall occur at the 50% and 100% completion marks.

For reconstruction and new construction projects, inspections will be conducted at the 33%, 66%, and 100% stages of construction.

## 7.3 Final Inspections

The construction contractor will submit a request for a final site inspection to occur no earlier than 24 hours from the time of request.

Re-inspections will occur when a construction inspector observes one major or 5 minor incompletions and/or deficiencies during a progress/final inspection. Any incompletions and/or deficiencies observed will be documented and provided to the contractor for correction. The contractor may request re-inspection, once incompletions/deficiencies are corrected, but no earlier than 48 hours from the date of the request.

Final inspections are made when all construction has been completed and are used to guarantee that all work outlined in the contract has been satisfactorily completed and is up to all appropriate state and local codes, and that the home meets the minimum housing quality standards. A final inspection will be completed by the VIHFA Planning and Construction Assistant Director and signed final inspection form will be placed in the project file. The homeowner will be provided instruction booklets and warranty information.

## 7.4 Performance Benchmarks

Vendors will be required to meet performance benchmarks. Before draws for services from contractors can be authorized, the contractors will be required to demonstrate that they have met the benchmark associated with that payment. For example, construction contractors would be allowed to draw three times for each house according to the agreed upon scope of work.

## 7.5 Completion Time

All work shall be satisfactorily completed with a specified time period based on the bid amount and level of repair, as described in the scope of work.

If the contractor does not complete the work within the time frame specified in the work contract, a penalty of \$500.00 per day may be withheld from the amount to be paid to the contractor for each day that the work

is not completed. It is the responsibility of the contractor, in the event of inclement weather or any other reason beyond the control of the contractor that causes a "no work" day, to contact the Construction Manager/Inspector on the day of the occurrence. Only "no work" days reported as required will be considered when determining assessment of penalties.

## **8.0 PRE- CONSTRUCTION SIGNING EVENT**

Once a contractor is selected for a project, a pre-construction conference signing event will be conducted at a designated location with the applicant, selected building contractor, and VIHFA staff. If necessary, the VIHFA CDBG-DR will adjust the process of having separate meetings to meet new needs/requirements.

The purpose of the meeting for construction operations is to discuss all the following:

- Expectations;
- House plan selection;
- Applicant move-out;
- Accessibility options;
- Schedule for completion of construction per contract documents;
- Mobilization payments and
- Notice to proceed
- Architectural plan review
- Future construction meetings

## **9.0 FOLLOW-UP WARRANTY ISSUES**

Construction contractors must provide all warranties at the time of project Close Out. Warranties must meet the HUD Retrofit Green Building Standards and all construction standards established by VIHFA. Photographs of the construction work will be taken for documentation purposes. The homeowner will be provided instruction booklets and a warranty information binder with an acknowledgement form they have reviewed it with their Construction Contractor.

## **10.0 MONITORING**

Contractors hired by VIHFA, or any Partner or subrecipient, are also subject to compliance with the applicable federal & local regulations, contract terms and conditions. The principal contractor (also referred to as the prime or general contractor) is responsible for the full compliance of all applicable CDBG-DR requirements, including but not limited to the contractor, subcontractors and any lower-tier subcontractors. They are responsible for achieving performance expectations and invoicing allowable, reasonable and fully supportable costs. VIHFA CDBG-DR Compliance and Monitoring Section along with their Partners and subrecipients will ensure that contractors are aware of these requirements by providing individual and/or joint technical assistance workshops and communicating any updates as they are available. Information about the applicable federal regulations will be made available to potential contractors through various methods such as the website, flyers, public notices, outreach workshops, solicitation processes and other communication mediums as necessary.

## **11.0 FEDERAL REQUIREMENTS**

### **Federal Requirements**

CDBG-DR grantees, their subrecipients and their contractors must comply with Federal Labor Standards requirements related to construction work that is financed in whole or in part with CDBG-DR funds. HUD

has delegated the primary responsibility for labor standards administration and enforcement to the agency administering the HUD program.

Housing Construction and Rehabilitation, including public housing. Labor standards requirements apply to all contracts for new construction or rehabilitation projects comprising eight units or more, where the construction activities are financed in whole or in part, with CDBG-DR funds. These standards will apply primarily to the Rental Rehabilitation and Construction program and to the Public and Affordable Housing program. Use of CDBG-DR funds for non-construction activities, e.g., land purchase or architectural and engineering fees, does NOT trigger compliance with labor standards.

The DBRA, the CWHSSA, and the Copeland “Anti-Kickback” Act apply to projects being assisted with CDBG CDBG-DR Program funds if a building contractor is performing work on a single structure which houses eight or more households. A building contractor performing work on eight or more individual, separate structures for eight or more individual, separate households is not subject to DBRA. The FLSA (which establishes the minimum wage for all workers) will be applicable in most cases, whether DBRA, CWHSSA, and/or the Copeland Act apply.

**Section 3:** is a provision of the Housing and Urban Development (HUD) Act of 1968 that helps foster local economic development, neighborhood economic improvement, and individual self-sufficiency. The Section 3 program requires that “to the greatest extent feasible” recipients of certain HUD financial assistance, give preference for training and employment opportunities to low- and very low-income persons, and for awarding contracts, to businesses that provide economic opportunities to low- and very low-income persons.

Housing Construction and Rehabilitation, including public housing and supportive housing Section 3 requirements apply to all training, employment and contracting opportunities arising from housing construction or rehabilitation. Public Housing Authorities are also subject to (separate) Section 3 requirements in implementing their programs. Professional services contracts in connection with these activities are also subject to Section 3.

