INTRODUCTION

The Standards for Architectural Planning and Construction (Standards) are being provided as an aid for owners/developers, architects and contractors for the design and construction of quality affordable housing. These Standards shall be used as a reference in establishing Illinois Housing Development Authority’s (Authority) minimum quality standards. The Authority will use these standards to evaluate the plans, specifications and other relevant data of the proposed housing development, including new construction, rehabilitation and the adaptive reuse of existing buildings. We encourage users to exceed these minimum requirements whenever possible, making projects more viable and extending their longevity. By increasing items such as the building’s energy efficiency, utilizing environmentally friendly materials, and insuring projects are more cost effective to construct and operate, the owner/developer, taxpayer and the end-user all benefit.

The Authority’s design review will be based in-part by the following broad policy objectives:

- Compliance with the Standards to the greatest extent feasible per the scope of work, funding sources and Property Needs Assessment.
- The quality of the building(s) and other improvements must be consistent with the underwriting and program requirements.
- The project must comply with all local, state, and federal codes or regulations (including any applicable lead-based paint, mold, and asbestos regulations and any other Authority requirement).
- The development must be consistent with the demands of the marketplace.
- The design and construction must be consistent with recognized standards and accepted practices in the construction industry.
- The Authority reserves the right to object to any proposed building system or material selection as being in conflict with the Authority’s interests.
- Sponsors are encouraged to meet with the Authority Architectural staff prior to submitting rehabilitation projects seeking 4% Low Income Tax Credits to specifically discuss the intended project scope.

The Standards are subject to change and modification, this version supersedes and replaces any prior versions. The Authority will also evaluate certain aspects of the Standards that may require modification in order to meet the unique site, design or use of the development. In this event, the Authority will consider modification requests on a case by case basis. It is therefore highly recommended that Authority staff be involved in the design concept at the earliest stage possible to provide guidance through the review process. Lastly, the Authority or its agents shall have the right of access to the property.
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Definitions

Unless otherwise expressly stated, the following terms shall, for the purposes of the Standards, have the meaning shown in this Section. Where terms are not defined in this Section, they shall have ordinarily accepted meanings such as the context implies.

**Accessible Dwelling Unit:** A unit that is approached, entered, and used by physically challenged people and designed to meet all applicable code requirements.

**Accessible Route:** A continuous unobstructed path connecting all accessible elements and spaces of a building or facility. Interior accessible routes may include corridors, doorways, floors, ramps, elevators, lifts, skywalks and tunnels. Exterior accessible routes may include parking access aisles, curb ramps, crosswalks at vehicular ways, walks, ramps, and lifts.

**Accessibility Standards:** Accessibility standards mean the Federal Fair Housing Act, Illinois Accessibility Code, Americans with Disabilities Act, local building codes, and Section 504 of the 1973 Rehabilitation Act.

**Adaptable Dwelling Unit:** A dwelling unit constructed and equipped so it can be converted with minimal structural change for use by persons with different types and degrees of environmental limitation.

**Adaptability or Adaptable:** The ability of certain building spaces and elements, such as: kitchen counters, sinks, and grab bars, to be added or altered so as to accommodate the needs of individuals with or without disabilities or to accommodate the needs of persons with different types or degrees of disability.

**Adaptive Reuse:** The process of converting or adapting structures for purposes or uses other than those initially intended.

**Addition:** An expansion, extension, or increase in the gross floor area of a building or facility.

**Alteration:** Any modification or renovation that affects or could affect the usability of the building or facility or part of the building or facility. Alteration includes*, but is not limited to, remodeling, renovation, rehabilitation, reconstruction, historic preservation, historic reconstruction, historic restoration (as separately required in Section 400.610 of the Illinois Accessibility Code), changes or rearrangement of the structural parts or elements, extraordinary repairs (as defined herein), changes to or replacement of plumbing fixtures or controls, changes or rearrangement in the plan configuration of walls and full-height partitions, and changes or improvements to parking lots (as separately required in Section 400.510 (e) 10 (c)).

*The following work is not considered to be an alteration unless it affects the usability of the building or facility: normal maintenance, re-roofing, interior or exterior redecoration, changes to mechanical and electrical systems, replacement of plumbing, piping or valves, asbestos removal, or installation of fire sprinkler systems. (Section 3, Environmental Barriers Act - EBA).

**Applicability:** The latest version of the Standards shall be used in conjunction with the design and construction of the project. The Owner and General Contractor shall incorporate these Standards into their contract and agree to abide by these Standards. If there is a conflict between these Standards and any provision in the contract these Standards shall prevail.

**Architect/Engineer of Record:** An architect, professional engineer, or structural engineer as defined by the Illinois Architecture Practice Act, the Illinois Professional Engineering Practice Act, or the Illinois Structural Engineering Licensing Act who has the contract responsibility for the project, who prepares the construction documents from which the building is constructed, and who signs the required documents.

**Architect/Engineer-Consulting:** An architect, professional engineer, or structural engineer as defined by the Illinois Architecture Practice Act, the Illinois Professional Engineering Practice Act, or the Illinois Structural Engineering Licensing Act who provides his professional services such as civil, mechanical, electrical and plumbing engineering and design, to the “Architect of Record”.

**Area, Gross:** The total area of a building or part of a building measured from the outside face of the exterior walls, including areas of usable or occupiable basements, but not including areas of basements used for storage or mechanical purposes only, overhangs, and mechanical penthouses on the roof.
**Area, Net:** The total usable or occupiable area within the enclosing walls or partitions exclusive of shafts, partitions, columns, walls, elevators, stairs, permanent fixtures, toilet rooms, janitor closets, and mechanical, electrical, and telephone rooms.

**Area of Rescue Assistance:** An area, which has direct access to an exit, where people who are unable to use stairs may remain temporarily in safety to await further instructions or assistance during emergency evacuation.

**Building Code, Applicable:** The building code and applicable amendments, adopted by the administrative authority under whose jurisdiction the work involved with the construction, addition, alteration, or change of occupancy will be carried out. If no building code has been adopted by the administrative authority, or if the work is not within a municipal or other administrative authority’s jurisdiction, the building code shall be deemed to be the 2015 International Building Code package.

**Change Order (CO):** A written request prepared on A.I.A. Form G701 that changes the scope of work from the Authority approved drawings and specifications. The change order must be signed by the owner/developer, Architect of Record, and the contractor and presented to the Authority’s field representative at least one month before requesting the payment on a draw.

**Clear Floor Space:** The minimum unobstructed floor or ground space required to accommodate a single, stationary wheelchair and occupant.

**Common Use or Common Areas:** Areas (including interior and exterior rooms, spaces, or elements) which are held out for use by all tenants, their guests, and owners in public facilities and multi-story housing units.

**Construction Contingency or Contingency:** Amount of money allocated to the project in the Authority awarded funds available to the project sponsor to pay for construction related items not in the approved construction documents. Value should be equal to 5% of new construction hard costs, and 10% of rehabilitation hard costs. Allocation of these funds shall be in compliance with Section 4.01.

**Cross Slope:** The slope that is perpendicular to the direction of travel (see Running Slope).

**Curb Ramp:** A short ramp cutting through a curb or built up to it.

**Detectable Warning:** A standardized surface feature built in or applied to a walking surfaces or other element to warn people with visual impairments of hazards on the circulation path. The State of Illinois has adopted the truncated dome standard with a contrasting color to the base surface.

**Dwelling Unit:** A single residential unit which provides a kitchen or food preparation area, in addition to rooms and spaces for living, bathing, sleeping, and the like.

**Efficiency or Studio Unit:** A unit used or intended to be used as a residential housekeeping unit by not more than one occupant for living, sleeping, and cooking facilities. The unit shall contain not less than the area indicated in Section 12.01 of these standards.

**Emergency Warning System:** A fire alarm, carbon monoxide, smoke or heat detector system used to activate emergency audible and visual alarms.