The **Davis-Bacon Act:** applies to contracts over \$2,000 for construction, alteration or repair of structures financed in whole or in part with CDBG-DR funds. It requires that workers be paid no less than the prevailing wages for similar work in the locality, that they be paid not less often than once per week and that the wage rate is posted at the job site. Davis-Bacon does not apply to rehabilitation, reconstruction and demolition of single-family, owner-occupied housing or multifamily housing comprised of fewer than eight units or to commercial buildings. The applicable Davis-Bacon wage decision (made by the US Department of Labor) and labor standards provisions must be incorporated into the bid specifications and contract for each project subject to Davis-Bacon requirements.

**Contract Work Hours and Safety Standards Act (“CWHSSA”):** The CWHSSA (40 USC 327–334) requires overtime pay for laborers and mechanics at a rate of one and one-half times the basic rate of pay for hours in excess of 40 per week worked on federally funded or federally assisted construction contracts in excess of \$100,000.

CWHSSA also requires an assessment of liquidated damages at the rate of \$10 per day per worker for each day that each laborer or mechanic worked without receiving the required overtime compensation.

**Copeland “Anti-Kickback” Act (18 USC 874 and 40 USC 276c):** Makes it a federal crime for anyone to require a worker to give up or pay back any part of their wages. The Copeland Act requires every employer (contractors and sub-contractors) to submit weekly certified payroll reports and regulates permissible payroll deductions. Kickbacks of wages and falsification of certified payroll records are criminal violations and result in a \$5,000 fine, five years in prison, or both.

**Section 504 of the Rehabilitation Act of 1973:** The Act requires that any alterations of multifamily (5+ units) rental projects, a minimum of 5 percent (5%) of the dwelling units in the project (but not less than one unit) must be accessible to individuals with mobility impairments. An additional two percent (2%) of the dwelling units (but at a minimum, not less than one unit) must be accessible to individuals with sensory impairments (i.e., hearing or vision impairments).

In buildings with five (5) or more dwelling units and at least one elevator, all dwelling units and all public/common use areas are subject to Section 504 requirements. In buildings with five (5) or more dwelling units and no elevator, all ground floor units and public and common use areas are subject to Section 504 requirements.

For new construction, Section 504 applies only to Projects that include 5 or more units. Projects with five (5) or more units must be designed and constructed to be readily “accessible” to and usable by persons with disabilities (including the common areas). “Accessible,” when used with respect to the design, construction, or alteration of an individual dwelling unit, means that the unit is located on an accessible route and when designed, constructed, altered, or adapted can be approached, entered, and used by individuals with physical handicaps.

A fifteen (15) or more units Project, with rehabilitation costs that are seventy-five percent (75%) or more of the replacement cost of the completed facility, is considered substantial rehabilitation. In this case, a minimum of five percent (5) of the dwelling units in the Project (but not less than one unit) must be accessible to individuals with mobility impairments, and an additional two percent (2%), at a minimum (but not less than one unit), must be accessible to individuals with sensory impairments.

**Fair Labor Standards Act of 1938, as amended (“FLSA”):** The FLSA (29 USC 201, et seq.) establishes the basic minimum wage levels for all work and requires the payment of overtime at the rate of at least one and one-half times the basic hourly rate of pay for hours worked in excess of 40 per week.

**Housing and Community Development Act: The Housing and Community Development Act of 1974,** as amended, requires that all laborers and mechanics employed by contractors or sub-contractors on federally funded or federally assisted public works construction contracts in excess of \$2,000; or residential construction or rehabilitation projects involving eight or more units, shall be paid wages no less than those prescribed by the DOL and in accordance with the DBRA.

**The Copeland Anti-Kickback Act** applies to contracts/projects subject to Davis-Bacon wage requirements. It also requires that workers be paid weekly, regulates deductions from workers’ earnings, requires that contractors maintain, certify and submit weekly payroll reports and prohibits “kickbacks” from employee earnings.

**The Contract Work Hours and Safety Standards (40 U.S.C. 327):** applies to prime contracts valued over \$100,000 and requires that workers receive overtime compensation for hours in excess of 40 hours in one week.

**Standard Workweek.** — The wages of every laborer and mechanic employed by any contractor or subcontractor in the performance of work on a contract described in section 3701 of this title shall be computed based on a standard workweek of 40 hours. Work in excess of the standard workweek is permitted subject to this section. For each workweek in which the laborer or mechanic is so employed, wages include compensation, at a rate not less than one and one-half times the basic rate of pay, for all hours worked in excess of 40 hours in the workweek.

**Kickbacks from Public Works Employees: 18 U.S.C. 874**

Whoever, by force, intimidation, or threat of procuring dismissal from employment, or by any other manner whatsoever induces any person employed in the construction, prosecution, completion or repair of any public building, public work, or building or work financed in whole or in part by loans or grants from the United States, to give up any part of the compensation to which he is entitled under his contract of employment, shall be fined under this title or imprisoned not more than five years, or both.

### **Environmental Review**

Passed in 1970, the National Environmental Protection Act (NEPA) of 1969 requires that all activities receiving federal funds be reviewed for their impact on the environment. HUD regulations located at 24 CFR Part 58 outline the process by which grantees are to review the environmental impacts of their activities. As described below, some activities do not require intensive review, while others do. As part of their NEPA review, grantees must comply with related laws and authorities.

All disaster recovery activities trigger some level of Environmental Review. The difference is what type of review is required. There are four possible determinations. The table below lists activities that are likely to fall into the different determinations. Subrecipients may not commit funds to activities until an environmental review is complete and HUD issues a Release of Funds.