**Entrance:** Any access point to a building or portion of a building used for the purpose of entering. An entrance includes the approach walk, the vertical access leading to the entrance platform itself, vestibules, if provided, and the entry door or doors or gate or gates

**Environmental Barrier:** An element or space of the built environment which limits accessibility to or use of the built environment by environmentally limited persons.

**Exit:** That portion of a means of egress which is separated from all other spaces of a building or structure by construction or equipment as required by the applicable building code to provide a protected way of travel to the exit discharge. The walls ceiling, and openings therein, of the protected way of travel shall provide a fire resistance rating required by the applicable building code.

**Exit Access:** That portion of a means of egress that leads to an exit.

**Exit Discharge:** That portion of a means of egress between the termination of an exit and a public way.

**Extraordinary Repair:** The replacement or renewal of any element of an existing building or facility for purposes
other than normal routine maintenance. It includes, but is not limited to: replacement of sidewalk and curb ramp, replacement of a door and frame, complete stair replacement and plumbing fixture replacement (see Alteration).

**Facility:** All or any portion of buildings, structures, site improvements, complexes, equipment, roads, walks, passageways, parking lots, or other real or personal property located on a site (see Public Facility).

**Floor:** Any level within a building that may be occupied by the public. Mezzanines and seating tiers are not included in the definition of “Floor” in the Illinois Accessibility Code.

**Functional Spaces:** The rooms or spaces in a building or facility that house the primary functions for which the building or facility is intended, and the secondary or supporting functions that relate to the support, maintenance or performance of the primary functions, including connective or ancillary space such as parking and storage. Unfinished or undeveloped space is included as a “Functional Space”.

**General Contractor:** A general contractor (GC) is responsible for providing all of the material, labor, equipment and services necessary for the construction of a project. The GC is responsible for the day-to-day oversight of a construction site, management of vendors and trades and communication of information to involved parties throughout the course of construction.

**Governmental Unit:** The State or any political subdivision thereof, including but not limited to any county, town, township, city, village, municipality, municipal corporation, school district, park district, sanitary district, local housing authority, public commission, public authority, the Authority or other special purpose district.

**Grade:** The elevation of the finished surface of the ground, paving, or sidewalk within the area between the building and an imaginary line five feet (5’) from the building.

**Ground Floor:** Any occupiable floor less than one story above or below grade with direct access to grade. A building or facility always has at least one ground floor and may have more than one ground floor as where a split-level entrance has been provided or where a building is built into a hillside. A building where the first floor containing dwelling units is above grade that floor will be considered the ground floor. For example, a grade level or slightly below grade floor contains parking, laundry, building office, and storage is not considered a ground floor. The first floor in a building of this type containing dwelling units will be considered the ground floor.

**Habitable Room:** A room within a residential occupancy and used or intended to be used for living, sleeping, eating or cooking purposes, as well as any room within a residential occupancy but does not include bathrooms, toilet rooms, laundries, pantries, foyers, corridors, storage spaces, stairways or closets.

**Historic Building:** All buildings, parts of buildings, facilities or sites individually listed in or eligible for listing in the National Register of Historic Places, a “contributing” building or site in a National Register Historic District as determined by the Illinois Department of Natural Resources (IDNR) State Historic Preservation Officer or as determined by a “Certified Local Government” designated by the IDNR, a building or site designated as a historic or architectural landmark by a local Landmarks Commission or local Historic Preservation Commission, and buildings which undergo historic reconstruction.

**Historic Preservation:** The act or process of accurately preserving and/or recovering the form and details of a historic building and its setting as it appeared at a particular period of time by means of repair, stabilization, or restoration as defined herein. Historic Preservation also includes “Historic Reconstruction and Historic Restoration”.

**Historic Reconstruction:** The act or process of reproducing by new construction the exact form and detail of an original building, structure, object, or part thereof as it appeared at a specific period of time. Historic Reconstruction only applies to reconstruction of buildings which are open to view by the public, are used to demonstrate historic or architectural values, and/or are used for purposes of display of a historic building type, design, and technique of construction or period setting.

**Historic Restoration:** The act or process of accurately recovering the form and details of a building or facility and its setting as it appeared at a particular period of time by means of the removal of later works or replacement of missing earlier work.

**Housing, Financed or Guaranteed by a Government Unit:** Any building, facility or portion thereof, excluding in-patient medical care facilities, which contains one or more dwelling units or sleeping accommodations, and which is owned by or on behalf of a governmental unit, or financed, in whole or in part, for either initial construction or
subsequent alteration, by a grant or loan made or guaranteed by a governmental unit. Such housing may include, but is not limited to, one family dwellings and multi-family dwellings, including multi-story apartment buildings, group homes, dormitories and housing for the elderly.

**Interior Redecoration**: Replacement of interior floor, wall, and ceiling decorative finishes (such as carpet, wall coverings, paint, and paneling), window treatments (such as drapery, blinds, and shades), interior space lighting, fixtures, furnishings, and furniture.

**Masonry Unit**: Brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the 2015 International Building Code.

**Means of Egress**: A continuous and unobstructed path of travel from any point in a building or structure to a public way, consisting of three separate and distinct parts: the exit access, the exit, and the exit discharge. A means of egress comprises vertical and horizontal means of travel and includes intervening room spaces, doors, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, escalators, horizontal exits, courts and yards. (Section 3, EBA).

**Mezzanine**: Any intermediate occupiable and usable level placed above any floor of a building and limited to 33% of the net floor area of the floor over which it is placed. The net area of a mezzanine is included in the net area of the floor above which it is placed.

**Multi-Story Building**: Any building of any type two or more stories above the grade level containing any number of units.

**Multi-Story Housing Unit**: Any building of four or more stories containing ten or more dwelling units constructed to be held out for sale or lease by any person to the public. This category includes, but is not limited to, the following building types: apartment buildings, condominium apartment buildings, convents, housing for the elderly and monasteries.

**Other Alterations (Section 504)**: If the project involves fewer than 15 units or the cost of alterations is less than 75% of the replacement cost of the completed facility and the recipient has not made 5% of its units in the development accessible to and usable by individuals with disabilities, then the requirements of 24 CFR 8.23(b) apply. Under this section, alterations to dwelling units shall, to the maximum extent feasible, be made readily accessible to and usable by individuals with disabilities. If alterations to single elements or spaces of a dwelling unit, when considered together, amount to an alteration of a dwelling unit, the entire unit shall be made accessible. Alteration of an entire unit is considered to be when at least all of the following individual elements are replaced:

- renovation of whole kitchens, or at least replacement of kitchen cabinets; and
- renovation of the bathroom, if at least bathtub or shower is replaced or added, or a toilet and flooring is replaced; and
- replacement of entrance door jambs.

When the entire unit is not being altered, 100% of the single elements being altered must be made accessible until 5% of the units in the development are accessible. However, HUD strongly encourages a recipient to make 5% of the units in a development readily accessible to and usable by individuals with mobility impairments, since that will avoid the necessity of making every element altered accessible, which often may result in having partially accessible units which may be of little or no value for persons with mobility impairments. It is also more likely that the cost of making 5% of the units accessible up front will be less than making each and every element altered accessible. Alterations must meet the applicable sections of the UFAS which govern alterations.

**Point of Arrival**: A location within the site where an accessible route must be provided. Acceptable locations shall include an accessible parking space, accessible passenger unloading/loading zone, public street or sidewalk, or each public transportation stop.

**Power-Assisted Door**: A door used for human passage, with a mechanism that helps to open the door, or relieves the opening resistance of the door, upon the activation of a switch or a continued force applied to the door itself.

**Principal or Primary Entrance**: An entrance intended to be used by the residents or users to enter or leave a building or facility. This shall include, but is not limited to, the main entrance.
Privately Owned Building: Any building which is not publicly owned as defined herein.

Project: Any building, structure or site including the related improvements owned or financed in whole or in part by the Authority, or one in which the Authority has or will have an interest.

Public: Any group of people who are users of the building and employees of the building, excluding those people who are employed by the owner of a building for construction or alteration of a building.

Public Facility: Any building, structure, or site improvement which is: (i) owned by or on behalf of a governmental unit; leased, rented or used, in whole or in part, by a governmental unit; financed, in whole or in part, by a grant or a loan made or guaranteed by a governmental unit; (ii) used or held out for use or intended for use by the public or by employees for one or more of, but not limited to, the following: the purpose of gathering, recreation, transient lodging, education, employment, institutional care, or the purchase, rental, sale or acquisition of any goods, personal property or services; places of public display or collection; social service establishments; and stations used for specified public transportation.

Public Use: Interior and exterior rooms or spaces that are made available to the general public at a building or facility that is privately or publicly owned.

Ramp: A walking surface which has a running slope greater than 1:20 (5%) and a cross slope no greater than 1:50 (2%).

Reproduction Cost: The estimated cost of constructing a new building, structure, or site improvement of like size, design and materials at the site of the original building, structure, or site improvement, assuming such site is clear. The reproduction cost shall be determined by using the recognized standards of an authoritative technical organization (see Authoritative Technical Organization for examples of estimating guides).

Running Slope: The slope that is parallel to the direction of travel (see Cross Slope).

Service Entrance: An entrance intended primarily for delivery of goods or services. A service entrance may not be the principal entrance unless it is the only entrance to the building/facility.

Single Room Occupancy Unit or SRO: A unit used or intended to be used as a residential housekeeping unit by not more than one occupant for living, sleeping, with or without cooking facilities. See Section 12.01 for area requirements.

Storage, Bulk: A clear volume space provided for storage of personal items such as luggage, boxes of seasonal items or any bulk items. The space may be located in the dwelling unit, in a separate room in the building, or in a separate building on the same site.

Structural Change: Changes to or rearrangement of the structural elements, plumbing fixture changes, or changes to or rearrangement of the plan configuration of walls and full height partitions.

Structurally Impracticable: Those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features in new construction.

Substantial Alteration (Section 504): Alterations are substantial if they are undertaken to a project that has 15 or more units and the cost of the alterations is 75% or more of the replacement cost of the completed facility. [See 24 CFR 8.23(a)]. The new construction provisions of 24 CFR 8.22 shall apply. Section 8.22 requires that a minimum of 5% of the dwelling units, or at least one unit, whichever is greater, shall be made accessible to persons with mobility disabilities and an additional 2% of the dwelling units, or at least one unit, whichever is greater, shall be made accessible to persons with hearing or visual disabilities.

Technically Infeasible: With respect to an alteration of a building or a facility, a change that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member, which is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility. (ADA Accessibility Guidelines 4.1.6)

Toilet or Powder Rooms: At a minimum, a room consisting of one water closet and one lavatory.

Vehicular Way: A route intended for vehicular traffic, such as a street, driveway or parking lot.
Visitability: The requirement that all single-family homes, townhouses, multi-story housing units, and multi-family apartment units provide accessible features that permit people with mobility impairments to visit (enter and stay, but not live in) a residence.

1) Fees and Costs

The Authority reserves the right to utilize outside consultants or other professionals as it may deem appropriate, to conduct various aspects in conjunction with the Architecture and Construction Services functions related to the completion of the project. The Authority shall determine if some or all of these costs shall be funded by the borrower/developer.

Only fees and cost incurred relating to the financed project shall be permitted. The Authority will not pay for fees and costs relating to future phases of the project.

The Authority shall review the architectural and general contracting fees associated with the development to insure they are proper, fair and reasonable. The Authority has evaluated the fees from past Authority financed projects. These fees were based on the percentage of the construction costs (site work, general requirements, general contractor's overhead and profit, construction permits and fees). As such, the architectural and general contractor fees listed below reflect the maximum percentage the Authority will accept as a reasonable fee for services. Higher percentages for the architectural fees are acceptable but the owner/developer will be responsible to pay the difference between the higher percentage and the percentage in the table below. The fees shall include the following:

Architectural

1.00 The “Architect of Record” shall be same individual who created the plans and specifications. Any on-site architectural observation shall be conducted by the “Architect of Record”. The Architect is responsible for certifying that all the work requested for payment, at a minimum of one site visit per pay application, is accurate and has been completed.

1.01 Preparation of plans and specifications including consultations, estimates, and professional engineering services typically associated with the architectural portion of the plans, including structural design and Landscape Architecture. Architectural fees shall not include any work or contractual obligations of other professional services such as: surveys, soil borings, Civil Engineering and third party consultant reports.

1.02 General administration, reimbursables as per the Contract between Architect and Sponsor and overall observation of construction.

1.03 Approving payment vouchers to the contractor.

1.04 Approval and acceptance of completed construction.

1.05 The “Architect of Record” will not be permitted to act as the general contractor without the written approval of the Authority. If the “Architect of Record” sub-contracts any portion of his work, excluding professional engineering services, the difference between the architect’s contract fee and the sub-contractors’ fee will cause a reduction in the Developers’ Fee.

1.06 Any project utilizing an Architect’s “Self-Certification” permit review or Certified Revisions may be subject to design and construction costs after the design documents have been completed and approved by the Authority. Any related changes in cost as a result of code related requirements submitted for Authority review will be deemed as an error and omission, and will be handled as described in Section 4 of these standards.

Architectural Fee, in combination with building engineering fees for structural, mechanical, electrical and fire protections systems as well as Landscape Architecture fees in excess of the Authority limits listed below cannot be kept in basis and may be paid from a non-Authority source.
1.07 Architectural and Civil Engineering fees in excess of the Authority limits listed below cannot be kept in basis, and may be paid from a non-Authority source.

**AUTHORITY ARCHITECTURAL FEE LIMITS:**

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<th>% Architect Fee (Renovation)</th>
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<tr>
<td>Over 25,000,000</td>
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**AUTHORITY CIVIL ENGINEERING FEE LIMITS:**

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**General Contractor**

The General Contractor (GC) needs to obtain Authority approval prior to the commencement of any work. The Authority shall evaluate the GC’s past performance in addition to the requirements as indicated on the General Contractor Certification (Addendum #1). The Authority reserves the right to deny a project’s funding where a proposed contractor does not meet the standards established in this certification, or if the contractor’s past history with the authority does not meet a high quality standard of construction expected to be provided for all projects. The Authority shall review the Contract for Construction with the owner. All Contracts for General Construction must be a Stipulated Sum or Lump Sum contract. No project shall be completed with a Guaranteed Maximum Price or a Cost Plus style contract. The final sum contract must be agreed upon with the owner prior to Authority review and be in accordance with the approved project budget. Work started prior to Authority approval may put the proposed funding at risk. The Authority shall not be responsible for payment or compensation to the contractor if funding is lost because of unauthorized activity.

1.08 The general contractor is allowed “Profit” in the amount of 6%, “Overhead” in the amount of 2% and “General Conditions” (a.k.a. general requirements) in the amount of 6%, all of which are maximum amounts calculated from the hard construction costs. The percentage of each, Profit/Overhead/General Conditions as indicated in the CSS at Initial Closing, shall remain constant throughout the project including any change orders. General Conditions, Overhead and Profit shall be paid out equal to the completion of construction percentage as identified in the pay application. Related mobilization charges shall be evaluated on an as needed basis.

1.09 **Profit** is defined as the proceeds of transaction minus the cost, including intangibles such as contract incentives. Individual mark-up is not allowed on GC supplied materials or the total “Profit” line item on the Contractors Sworn Statement will be reduced accordingly. If this is insufficient, then deductions will be made to the General Conditions and/or Overhead lines.

**Overhead** being the expenses necessary to conduct a business. Cost shall also include those specific to
the project and include transportation, travel expenses, temporary housing etc.
In the event there is an identity of interest between the owner/developer and general contractor, the following will apply: (a) the developer fee will be reduced 2% through the Authority's underwriting process (via the Authority's Multifamily Application), or (b) the general contractor's 2% overhead shall be eliminated. Limited partnerships, joint ventures and other types of associations between the owners and the general contractor shall be subject to the Authority's limitations on Overhead.