## **12.0 CONSTRUCTION CLOSE OUT**

The Construction Manager must certify that all work is completed according to work write-up and must certify that all work meets applicable codes before disbursement of final payment.

# APPENDIX

## APPENDIX 1: RIGHT OF ENTRY

# VIRGIN ISLANDS HOUSING FINANCE AUTHORITY

Community Development Block Grant – Disaster Recovery  
3438 Kronprindsens Gade • GERS Complex 1<sup>st</sup> Floor Suite 4  
St. Thomas, USVI 00802-6447  
Telephone: (340) 777-4432 • Fax: (340) 775-7913

## CDBG-DR PROGRAM

### VIHFA HOUSING ENVISION TOMORROW PROGRAM RIGHT-OF-ENTRY PERMIT AND RELEASE

Applicant Name: \_\_\_\_\_

Applicant ID: \_\_\_\_\_

Damaged Property Address: \_\_\_\_\_

City, Island, ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

The undersigned (individually or collectively referred to herein, as the case may be, as the “Applicant”) has applied for funding under the VIHFA Envision Tomorrow Program (the “Program”). In consideration thereof, the undersigned Applicant hereby unconditionally authorizes the Virgin Islands Housing Finance Authority (“VIHFA”), and each of their respective employees, agents, consultants, contractors, assigns and/or representatives, including the Department of Housing and Urban Development (“HUD”), and each of their respective employees, agents, assigns, consultants, contractors and/or representatives (collectively, the “Federal Agency”, and together with VIHFA and the VIHFA Construction Managers, the “Assistance Providers”) to have the right of access and to enter in and onto the property described above (the “Property”) for the purpose of performing property, environmental and historic preservation review inspections, making assessments, testing (including taking sample materials for any specialized testing) and any inspection-related Program activities at, on, in or under the Property (collectively, the “Authorized Work”), all in connection with the Applicant’s participation in the Program.

It is fully understood that this Right of Entry Permit ("ROE") does not create any obligation on the part of any Assistance Provider to perform inspections or any other Authorized Work or to undertake any repairs to the Property.

Applicant understands and agrees:

1) No inspections or any other Authorized Work will be performed, and no Program payments will be made for any repairs, unless and until this ROE is completed in full and signed by the Applicant.

2) Granting the Assistance Providers full access to the Property for the purpose of performing inspections and all other Authorized Work is a requirement of the Program. Attempts will be made to schedule mutually convenient appointments for inhabited homes.

3) Time Period: This ROE shall expire five (5) years after this form is signed, unless sooner cancelled according to the terms herein.

4) Inspections: This ROE authorizes inspections of the Property. Applicant understands and agrees that the Assistance Providers shall, in their sole discretion, determine the extent of the required inspections, including, without limitation, environmental and historic preservation reviews. Applicant understands that more than one (1) such inspection may be required and agrees to provide access for all such inspections.

5) Photos: Applicant understands and authorizes the Assistance Providers to take photos, digital likenesses, and audio/video recordings of the property and damages thereto and authorizes the use of such items solely for the purposes of promotion of the Program on the Program website, newsletters, news releases or other media outlets.

6) Sampling: Applicant understands and authorizes the Assistance Providers to collect samples (including but not limited to drywall compound, floor tile, piping insulation, paint, ceiling tile, soil) of housing materials for purposes of testing for potentially hazardous materials (including lead paint, asbestos, mold, etc.) in accordance with the requirements of territorial and federal law. Applicant understands that this sampling may result in minor damage to the Property.

7) Disclosures: By signing this ROE, Applicant acknowledges that none, some, or all of the above-mentioned Authorized Work may be performed pursuant to this ROE and the Program. Applicant further acknowledges that such Work may cause some damage to limited areas of the Property. Applicant understands and acknowledges that, if the Applicant elects to discontinue the Program or if Applicant is determined to be ineligible for repairs under the Program, then the areas damaged by the inspector taking the testing samples may not be repaired under the Program.

8) Waiver, Indemnity and Hold Harmless: The undersigned Applicant hereby releases and agrees to indemnify and hold harmless each and every Assistance Provider for any and all liability, loss, damage, or destruction of any type whatsoever to the Property or to personal property and fixtures situated thereon, or for any bodily injury or death to persons resulting from or related to the Authorized Work on the Property. The Applicant further releases, discharges and waives any and all liability, claims, demands, damages, injuries, losses, penalties, fines, costs, causes of action, judgments, expenses, as well as any and all actions, either legal or, equitable which the undersigned has, or that might arise, of any nature whatsoever and by whomever made, by reason of, or related to the Authorized Work or any other action of any Assistance Provider, taken to accomplish the aforementioned purposes.

9) Authority: Applicant expressly represents and warrants that Applicant is the owner of the Property and has full power and authority to execute and fully perform Applicant's obligations under this ROE. The Assistance Providers require that this ROE be executed by all persons or entities having an ownership interest in the Property. To this end, that Applicant (either individually or collectively) further represent(s) and warrant(s) that: (i) the parties signing as Applicant(s) below represent the entire ownership interest in the Property, and (ii) no other party having an ownership interest in the Property exists for purposes of satisfying this requirement. If Applicant is an entity, Applicant also represents and warrants that Applicant has such power and authority pursuant to its governing instruments, without the need for any further action, and that the person(s) executing this ROE on behalf of Applicant are the duly designated agents of Applicant and are authorized to do so. A copy of the Applicant's current deed is provided by the Applicant(s) and attached hereto and made a part hereof.