General Conditions are the functions needed to complete the construction phase and shall include the following costs: project manager and superintendent, draw related paperwork, layout, surveys, plans/printing, material testing, communications, mobilization, temporary heat and utilities, portable toilets, temporary fencing, OSHA protection, field office, hoisting equipment, security, small tools, disposal, construction photography, cost certifications, audits, mock-ups, daily construction site cleaning, final clean, general labor, etc., essentially including, but not limited to, items identified within Construction Specifications Institute (CSI) Master Format Divisions 0 and 1 within the project manual (when provided). As the GC is responsible for these functions any subcontracting of these out to lower tier subcontractors will be evaluated against the stated limit, and may reduce the amount of the GC's General Conditions percentage a GC can collect accordingly. All General Conditions items listed above must be kept within the allowable percentages and the Authority prefers not to have individual GC related items broken out as separate trade lines on the CSS. If individual items are isolated, the GC line item must be reduced by the individual line value so the sum of the GCs listed and individual line items do not exceed the allowable 6%. Values for these items, if identified by the Authority, are in excess of the allowable percentage, the individual line item values shall be removed from the budget. Redistribution of these values through the remaining trades after being removed from the contract is prohibited.

Financing, holding charges or other types of construction related interest shall be included in the Overhead or General Conditions calculation.

Payment for any shop drawings will be limited to 5% of the total cost for that line item. In addition, The Authority may authorize payment to begin ordering elevators for the project, up to 35% of the elevator contract amount, including installation. All requests for deposit payments must be substantiated by an invoice issued by the supplier or subcontractor requesting the deposit and included with the draw in which the request is made. Invoices are not required for all other shop drawing requests.

The construction budget shall include any costs resulting from scheduling delays or seasonal constraints such as winter conditions, water extraction from recent rains, etc. These items are not considered unforeseen, and will be determined to be an error and omission when presented to the Authority for CO Determination as defined in Section 4.

When a contractor is acting in the capacity of a “GC” they shall provide all the functions typically associated with the position. The GC is responsible for the overall construction management aspects and tasks involved from the Project's start-up through final completion. Functions include (but are not limited to): scheduling, coordination of the trades, supervision, safety, program compliance, monitoring, and all other means and methods required to complete the construction of the project. As such, the Authority will not allow for a “Straw” GC or a firm which reaps the benefits and fees associated with the GC title but in reality subcontracts these functions to another GC or separately contracted individual to perform these duties in place of a primary employee of the GC. Subsequently the GC is expected to be on the site during construction and at least daily, and maintain a daily log documenting the progress of the work to be available for review upon Authority request. Similarly any side agreements to the contrary or kickbacks will result in forfeiture of any future work with the Authority.

Construction Performance Bonds and/or a Letters of Credit. The Authority will require either: (a) Payment and Performance Bond by a company approved by the Authority equal to one hundred (100%) percent of the cost of construction of the development or (b) Unconditional, irrevocable commercial letter of credit, issued by a financial institution approved by the Authority, in an amount equal to twenty-five (25%) of the cost of construction of the development. This is not required for projects receiving LIHTC
financing only or seeking bond only financing with 4% Tax Credits. If a project is seeking additional financing in combination with these sources, the bond must be provided as described above.

1.10 All Construction Related Costs required to complete the project shall be determined by receiving bids from all trades identified in the construction tab of the application prior to the project obtaining Initial Closing by the Authority. Allowances are not allowed for biddable and definable portions of the project except where discussed and approved by the Authority’s Architectural staff prior to Initial Closing. Any allowances identified in the bid shall be indicated as such, and definition of how the allowance was created shall be provided to the Authority for consideration. Any increases to the allowance via change order shall be deemed as an error when presented to the Authority for CO Determination as defined in Section 4. The construction budget needs to be complete including all value engineering, permit review requirements, proper wages, etc. Any deletion of Authority required work items (as indicated the Authority’s Architectural and Construction Standards, QAP requirements, etc.) from the scope due to costs will not be approved, and any CO requests to reimburse the contractor for installing items related to these standards will be deemed as error when presented to the Authority for CO Determination as defined in Section 4.

In all instances where any contract agreement results in cost savings at the completion of the Project, the disposition of any savings shall be in the sole discretion of the Authority.

The General Contractor shall reduce of the 6% overhead percentage listed above for any self-performed work. The reduction shall equal to the 2% of the trade cost identified as being self performed. All self-performed work anticipated for the project must be identified on the originally submitted CSS for review prior to Initial Closing.

Material suppliers for construction related products shall be identified on the contractors sworn statement accordingly. Draws for materials and/or furniture, fixtures and equipment (FF&E) can only occur when they have been properly installed and inspected by the Authority’s Field Construction Representative.

1.11 Furniture, Fixtures and Equipment (FF&E)
Furniture, Fixtures and Equipment expenses are eligible for reimbursement. However they must be for qualified items which mirror the FF&E designation.

Furniture
Items which are generally used by the residents, guests and staff for living and operating the project. Examples include beds, desks, chairs, couches, office file cabinets, etc.

Fixtures
Items which were once personal property but due to permanent attachment is now considered as being part of the real estate. Examples include window blinds, built-in cabinetry, etc.

Equipment
Items having a contributory association with the operation of the project. Equipment is usually considered personal property as it’s not readily attached to the real estate. Examples include computers, laundry equipment, appliances, snow blowers, etc.

Supplies are considered general purpose items and not eligible for reimbursement from the FF&E budget. Examples of supplies are hand and power tools, mops, cleaning solutions, trash cans, garden utensils, portable sports equipment, computer ink and paper, etc. Hand held tools including power tools or other related items that could be removed from the designated shop or location are supplies.

None of the aforementioned items represents a complete list and payment of these items will be at the Authority's discretion. These items shall be in new condition or if refurbished will require Authority approval.
1.12 Subcontractor Bid Submittals
When making application to the Authority the GC shall provide bids from the proposed subcontractors to substantiate the total construction contract. These bids shall be required from all the major trades (Mechanical, Plumbing, Electrical, Carpentry, Excavation, Concrete, Roofing, Fire Suppression, etc.) and reconcile with the respective line items in the Contractors Sworn Statement.

2) Codes and Regulations
The project shall comply with applicable zoning ordinances (including variances or amendments), these Standards and building codes. The project shall obtain all necessary building permits and required inspections to obtain a certificate of occupancy for conversion/new construction, or a final approval for rehabilitation/renovation projects. All jurisdictions in the state of Illinois shall comply with the 2015 International Energy Conservation Code with state amendments.

If there is a conflict between the requirements of the applicable codes and/or these Standards, the most stringent requirement will prevail. If there are any questions regarding the codes, the owner/developer or the Architect of Record shall consult with Authority Architectural Services staff to determine whether the proposed development would be subject to such requirements. During the construction process, owners/developers and/or architects will be asked to certify compliance with applicable regulations. The Authority or its representatives will check for compliance with standards set forth by federal, state and local regulations.

The following codes and regulations shall be used in preparation of the drawings and specifications:

2.00 The Standards applies to all buildings owned or financed in whole or in part by the Authority.

2.01 Local Building Codes: In areas where there is no local governing building code, the requirements indicated in the 2015 International Code Package will apply. IRC Section R313 is deleted.

2.02 The Americans with Disabilities Act applies to the common areas open for public use, such as a property management or rental office and community room areas including the kitchen.

2.03 Federal Fair Housing Act applies to all new multi-family housing consisting of four or more dwelling units per building built for first occupancy after March 13, 1991.

The Architect of Record will be required to survey the entire project and certify compliance with the Federal Fair Housing Act for those buildings built for first occupancy after March 13, 1991 and buildings where the last building permit or renewal thereof was issued after June 15, 1990 before any new addition or alteration to those buildings will be approved by the Authority.

2.04 Illinois Accessibility Code (current edition) applies to all "public facilities" and "multi-story housing units" as defined and governed by the Environmental Barriers Act (EBA) and located, in whole or in part, within the legal geographic boundaries of the State of Illinois, unless specifically exempted. This Code is applicable when work involving new construction of projects containing five or more units, alterations, additions, historic preservation, restoration, or reconstruction in whole or in part begins after the effective date of this Code.

The Illinois Accessibility Code together with the Environmental Barriers Act and the standards incorporated by reference identified in Section 400.120 has the force of a building code and as such is law in the State of Illinois.

2.05 The ICC/ANSI A117.1-Latest Version applies to projects seeking Tax Credits, either through tax-exempt bonds (4% Tax Credits) or through the competitive round (9% Tax Credits).

2.06 Section 504 of the Rehabilitation Act of 1973 (29 U.S.C 794) applies to recipients of federal financial assistance.

2.07 Illinois State Plumbing Code (current edition)

2.08 National Electrical Code (current edition)
2.09 **2015 International Energy Conservation Code** with state amendments is mandatory in all jurisdictions in the state of Illinois.

2.10 **Minimum Property Standards for Housing (MPS)** U.S. Department of Housing and Urban Development (HUD)

2.11 **24 CFR Parts 3280 of the Manufactured Home Construction and Safety Standards**

2.12 **Title 89 Illinois Administrative Code, Subpart B: Supportive Living Facilities**

2.13 **Lead Based Paint Hazards**: The Project shall comply with the applicable lead based paint regulations as outlined in the Authority’s Lead Based Paint Compliance Guide which can be found at: [http://www.ihda.org/developer/architectureConstructionServices.htm](http://www.ihda.org/developer/architectureConstructionServices.htm). All federally-assisted projects having units constructed before 1978 must comply with Title X of the Housing and Community Redevelopment Act of 1992 regulations found in 24 CFR Part 35 and the Illinois Lead Poisoning Prevention Code, 77 IL. Admin. Code 845. In addition, all properties and/or units must comply with the Environmental Protection Agency, final rule developed under the Toxic Substances and Control Act specifically 40 CFR Part 745, as it relates to the Lead Renovation, Repair, and Painting Program.

2.14 **Asbestos Containing Materials**: All federally-assisted projects must comply with EPA 40 CFR 61.145 and all other HUD, EPA, IEPA and Illinois Department of Public Health (IDPH) regulations.

2.15 **Radon**: All projects must comply with the Illinois Emergency Management Agency Radon program and the EPA’s radon guidelines. When radon mitigation is *either recommended or required*, at a minimum, a passive-future active system shall be installed. For further information, visit: [http://radon.illinois.gov/](http://radon.illinois.gov/) and [http://www.epa.gov/radon/index.html](http://www.epa.gov/radon/index.html)

2.16 **Mold considerations**: Fact Sheets from IDPH: [http://www.idph.state.il.us/envhealth/factsheets/mold.htm](http://www.idph.state.il.us/envhealth/factsheets/mold.htm) [http://www.idph.state.il.us/envhealth/factsheets/moisture.htm](http://www.idph.state.il.us/envhealth/factsheets/moisture.htm) EPA Mold Site: [http://www.epa.gov/mold/](http://www.epa.gov/mold/)

2.17 Illinois State Prevailing Wages or Federal Davis-Bacon Prevailing Wage requirements will be *mandated* on Authority financed projects having construction related activities. Section 3 will apply were required. See links below to respective guidelines and websites.

- **Authority Davis Bacon Compliance Guide**

- **Illinois Prevailing Wage Website**
  [http://www.state.il.us/agency/idol/RATES/RATES.HTM](http://www.state.il.us/agency/idol/RATES/RATES.HTM)

- **Section 3 Plan and Compliance Guide**

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**CONSTRUCTION PHASE**

### 3) Pre-Closing and Preconstruction Meetings

3.01 The Authority will convene two meetings prior to the construction start. It is expected the sponsor and general contractor will be present in the Pre-closing meeting. The sponsor, their Architect, the General Contractor and all subcontractors must attend the Preconstruction meeting. In addition, the sponsor’s and GC’s representative responsible for completing and forwarding the various documents should be present at the preconstruction meeting as well.
3.02 The following items will be reviewed at these meetings:

- **Payout Procedures for both sponsor and GC.**
  - The Authority will allow advanced payments for on-site stored materials custom fabricated solely for installation for the funded project. The GC must identify these materials they expect to make early payment requests for prior to Initial Closing for Authority review. Each item shall be included as a special endorsement on the GC’s Builder’s Risk Insurance policy. Common materials such as gypsum board, plumbing piping, lumber, steel studs, hardware, off-the-shelf items, etc. are not considered custom materials and will only be approved for payment after installation. Proper invoices indicating the quantity of the material stored on site must be provided at the time of the payment request in order to allow the field representative to verify the quantity matches the request.
  - The Authority will not allow for early payment of materials stored off-site without approval from the Construction Services Staff prior to Initial Closing. Any material granted advanced payment are subject to the following additional requirements:
    - Evidence that the Stored Materials are in the care, custody and control of the Owner, or the Owner’s General Contractor on behalf of and under the direction of the Owner;
    - Allow the Authority’s field representative to confirm the Stored Materials are stored and cared for in a safe and secure location;
    - Endorsement of other applicable amendment to the builders risk insurance policy for the Development insuring for the theft and damage to materials on site, installed, at a temporary location and/or transit;
    - The Guarantors shall guaranty to the Authority payment for replacement of stored materials in the event of theft or damage
  - The Authority will deny any request where the owner and general contractor does not agree to these terms at the time of the request. All fees associated with these requirements must be included in the development cost of the project, and if a change order is received to pay for expenses related to them will be deemed as an error and omission once the CO is reviewed. Proper invoices indicating the quantity of the material stored must be provided at the time of the payment request in order to allow the field representative to verify the quantity matches the request.
  - Furniture, fixtures and equipment (FF&E) will not be paid for until installed and observed to be in place by the Authority’s Construction Field Representative, and does not qualify for the advance deposit payment policy listed above.
  - **Retention reduction:** 10% retention must be retained up to 95% completion, then may be reduced to 5% if the building is occupiable, has a C of O, a completed AIA form G704, Authority’s Permission to Occupy, Authority’s Completion Certificate and the Authority’s Field Representative approval. Retention shall apply to all trade labor and material costs, General Conditions, Overhead and Profit and all change orders, but does not apply to insurance, bonds and permits. For single family and scattered site projects only, The Authority will allow retention reduction based upon individual site completion as identified on an individual Contractors Sworn Statement for each individual site. Retention shall be reduced from 10% to 5% for the individual site after it has achieved an individual C of O, and completed the Authority’s Permission to Occupy, Authority Completion Certificate and the Authority’s Field Representative’s approval for that particular property/site.
  - The GC will submit a Contractors Sworn Statement (as approved by the Authority). In addition, the GC and all subcontractors must submit G702’s and G703’s. All documents must be submitted to the Authority’s Field Representative at least five days prior to the draw inspection.
- Wage Guidelines (Davis Bacon or Illinois Prevailing Wage whichever is applicable).
- Section 3 Hiring Guidelines, if applicable.
- Change Order Process
- Lead Based Paint and Asbestos Containing Material Regulations, if applicable.
3.03 **Contract Exclusions and Value Engineering**

- The project team must address the potential for additional General Contractor exclusions or value engineering on the project during the plan review process and prior to the pre-closing meeting.
- The Authority shall receive a list of all such items including stated values for each item removed from the reviewed documents.
- Exclusions or value engineering items deemed acceptable to the Authority must be fully coordinated with the final set of construction documents received by the Authority prior to issuance of the plan review approval.
- The final contract lump sum value, at Initial Closing of the project, must reflect inclusion of these items. Excluded items may return to the project scope after construction has started as project betterments, but only for the value equal to the credit received at the time of removal from the project prior to Initial Closing.