10) Tools and Equipment: All tools, equipment, and other property taken upon or placed upon the Property by any Assistance Provider, shall remain the property of such Assistance Provider, and may be removed by the Assistance Providers at any time within a reasonable period of this ROE, if necessary.

11) Information Sharing: Information is collected to make it possible for the Assistance Providers to enter Applicant's Property, inspect for damage, and/or undertake emergency protective measures. Information submitted will be shared with other government agencies (Federal, State and applicable local municipality), their contractors, subcontractors and employees, as well as with vested agencies performing inspections and/or repairs, for official use only in accordance with the purposes stated in this ROE.

12) Cancellation: To cancel this Right of Entry Permit and Release of Information, I understand the cancellation must be signed by the Applicant and provided in writing to the VIHFA Senior Housing Manager. Phone-in and verbal cancellations will not be accepted.

13) Effect of Cancellation: By cancelling this form, the Applicant acknowledges that inspections and repairs may not be performed by VIHFA, the VIHFA Construction Managers or the Assistance Providers under the Program.

14) GLOBAL PANDEMIC COVID-19 AND COMMUNICABLE DISEASES NOTICE:

The Authority is committed to ensuring the continuation of the CDBG-DR Envision Program and the Territory's disaster recovery while simultaneously protecting the health, safety and well-being of employees, clients and contractors. The Virgin Islands Housing Finance Authority ("VIHFA") is committed to do its part to prevent the further spread of the COVID-19 virus and as such our inspections are in alignment with the latest guidance from the CDC, public health agencies and local governments.

As such, HORNE and VIHFA have enacted the safety protocol to confirm all inspection appointments prior to the scheduled time to determine if homeowners would like to continue with the scheduled inspection or defer to another date.

For the considerations and purposes set forth herein, I/we hereby set my/our hand(s)

this \_\_\_\_\_ day of \_\_\_\_\_ 20 \_\_\_\_\_.

This form is signed in order to gain access to:

Property address:

\_\_\_\_\_

Signature of Property Owner or Property Owner Authorized Agent :

\_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Current Telephone No.: \_\_\_\_\_

Current Address: \_\_\_\_\_

## APPENDIX 2: SITE INSPECTION REPORT



### SITE ASSESSMENT REPORT CHECKLIST

APPLICANT NAME: \_\_\_\_\_ APPLICANT ID: \_\_\_\_\_  
 DATE: \_\_\_\_\_ YEAR BUILT: \_\_\_\_\_ INSPECTOR: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 GPS COORDINATES: \_\_\_\_\_  
 1 STORY/2 STORY    TOTAL # OF UNITS    # OF VACANT UNITS    # OF OCCUPIED  
 UNITS DEMO: Y / N/ PARTIAL    MOBILE HOME VIN # \_\_\_\_\_  
 ELECTRICAL SERVICE ON / OFF    ATTACHED TO BUILDING    PEDESTAL  
 ELECTRICAL PANEL VISIBLE: YES/ NO    100 AMP / 150 AMP / 200 AMP    GENERATOR: YES  
 /NO WAPA WATER ON / OFF/ NA    PLUMBING WASTE: \_\_\_\_\_  
 VI WASTE / SEPTIC SYSTEM \_\_\_\_\_  
 WATER HEATER: ELECTRIC /GAS SIZE: 20 GAL /30 GAL /40 GAL /50 GAL  
 DOMESTIC WATER PUMP: HP \_\_\_\_\_ DAMAGED YES /NO  
 VIYA YES / NO    DID APPLICANT RELOCATE YES / NO    ENVIRO HAZARDS: MOLD / LEAD / ASBESTOS  
 WATER LEVEL: EXTERIOR AMT    INTERIOR AMT    VISIBLE WATER MARK: YES / NO

# APPENDIX 3: QUALITY CONTROL CHECKLIST

Revised

Date	Initials

## Quality Control Checklist:

<b>Applicant ID:</b>		<b>Armand – Assessor Name:</b>		<b>QC Reviewer:</b>			
<b>Date – Submitted:</b>		<b>Date – QC'd:</b>		<input type="checkbox"/> <b>PASS</b> <input type="checkbox"/> <b>Revise</b>			
<b>Structure Type: House/Condo/Mobile</b>		<input type="checkbox"/> <b>REHAB</b> <input type="checkbox"/> <b>RECON</b>		<b>Environmental Issue</b> <input type="checkbox"/>			
<b>ECR Amount \$</b>		<b>AA Amount \$</b>		<input type="checkbox"/> <b>Soil Disturbance</b> <input type="checkbox"/> <b>Other:</b> _____			
		<b>ECR</b>		<b>AA</b>			
<b>XACTIMATE SKETCH</b>		<b>YES</b>	<b>NO</b>	<b>Comments</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
Sketch floorplan/dimensions/text legible/label rooms/porch							
Footprint Verified							
Ceiling/Wall descriptions, heights							
Door/Window descriptions and measurements							
Roof Plan/descriptions							
Broken windows and doors identified on floor plan							
Electrical points in need of repair identified on floor plan							
<b>APPLICANT INFO/PARAMETERS</b>		<b>YES</b>	<b>NO</b>	<b>Comments</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
Correct Name							
Correct Address							
Applicant ID							
Correct Pricelist							
Date of Loss							
Date Inspected							
Inspector Name							
Correct Type of Loss							
Correct Overhead & Profit Applied							
<b>PHOTOS</b>		<b>YES</b>	<b>NO</b>	<b>Comments</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
Exterior Photos/ all elevations							
Photos of Roof Surface (close-up)							
Photos (labeled) and Dated							
Missing photos/ no duplicates							
Visible Ceiling & Floor in photos							
Close-ups of damaged items							
Photos support SOW							
Photos are clear							
<b>LINE ITEMS</b>		<b>YES</b>	<b>NO</b>	<b>Comments</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
Roof Plan verified; dimensions/description							
Roof: Retrofit: roof framing plan w/ existing rafters and identified new insert rafters & overall dimensions							
Roofing components verified: Rafters/beams/hurricane clips/fasteners/plywood/Elastomeric Liquid Membrane/metal sheathing/guttering/flashing/vent							