3.04 **Payout Procedures**

- All parties must comply with the Authority's current policies and procedures for processing draw requests.

4) **Change Orders and Contingency Funds**

A Change Order (CO) can originate from the project Sponsor, Architect or General Contractor. When a Sponsor receives or creates a request for a CO, they shall direct their Architect and GC to certify the requested items are not already included in the approved plans, specifications or various contract documents. The Authority will review the CO following the procedure outlined below.

*The Sponsor will submit the following complete Change Order Packet (CO Packet) to the Field Representative:*

- An unexecuted copy of the AIA G701 Change Order form
- A letter from the Architect clearly explaining the reasons for the CO
- Any other documents to justify the change, including the GC’s documentation of before and after conditions, with photos, if applicable
- Any other documents to support the value of the change

*The Construction Field Representative will:*

- Verify the pre-existing condition
- Review the proposed change to the scope of work
- Forward the CO Packet to the Authority’s Architectural Staff for review

*The Architectural Staff will:*

- Review the CO Packet to make a Change Order Determination (CO Determination) as to whether the change is either:
  - an unforeseen condition, or
  - a project betterment, or
  - an error or omission
- The Architecture Staff will inform the Construction Field Representative of the CO Determination, who will then notify the Sponsor.
- It is estimated the Architectural Staff will return a CO Determination 15 days from when a completed CO Packet is received by the Construction Field Representative.

*After receiving the CO Determination, the Sponsor will:*

- Follow the General CO Provisions, as stated in 4.01.
- Submit a CO Packet including the fully executed version of the AIA G701 and all required pricing back up included to achieve the CO Determination with the next draw package
- Allocate funds as necessary, including the use of construction Contingency, to fund the CO on the next
draw.

- Properly show the CO value on the OSS and CSS.

### 4.01 General Change Order and Construction Contingency Provisions

Sponsors must comply with the following CO and Construction Contingency usage provisions:

- COs must be submitted 30 days prior to inclusion within a construction draw package.
- Contingency exists solely to support the trade costs incurred with the construction of the project, and only to fund project related construction, rehabilitation or related site work after receiving the CO Determination.
- Contingency does not exist to fund items including, but not limited to, off-site improvements, soft costs, vehicles, developer fees, resident services, management and operations, items not related to the project, or other non-construction items.
- The Sponsor assumes all risk (both monetary and construction rework) in completing CO work without prior CO Determination.
- The Sponsor is responsible to pay for any CO submitted after exhausting all Contingency funds.
- The Authority will provide any additional project funding after expending all Contingency funds.
- Contingency funds are available only to the Sponsor and shall be reflected accordingly on the OSS.
- Contractors shall not include any Contingency amount in their bid whatsoever.
- Contractors and Sponsors shall not enter into any agreement accessing or splitting Sponsor Contingency or trade line savings. There shall be no utilization of cost savings without Authority approval.
- The Authority will maintain a log of CO Determinations for every project and will evaluate future funding awards based on the criteria listed below.
- The Authority retains the right to deny funding for any CO made in a fraudulent manner not in alignment with the rules listed above.

### 4.02 The following criteria will be used for a CO Determination of an unforeseen condition:

- **Concealed Condition** – Unforeseen items revealed as a part of normal construction activity either underground, within walls or hidden from view prior to removal of existing items not anticipated as part of the original design, and are not shown within the approved construction documents. The Authority expects the design team to have completed an adequate amount of selective demolition for renovation projects to properly anticipate concealed conditions prior to the completion of the construction documents.
- **Construction Cost Increases** – If the cost increases are proven to be caused by market uncertainty and the rapid rise in construction material costs, the funds from the construction Contingency may be used to pay for the cost increases.

### 4.03 The following criteria will be used for a CO Determination of a project Upgrade (Betterments):

- Improvement made in the design material quality, quantity or performance to provide a better environment for the residents than what is represented in the approved construction documents.
- Additional scope items to improve the project not shown on the approved construction documents.

### 4.04 The following criteria will be used for a CO Determination of an error or omission:

- **Contractor Negligence** – Any damage or neglect by the Contractor occurring as part of the general construction of the project, or during delivery of materials.
- **Building Code Related Issues** – are foreseeable costs, which should have been included within the project’s original design to meet local code restrictions.
- **Architects, Engineers and Contractors Errors and Omissions and Additional Architectural and Engineering Fees** – design items which are not coordinated within the approved construction documents, or missing materials which would be necessary to complete proper construction or maintain a product warranty.
d. **Building Inspector or any Municipal Official Requirements** – if not required by the Building Code, but are required for building occupancy by a field inspector. These are items the Sponsor would normally be responsible to pay for regardless of the timing of the requirements, but should have been investigated prior to construction commencing by either the architect or contractor.

e. **Separate contracts outside of the General Contract**: When a separate contract is let by the Sponsor for work to be performed outside of the General Contractor’s Scope of work resulting in additional incurred costs. A separate Contingency is required for separate contracts.

f. **Damage or theft**: The Developer and/or GC are primarily responsible for having sufficient insurance coverage to fund any losses due to damage, theft or other occurrences covered in their policy. This includes cost to cover insurance deductibles, as the responsible party is responsible to cover their own insurance deductibles as their cost of doing business.

h. **Seasonal Constraints** - such as winter conditions, water extraction from recent rains or other costs that could result in scheduling delays. These items should be anticipated and included in the original construction budget, or paid through available General Conditions costs.

i. **Other**: Any additional architectural, engineering, or other services outside of the scope of work that may be required. This includes construction related delays or time extensions resulting from additional scope, extended warranties, contractor incentives, or overtime or premium time.

j. If an item classified as an error or omission, it is the Authority’s position the Sponsor should review the CO and reconsider if it is worthy of an increase in the contract value. We encourage the project Sponsor to review their contract as well as the General Conditions to the Contract and take proper action under these documents prior to agreeing to funding the CO through Contingency funds.

j. The Authority retains the right to penalize the project team under the participant scoring section of the QAP for all future applications if any project allocates a total equal to or greater than 20% of the Contingency for items deemed as errors and omissions.

### 5) Construction Close Out

Prior to final project close out, several criteria must be met for the Authority’s construction and architectural staff to give their final approval.

5.01 When the project is 95% complete, prior to final project close out, several criteria must be met in order for Construction and Architectural Services to give their approval to reduce retention to 5%.

- The building must be occupiable.
- Certificate of Occupancy or Final Inspection from the governing jurisdiction (if applicable).
- Signed PDF copy of the A.I.A. G704 must be submitted to the Construction Field Representative and any punch list items (Punch list cost multiplied by 150% to be held in escrow).
- Digital Signed PDF copy of the Authority’s Permission to Occupy must be submitted to the Construction Field Representative. This form can be found at: [http://www.ihda.org/developer/architectureConstructionServices.htm](http://www.ihda.org/developer/architectureConstructionServices.htm)
- The Authority’s Construction Field Representative approval.
- All Prevailing Wage, Davis Bacon, Certified Payrolls & Section 3, Compliance requirements are met and satisfied.
- Environmental clearance required by Demolition – i.e. Asbestos and Lead Base Paint clearance report & O&M manual – are received by the Authority.
- For projects receiving tax credits for Universal Design and/or Green Initiatives, the Authority’s Architectural Services final inspection approval of the items identified for scoring.
  a. At final project closeout: Projects awarded funding based on scoring in any green category must submit the applicable 3rd party certification, green maintenance/tenant manual, and videos (if applicable).
5.02 When the project is 100% complete, including punch list items, the Authority’s Construction Field Representative will verify and inform the Authority Manager of Architecture and Construction. The Authority Manager of Architecture and Construction will approve final 5% retention release.

DESIGN PHASE

6) Plan Review Process

Once the Authority has determined the project is feasible, the owner/developer shall submit completed project drawings and specifications to Architectural Services for their respective review. This review and approval must take place prior to the project Initial Closing. Any major modifications to the project after architectural approval and before Initial Closing must be approved by the Authority and possibly the Authority’s Board.