Bathroom fixtures verified w/ plumbing items in SOW						
Electrical components in SOW in line with NEC/flood elevation regs						
Calculations (sq. ft) for anti-microbial treatment Stud wall / ceiling replacement match area of removal						
SOW includes D&R of non-damaged items necessary to complete repairs (systems) (ex. Sink if replacing adjacent countertops)						
Kitchen Replacement, includes detailed measurements of kitchen locating plumbing, electrical, and wall openings.						
No Duplicate Scope items						
Reference Applicant's Finish Manual for options						
<b>NARRATIVES</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>	<b>YES</b>	<b>NO</b>	<b>Comments</b>
Narrative aligned with SOW & photos						
Narrative Free of Errors / check grammar						
All required Narrative sections present						

## APPENDIX 4: BUILDER ASSIGNMENT METHODOLOGY

Contractors who successfully registered to be part of the Envision Tomorrow's contractor (and trades) pool will each be given an initial project based on a lottery pick. It is anticipated that there will be only one lottery to determine the order at which each contractor will be assigned properties. There will be multiple lottery draws for projects (properties) owing to the availability and randomness of projects as they move through the Envision Program operations. Applicants (projects) that are dispositioned as eligible for construction will also be sub-batched by island so lottery draws can take into account that not all contractors can perform work on all islands. The process to assign contractors to project is as follows:

Run the lottery calculator to randomly generate the order that each contractor will be assigned to a property;  
Each time a project/projects are available for assignment (to a contractor), create a batch profile (of contractors) based on island; such as; a batch of St. Croix properties will be matched to contractors who are able to perform work on St. Croix;  
Perform the same routine for the batch of properties to randomize that list;  
Sequentially assign contractors to properties until all contractors and properties have been assigned.

### ***Lottery Framework***

To create a simplistic approach, the Construction Management team selected Microsoft Excel to implement the lottery framework.

There are no built-in functions to randomly pick cells in Excel, but one can use of a tandem of functions to generate random numbers as a workaround. These probably cannot be called simple intuitive formulas, but they do work.

### **Step 1**

How to select a random contractor from our pool of contractors without duplicates. In the example (below) sample list of 13 contractors is provided to demonstrate the approach.

With the list of Contractors in cells A2:A14, the steps that we followed to create the Lottery calculator are as follows:

Enter the Rand function in B2, and copy it down to row B14:

**=RAND ()**

There are a few ways to select random data without duplicates in Excel. Generally, you have to use the RAND function to assign a random number to each cell, and then you pick a few cells by using an INDEX RANK formula.

Enter the INDEX/MATCH formula into C2, and copy it down to row C14:

**=INDEX (\$A\$2: \$A\$13, RANK.EQ(B2, \$B\$2: \$B\$13) + COUNTIF (\$B\$2: B2, B2) - 1, 1)**

The final step is to run a "Checksum" to confirm that every contractor in the list was assigned. Enter the VLOOKUP formula into D2, and copy it down to row D14

**=VLOOKUP (C2, \$A\$2: \$A\$30,1, FALSE**

	A	B	C	D
1	Contractor/Company Name	Random Number	Lottery	Check Sum
2	Contractor-001	0.412311285	Contractor-007	Contractor-007
3	Contractor-002	0.591121606	Contractor-005	Contractor-005
4	Contractor-003	0.087378645	Contractor-012	Contractor-012
5	Contractor-004	0.318412572	Contractor-008	Contractor-008
6	Contractor-005	0.027266847	Contractor-013	Contractor-013
7	Contractor-006	0.766824864	Contractor-002	Contractor-002
8	Contractor-007	0.834365362	Contractor-001	Contractor-001
9	Contractor-008	0.762328437	Contractor-003	Contractor-003
10	Contractor-009	0.092062586	Contractor-011	Contractor-011
11	Contractor-010	0.250806841	Contractor-010	Contractor-010
12	Contractor-011	0.564196402	Contractor-006	Contractor-006
13	Contractor-012	0.288017522	Contractor-009	Contractor-009
14	Contractor-013	0.677756547	Contractor-004	Contractor-004

Formula callouts:

- Cell B2: `=RAND()`
- Cell C2: `=INDEX($A$2:$A$14, RANK.EQ(B2, $B$2:$B$14)+ COUNTIF($B$2:B2, B2) - 1, 1)`
- Cell D2: `=VLOOKUP(C2,$A$2:$A$14,1,FALSE)`

## Step 2

How to select a random project from list of projects without duplicates. In the “cut out” from our Projects that have moved into the pre-construction stage, we have a list of 13 projects.

With the list of Projects in cells A2:A14, the steps that we followed to create the Lottery calculator are as follows:

Enter the Rand function in B2, and copy it down to row B14:

`=RAND ()`

There are a few ways to select random data without duplicates in Excel. Generally, you have to use the RAND function to assign a random number to each cell, and then you pick a few cells by using an INDEX RANK formula.

Enter the INDEX/MATCH formula into C2, and copy it down to row C14:

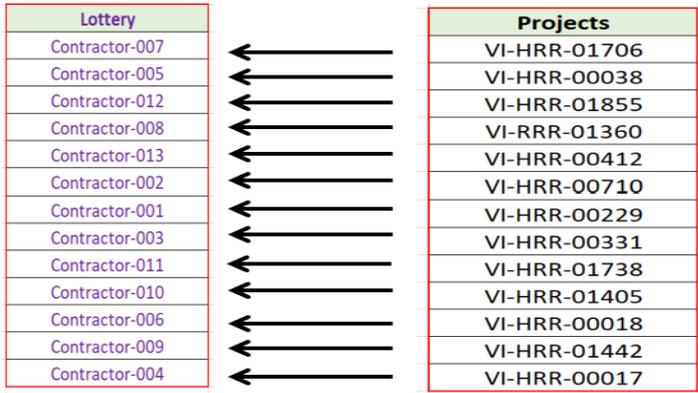
`=INDEX ($A$2: $A$14, RANK.EQ(B2, $B$2: $B$14) + COUNTIF ($B$2: B2, B2) - 1, 1)`

The final step is to run a “Checksum” to confirm that every contractor in the list was assigned. Enter the VLOOKUP formula into D2, and copy it down to row D14

`=VLOOKUP (C2, $A$2: $A$14,1, FALSE)`

## Step 3

The final step in the lottery process is comingling the selected contractors against the selected projects in order of the first contractor is assigned the first project. Contractors continued to be assigned projects in the order each was selected until you get to the end of the list. In event that a contractor declines an assigned project, the project will be assigned to the next contractor on the list.



## APPENDIX 5: SCORECARD METHODOLOGY

### CONTRACTOR PERFORMANCE EVALUATION

The Contractor Performance Evaluation is prepared by the Lead Project Manager and approved by the Senior Construction Manager to communicate the Contractor's performance to the VIHFA and the Contractor. The evaluation is reviewed by the VIHFA to assess the Contractor's capabilities before issuing additional work to a contractor. The VIHFA may recommend an increase or decrease in bid assignments or disciplinary action based upon a review of a Contractor's evaluation(s). Attention should be given to completing an evaluation within the time specified. This will assure timely review by the VIHFA, as appropriate.

CONTRACT INFORMATION			
Contract/Agreement Number	Project Number/Title		
Contractor Name			Phone
Award Amount	Change Orders & Amendments	No. of	Total Cost \$
Construction Start Date		Construction Completion Date	
RECOMMENDED FOR FUTURE USE			
Recommended for future contracts: If other than Yes, provide detailed explanation as attachment.		<input type="radio"/> YES <input type="radio"/> NO <input type="radio"/> Conditional	Numerical Score:
State Condition for Recommendation:			
<b>Overall Rating:</b>		<input type="radio"/> 5-Excellent (4.50 - 5.00) <input type="radio"/> 4-Good (3.20 - 4.49) <input type="radio"/> 3-Fair (2.60 - 3.19) <input type="radio"/> 2-Poor (1.81 - 2.59) <input type="radio"/> 1-Unsatisfactory (1.0 - 1.8)	Goal Evaluation Score:  Weighted Score:
VIHFA CONTACT INFORMATION			
Contract Administrator or Delegate Name			Email
Signature			Date
Project Manager Name			Email

Signature	Date
-----------	------

**Evaluation Criteria**

This evaluation provides an indication of the contractor's ability to implement a practical, accurate, complete and cost-conscious project. For each item, please provide a numerical score from 1 to 5, in accordance to the performance rating scale. Select N/A if the criteria do not apply to this evaluation. Reviewer comments must be entered for a rating of 1, 2 or 5. Minimum passing score is 2.60. **The following scale is used to rank the level of contributions made by the contractor to the project.**

5 - Excellent Performance: Project had no time or cost impacts related to contractor's performance;

4- Good Performance: Project had some minor issues which the contractor aggressively pursued to resolve and there were minor time or cost impacts related to the contractor's performance;

3 - Fair Performance: Project had some issues which the contractor pursued to resolve and that resulted in acceptable time and/or cost impacts;

2 - Poor Performance: Project had several issues which the contractor provided limited assistance to resolve and that resulted in significant time and cost impacts;

1 - Unsatisfactory Performance: Project had multiple, significant issues which the contractor provided no assistance to resolve and that resulted in substantial time and cost impacts.

**A) Business Practices** **Section Score: \_\_\_\_\_**

Evaluation Question	Unsatisfactory	Excellent
1. Consider the contractor's established safety program, compliance with standards, safety practices, accident prevention, etc.	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
2. How well did the contractor manage business relationships with subcontractors by ensuring that subcontractors were fully paid for work that had been completed to specifications? (This information can be verified through subcontractor complaints or liens for nonpayment)	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
3. How well did the contractor follow VIHFA procedure in reporting changes of subcontractors?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
4. How timely were the notices of inspection requests?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
5. How clean did the contractor keep the work site on a continuous basis?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	

COMMENTS:

**B) Fiscal Responsibility** **Section Score: \_\_\_\_\_**

Evaluation Question	Unsatisfactory	Excellent
1. How actively did the contractor participate in overcoming problems with other contractors and/or regulatory agencies?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	

2. How valid were the claims for extra costs?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
3. Did the contractor maintain adequate records and logs, and did it submit accurate, complete and timely payment request, invoices, change orders, timesheets and other required daily and periodic record submissions?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5
4. Did the contractor pay its suppliers and subcontractors, if any, promptly (if applicable)?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5

COMMENTS:

<b>C) Time Management</b>	<b>Section Score:</b>
---------------------------	-----------------------