Before construction begins, submit a sealed digital unlocked, editable PDF copy of the complete “For Construction” drawings, specifications and supporting documents to the Authority on a flash drive. This set shall incorporate all changes required by the municipal authorities, all applicable comments made by the Authority; all approved “value engineering” changes and any applicable comments made by other governmental agencies (HUD, IEPA, etc.). The Authority shall receive the review drawings, specs and supporting documents 60 days prior to the scheduled Initial Closing date. Please note, it is anticipated all drawings will be submitted through the IHDA Connect online portal when it is available, and submission of a flash drive will be unnecessary. Please continue submitting drawings via flash drive until this is available.

The drawings and specifications must be prepared under direct supervision of an Illinois Licensed Architect in accordance with the Architectural Practice Act, bear the license number of the architect, and if the architect is part of any business structure other than a sole proprietorship, he or she must include the Project Design Firm registration number on the drawings. The drawings are required to be signed and sealed by the design architect (“Architect of Record”). A Professional Engineer licensed to practice their profession in the State of Illinois, when acting as a consultant to the Architect of Record or under a separate agreement with the owner/developer, must sign and seal his work and provide proof of professional liability insurance.

The Authority’s acceptance of plans and specifications is limited to the Authority review and shall not constitute a general approval of the development. The review of the plans and specifications is solely for the benefit of the Authority and not that of any other party. Subsequent modifications to the plans and specifications after the Authority’s acceptance must be approved by the Authority. Further, such acceptance shall not constitute a waiver of the Authority rights against those responsible for any error or omission or unauthorized changes.

The completed drawings must be coordinated between all design disciplines and the final contract for construction including all value engineering items and General Contractor exclusions. In addition, the project drawings must be current (≤ three months old) and include the following:

New Construction

6.01 Complete Civil Engineering Drawings, including, but not limited to:
- Location map.
- Site erosion plan, site utilities plan, site grading plan and site drainage plan.
- Site parking plan, pavement details, curbs details, curb ramp details, sidewalk details, and road profiles (if applicable).
- Topographical survey.
- Flood plain information.
- Other necessary details that appear on a complete set of civil engineering drawings.

6.02 Complete Landscape Drawings including but not limited to:
- Location of all trees, shrubs, berms, and sod/grass areas.
• Material schedules with selected plant species.
• Other necessary details required for a complete set of landscape drawings.

6.03 Complete Architectural Drawings, including, but not limited to:
• Cover sheet, including index, project data, location map, building code and zoning information, table indicating unit schedule (including accessible, adaptable and sensory impaired units), types and sizes.
• Site plan, including parking data and layouts.
• Demolition Plans as applicable
• Floor plans.
• Building elevations.
• Interior Kitchen and Bath elevations, as well as other interior elevations required to identify areas receiving special design consideration. Including allowable space of 24” above range/stove to combustible surfaces and coordinated location of accessibility features
• Wall sections.
• Stair, kitchens and bathroom details.
• Door, hardware, windows, room finish and appliance schedules.
• Large scale drawings of the typical apartments and common areas, including accessibility compliance.
• Other necessary details required for a complete set of architectural drawings.

6.04 Complete Structural Engineering Drawings including, but not limited:
• Foundation plan, footing and pier schedules, foundation and footing sections.
• Floor framing plans, roof framing plan, wood truss and structural steel sizes and layout.
• Column and lintel schedules, connection details.
• Other necessary details required for a complete set of structural drawings.
• Truss and panel shop drawings shall be submitted to the Authority prior to installation.

6.05 Complete Mechanical Drawings including, but not limited to:
• Demolition Plans as applicable
• Duct layouts.
• Location of the HVAC equipment including condensing units, piping layouts, if hot water heating, large scale boiler room layout including duct sealing and insulation as required in the current IECC.
• Equipment schedules.
• Other necessary details required for a complete set of mechanical drawings.

6.06 Complete Plumbing Drawings, including, but not limited to:
• Demolition Plans as applicable
• Location and size of incoming water service, hot and cold-water distribution piping, including insulation as required in the current IECC.
• Storm water drainage piping, sanitary sewer piping.
• Plumbing fixture and equipment schedules.
• Soil waste and vent diagrams, water distribution diagrams.
• Other necessary details required for a complete set of plumbing drawings.

6.07 Complete Electrical Drawings including, but not limited to:
• Demolition Plans as applicable
• Location and height of all switches and outlets, including ground-fault circuit-interrupter (GFCI) protection in the locations required by the NEC and other governing codes and ordinances.
• Location of all lighting fixtures and compliance with all lighting levels for each usable space
• Location of all electrical panels, location and size of the incoming electric service.
• Electric riser diagram, main distribution panel diagram, electric panel schedules.
• Large scale floor plan of the electrical equipment room.
• Location of all exit and emergency lighting, location of all fire alarm audio visual devices, including all pull stations.
• Site lighting plan.
• Other necessary details required for a complete set of electrical drawings.

6.08 Complete Fire Protection Drawings (if applicable). Fire protection shop drawings shall be submitted to the Authority prior to installation.

6.09 Verification that the drawings comply with the 2015 International Energy Conservation Code with Illinois Amendments. (REScheck, COMcheck or equal).

6.10 Green Development Plan outlining the integrated design approach used for this development.

6.11 Complete Soils boring (Geotechnical) report describing the subsurface exploration, analysis, mining hazards, including mining maps, and geotechnical recommendations for the site.

6.12 A Structural Design Narrative prepared by the “Architect of Record” or Structural Engineer indicating the structural design data used for the site, including but not limited to live loads (e.g., floor and roof live loads), ground snow load, wind load (e.g., basic wind speed, wind exposure category, etc.), earthquake load (e.g., building seismic design category, site class, etc.), flood design data (if applicable) and any prescriptive construction detailing considered.

6.13 For new construction projects that fall within the New Madrid Seismic Zone, a certification statement attesting to the fact that the drawings meet the seismic design requirements for earthquake resistant buildings.

6.14 Project specifications and design manual outlining the necessary material, installation, warranty and other requirements to complete the scope of work for the successful construction of the project. This information shall be presented in the most current Construction Specifications Institute (CSI) format.

6.15 A current (≤ six months old) ALTA/NSPS Land Title Survey.

6.16 A current (≤ twelve months old) Phase I Environmental Site Assessment. This assessment must include, but not be limited to, the following considerations.

• Adjoining land use and zoning.
• Soil conditions.
• Slope conditions as related to soil erosion, parking, walks, drives, etc.
• Storm water drainage.
• Noise considerations.
• Site plan showing all major site features, buildings, roads, walks, utilities, etc.
• Flood plain information
• Wetland information
• Mining information
• Seismic information
• Radon information
• Endangered Species
• Vapor Intrusion information
• Completion of the Authority’s Phase I Environmental Consultant Report Requirements. This form may be found on the Authority’s website (www.ihda.org).
Rehabilitation and Adaptive Reuse Projects

If the project consists of any existing structures, a Property Needs Assessment (PNA) dated within 6 months of application deadline must be submitted at the time of application. The PNA will evaluate the current condition of the asset(s) and include a cost estimate for any critical, immediate and long term repairs. The Authority’s PNA standards can be found on the Authority website. (www.ihda.org). The selected third-party vendor can be neither the Architect of Record for the project nor the preparer of the owners/developers scope of work for the project.

Any project including rehabilitation must contain at least a minimum hard cost budget of $25,000 per unit for the area being updated, and include the following minimum project scope:

- Replacement of all unit and common area kitchen and bathroom cabinets and counter tops
- Replacement of all plumbing fixtures within the entire project with fixtures meeting with the fixture criteria identified in Section 14 - Energy Efficiency and Green Criteria of these standards
- Replacement of all light fixtures throughout the project
- Replacement of all flooring throughout the project
- Repair/Replacement of one additional major system (furnaces, water heaters, central boilers, air conditioning equipment, elevator, windows, roofing, tuckpointing of exterior masonry, etc.) throughout the entire building
- Painting of all units and Common areas.