Evaluation Question	Unsatisfactory	Excellent
1. How well did the contractor manage their time? If the contractor was given any extensions of time, were any such extensions reasonable?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
2. How timely and accurate were payment requests when submitted?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
3. Were any unreasonable delays in the contract work caused by the contractor or any of its subcontractors?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
4. Was the contract work completed on time, and if ongoing, is the contractor appropriately adhering to schedules and milestones?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
5. How well did the contractor conform with schedule of work progress in order to meet the planned completion dates for Final Completion?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	

COMMENTS:

<b>D) Change Order Management</b>	<b>Section Score:</b>
-----------------------------------	-----------------------

Evaluation Question	Unsatisfactory	Excellent
1. Did the contractor provide independent estimates of the value of changes?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
2. How accurate and timely were the preliminary estimates of the value of change orders/amendments provided by the contractor?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	
3. How accurate and timely were change orders/amendments processed with the proper documentation?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5	

4. How fair and timely did the contractor prepare, negotiate and make recommendations to the VIHFA regarding change orders/amendments?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
5. How appropriate were the contractor's recommendations for time extensions based on the actual circumstances and reviewed against the contract requirements?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
COMMENTS:				
<table border="0" style="width: 100%;"> <tr> <td style="width: 70%;"><b>E) Quality of Work</b></td> <td style="text-align: right;"><b>Section Score:</b></td> </tr> </table>		<b>E) Quality of Work</b>	<b>Section Score:</b>	
<b>E) Quality of Work</b>	<b>Section Score:</b>			
Evaluation Question	<table border="0" style="width: 100%;"> <tr> <td style="width: 33%; text-align: center;">Unsatisfactory</td> <td style="width: 33%;"></td> <td style="width: 33%; text-align: right;">Excellent</td> </tr> </table>	Unsatisfactory		Excellent
Unsatisfactory		Excellent		
1. How accessible was the work for inspection?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
2. Was the homeowner satisfied with the contractor's work?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
3. How closely were industry standard construction methods followed?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
4. How responsive and competent were contractor staff and workers?	<input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5			
COMMENTS:				

<b>F) Section 3 Compliance</b>						<b>Section Score: ____</b>
Evaluation Question	Unsatisfactory					Excellent
1. Contractor sought assistance, where necessary, in implementing a Section 3 compliance plan.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
2. Contractor recruited from within the project area Section 3 residents.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
3. Contractor maintained a list of all Section 3 area residents that are employed or who have made application for employment.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
4. Contractor maintained records, which document all the steps taken to recruit Section 3 residents and Section 3 subcontractors from within the project area.	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
COMMENTS:						
<b>G) Project Closeout</b>						<b>Section Score: ____</b>
Evaluation Question	Unsatisfactory					Excellent
1. How well did the project meet specified standards when inspected?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
2. How complete and accurate was the documentation provided at the completion of the project?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
3. How clean did the contractor leave the worksite by completely disposing of debris in a legal manner?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
4. How accurate and timely were the contractor's final project accounting documents sent to VIHFA?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5	<input type="radio"/> N/A
COMMENTS:						
RATING OFFICIAL INFORMATION						
Name and Title					Office	

## APPENDIX 6: HUD GREEN BUILDING RETROFIT STANDARDS FOR THE U.S.V.I

The CPD Green Retrofit Checklist promotes energy efficiency and green building practices for residential retrofit projects. The USVI CDBG-DR program had adapted the checklist to reflect the unique climate of the USVI.

Note: Historic averages for high and low temperatures by month in the USVI, coupled with the fact that there is no need for space heating equipment, should be sufficient evidence for exemption from typical Green requirements for building envelope insulation, air sealing and ventilation. This source provides a simple format for displaying average high and low temperatures by month.

<http://www.intellicast.com/Local/History.aspx?location=USVI9994>

The phrase “when replacing” in the Checklist refers to the mandatory replacement with specified green improvements, products, and fixtures only when replacing those systems during the normal course of the retrofit.

### WATER AND ENERGY CONSERVATION MEASURES

- Water-Conserving Fixtures**  
Install or retrofit water conserving fixtures in any unit and common facility, use the following specifications: Toilets-- 1.28 gpf; Urinals-- 0.5 gpf; Showerheads-- 2.0 gpm; Kitchen faucets-- 2.0 gpm; and Bathroom faucets-- 1.5gpm. [gpf = gallons per flush; gpm = gallons per minute]
- ENERGY STAR Appliances**  
Install ENERGY STAR-labeled clothes washers, dishwashers, and refrigerators, if these appliance categories are provided in units or common areas.
- Domestic Hot Water Systems**  
New water heaters shall be ENERGY STAR labeled.
- Efficient Lighting: Interior Units**  
All newly installed lighting fixtures must be ENERGY STAR-qualified or have ENERGY STAR-qualified lamps installed, including emergency lighting in multifamily.

### INDOOR AIR QUALITY

- Low/No VOC Paints and Primers**  
All interior paints and primers must be less than or equal to the following VOC levels: Flats--50 g/L; Non-flats--50 g/L; Floor--100 g/L. [g/L = grams per liter; levels are based on a combination of the Master Painters Institute (MPI) and GreenSeal standards.]

- Low/No VOC Adhesives and Sealants**  
All adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. All caulks and sealants must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District.
- Clothes Dryer Exhaust**  
Vent clothes dryers directly to the outdoors using rigid-type duct work, or into the crawl space on masonry homes if there is not an existing vent outlet to the exterior.
- Mold Inspection and Remediation**  
Inspect the interior and exterior of the building for evidence of moisture problems. Document the extent and location of the problems and implement the proposed repairs according to the Moisture section of the EPA Healthy Indoor Environment Protocols for Home Energy Upgrades.
- Mold Prevention: Surfaces**  
When replacing or repairing bathrooms, kitchens, and laundry rooms, use materials that have durable, cleanable surfaces.
- Mold Prevention: Tub and Shower Enclosures**  
When replacing or repairing tub and/or shower enclosures, use non-paper-faced backing materials such as cement board, fiber cement board, or equivalent in bathrooms.
- Integrated Pest Management**  
Seal all wall, floor, and joint penetrations with low-VOC caulking or other appropriate sealing methods to prevent pest entry. [If applicable, provide training to multifamily buildings staff.]
- Lead-Safe Work Practices**  
For properties built before 1978, if the project will involve disturbing painted surfaces or cleaning up lead contaminated dust or soil, use certified renovation or lead abatement contractors and workers using lead-safe work practices and clearance examinations consistent with the more stringent of EPA's Renovation, Repair, and Painting Rule and HUD's Lead Safe Housing Rule.

## **APPENDIX 7: CONSTRUCTION COSTS FOR THE ENVISION TOMORROW PROGRAM**

Since the inception of the EnVision Tomorrow program, it has been difficult to accurately estimate construction costs. Costs have been extremely challenging to predict, and none of the standard cost indexes have proven to be reliable.

There has been a competitive bidding round titled the Mini Bid, which included four properties on St. Croix. A national cost database, adjusted on the recommendations of a Rand Corporation analysis of construction costs in the USVI, was used to estimate costs for those Mini Bid properties. That cost database significantly underestimated the costs submitted by the five contractors.

For the ensuing batch of ten properties, an attempt to adjust the costs was undertaken, using some historic data and a survey of labor and material costs on the islands. Rather than using a bidding process, those properties were assigned to contractors (see Appendix 4 for the assignment framework), and the costs from the adjusted cost database were assigned as well. Most of the contractors assigned to those projects objected to the assigned costs, stating that the assigned costs were too low to complete the scopes of work.

In hopes of finding an accurate way to adjust costs that would be efficient and timely, a subsequent analysis of the bid data from the Mini Bid process performed by VIHFA's HUD TA, Livable Housing Inc. (LHI). The goal was to determine if there was enough consistency in the line item bids from the contractors to identify a cost factor that could accurately adjust the cost database. The goal was to define a fully loaded cost (labor, materials, overhead and profit) for each standard line item of work, the standard way to assign costs.

This methodology was required because of the lack of reliable cost data from the typical national sources, and the lack of bid data for similar projects in the territory. Applying a methodology that would produce a single cost factor was required because it is the timeliest way to accomplish the goal of getting the territory's CDBG-DR projects immediately under contract for construction.

LHI's analysis of the Mini Bid cost data started by comparing the cost estimate (at the line item level), to the line item bids of each of the contractors. For each of the four properties included in the Mini Bid process there were either four or five bidders. In aggregate, there were two hundred and ninety-seven (297) line items examined. I assessed how each line item bid, for each contractor, compared to the estimate for that line item, and calculated the percentage difference in a spreadsheet. As a spreadsheet of all the bid data had already been assembled, LHI was able to simply append their analysis to that file.

The next step then calculated the average difference of the bids from the contractors to the line item estimate and expressed that as a percentage as well. A few bids were omitted from the calculation if they fell outside a reasonable range of the four or five bids. For example, if the bids for a line item were 128%, 83%, 110%, 64% and 58% of the estimate respectively, the two lowest bids were omitted and calculated the average difference from the remaining three bids.

With the average difference calculated at the line item level, the next step was to average the difference for all the line items for each of the four projects. Based on that information, an adjustment factor was identified for each of the projects that would bring the estimate up to a level comparable with the bids.

(Remember, bids that were either unreasonably high or low when compared to all the other bids for that line item, were excluded).

As a result of this analysis, LHI's recommendation was to apply a cost factor of an additional 40% to the cost database that was utilized for the Mini Bid process, and to use that adjusted cost database either to assign projects and costs to contractors, or to assess the cost reasonableness of bids submitted in a bidding process. While there was not one single cost factor that worked consistently for all four of the projects analyzed, a 40% figure was determined through averaging.

Also, several line items that will require adjustment beyond the 40% cost factor were identified. There were several line items consistently above or below that 40% adjustment factor. The list is attached to this memo.

This analysis was accomplished using bid data from St. Croix. Construction costs historically vary somewhat between the islands of St. Croix, St. Thomas and St. John. The VIHFA Planning and Construction (P&C) staff have analyzed labor rates and state that compared to St. Croix, labor rates on St. Thomas are between 5% and 10% higher and between 20% and 30% higher on St. John. The P&C staff also analyzed building material costs and state that compared to St. Croix, St. Thomas material costs are essentially the same, and St. John material costs are 18% higher. LHI's recommendation is to begin with the cost database that was used for the Mini Bid process on St. Croix, and for cost estimating ensuing projects to, add:

- 40% to each line item for estimating the cost of St. Croix projects
- 44% to each line item for estimating the cost of St. Thomas projects, and
- 61% to each line item for estimating the cost of St. John projects

LHI also recommends the use of those cost factors as a starting point, but also recommends that when bids are solicited in the future, that contractors are required to submit their bids with costs at the line item level. As further cost data can be gathered, and analyzed over time, that data can be used to adjust the line item cost estimating for each island. In the absence of this line item bid data it will be difficult to confirm the cost reasonableness of construction work going forward.