The completed project drawings must be current (≤ three months old) and include the following:

6.17 Complete Civil Engineering Drawings, including, but not limited to:
- Location map.
- Site erosion plan, site utilities plan, site grading plan (if re-grading work is required), and existing site drainage plan.
- Site parking plan, pavement details if new pavement or an overlay of the existing pavement is required, curb details (if repair or new curb work is required), curb ramp details (if new curb ramps are to be provided), sidewalk details (if new sidewalks are to be provided) and road profiles (if applicable).
- Topographical survey,
- Indication of the flood plain limits (if applicable).
- Other necessary details that appear on a complete set of civil engineering drawings.

6.18 Complete Landscape Drawings including but not limited to:
- Location of all trees, shrubs, berms, and sod/grass areas.
- Material schedules with selected plant species.
- Other necessary details required for a complete set of landscape drawings.

6.19 Complete Architectural Drawings, including, but not limited:
- Cover sheet, including index, project data, location map, building code and zoning information, table indicating unit schedule (including accessible, adaptable and sensory impaired units), types and sizes.
- Site plan, including parking data and layouts.
- Demolition plans documenting the full scope of project demolition
- Floor plans of the typical building or if there are various types of buildings, floor plans of each type. These plans shall be dimensioned, indicate the rehabilitation work to be performed in each type of apartment, the type of existing floor framing and the direction of the span.
- Building elevations (front, rear, and sides) indicating the location and type of work to be performed and the heights of the various floors from grade to finish first floor and finish floor to floor heights thereafter. Wall sections indicating existing wall and floor construction and any work to be performed.
Detail sheets including stair details (if replacing the stairs), kitchen details (if replacing cabinets), door schedules, room finish schedules, bathroom details (if renovation bathrooms), large scale drawings of the typical apartments, large scale drawings of the common areas, accessibility compliance, and all other necessary details required for a complete set of architectural drawings.

*Interior Kitchen and Bath elevations, as well as other interior elevations required to identify areas receiving special design consideration. Including allowable space above range/stove to combustible surfaces and coordinated location of accessibility features. Cutsheets for all Appliances. Any proposed modifications complying with the applicable accessibility requirements.*

Other necessary details required for a complete set of architectural drawings.

Truss and panel shop drawings shall be submitted shall be submitted to the authority prior to installation. (If applicable.)

**6.20 Complete Structural Drawings,** if applicable to the scope of work, including, but not limited to:

- Foundation plan, footing and pier schedules, foundation and footing sections.
- Floor framing plans, roof framing plan, structural steel sizes and layout.
- Column and lintel schedules, connection details.
- Other necessary details required for a complete set of structural drawings.
- Truss and panel shop drawings shall be submitted to the Authority prior to installation.

**6.21 Complete Mechanical Drawings,** including, but not limited to:

- Demolition plans
- Duct layouts (if altering the existing duct layout or installing new ducts).
- Location of the HVAC equipment including condensing units, piping layouts (if applicable), if new hot water heating system, large scale boiler room layout *including duct sealing and insulation as required in the current IECC.*
- Equipment schedules.
- Roof penetration details (if applicable).
- Other necessary details required for a complete set of mechanical drawings.

**6.22 Complete Plumbing Drawings,** including, but not limited to:

- Location of the existing incoming water service, new hot and cold-water distribution piping (if applicable).
- Existing storm water drainage piping (if applicable), new sanitary sewer piping (if applicable).
- Definition of demolition scope as required for the project
- New plumbing fixture and equipment schedules.
- New soil waste and vent diagrams (if applicable), and new water distribution diagrams (if applicable).
- Other necessary details required for a complete set of plumbing drawings.

**6.23 Complete Electrical Drawings** including, but not limited to:

- Location and height of all existing switches and outlets, including ground-fault circuit-interrupter (GFCI) protection in the locations required by the NEC and other governing codes and ordinances.
- Location of all existing lighting fixtures.
- Location of all existing electrical panels, location of the incoming electric service, size of the incoming electric service.
- Definition of demolition scope as required for the project
- Electric riser diagram (if providing a new building service), main distribution panel diagram (if providing a new main panel), electric panel schedules (if applicable).
- Large scale floor plan of the electrical equipment room (if applicable).
- Location of all existing or new exit and emergency lighting, location of all existing or new fire alarm
audio visual devices, location of all existing or new pull stations.

- Site lighting plan.
- Lighting Fixture Schedules
- Other necessary details required for a complete set of electrical drawings.

6.24 Complete **Fire Protection Drawings** (if applicable). Fire protection shop drawings shall be submitted to the authority prior to installation.

6.25 **Green Development Plan** outlining the integrated design approach used for this development.

6.26 For projects that fall within the New Madrid Seismic Zone, a certification statement attesting to the fact that the buildings meet the seismic design requirements for earthquake resistant buildings.

6.27 **Project specifications and design manual** outlining the necessary material, installation and other requirements to complete the scope of work for the successful construction of the project. This information shall be presented in the most current Construction Specifications Institute (CSI) format.

6.28 A current (≤ six months old) **ALTA/NSPS Land Title Survey**

6.29 A current (≤ twelve months old) **Phase I Environmental Site Assessment**. Please include all the assessment requirements under “New Construction” above, including applicable:

- All projects must comply with the **Authority’s Lead Based Paint Construction Guidelines**.
  


6.30 **Mold considerations:**

- Fact Sheets from Illinois Department of Public Health:
  
  [http://www.idph.state.il.us/envhealth/factsheets/mold.htm](http://www.idph.state.il.us/envhealth/factsheets/mold.htm)
  
  [http://www.idph.state.il.us/envhealth/factsheets/moisture.htm](http://www.idph.state.il.us/envhealth/factsheets/moisture.htm)

- EPA Mold Site: [http://www.epa.gov/mold/](http://www.epa.gov/mold/)

6.31 On smaller projects such as a single family home, multifamily building with less than 5 units, etc., (in lieu of the above rehabilitation requirements) the Authority may accept the following: a home inspection report by a licensed state inspector, radon report, asbestos inspection, termite report, lead based paint risk assessment and Housing Quality Standards (HQS) Report unless HOME funded which may require additional documentation. The scope of work shall address all listed deficiencies. If contemplating this approach please contact Authority Staff for approval prior to conducting any work or third party reports.

### 7) Design and Planning

The following standards are being provided as an aid in the development and design process. These requirements represent the minimum standards as imposed by the Authority. In addition to the previously mentioned Codes and Regulations, the construction must also be consistent with recognized standards and accepted practices in the construction industry.

These standards are primarily for new construction. However, any new work done in any rehabilitation or adaptive reuse shall comply with the standards for new materials. If unsure as to which standards shall apply, consult with **Authority’s Architectural Services staff**.

As these Projects will sustain affordable housing over the loan term, the Authority encourages the incorporation of innovation and cost effectiveness whenever possible. The Authority recommends careful consideration of the material selection for the project, as long lasting and durable materials that will minimize unnecessary maintenance and replacement are preferred.
7.01 Required Project Amenities:

- Secured building features, such as security staff, cameras, alarm systems, secure common hallways and entrances, access control for circulation, etc. Keyed or fobbed door hardware only do not satisfy this amenity.
- The capability for each unit to access high-speed internet either through wireless service to all residents or hard-wire connection.
- Window treatments for each unit, such as mini blinds or curtains.
- On-site laundry facilities that will include, at a minimum, one of the following: a.) quantities of washers and dryers in a common laundry area equal to the more stringent amount of washers and dryers required by either the most current version of local or state plumbing codes, or b.) washers and dryers installed and maintained in every unit. The provision of washer/dryer hook-ups will not fulfill the requirement for on-site laundry.

If the Project has three-bedroom units:

- The units must contain at least one full bathroom and a three-quarters bathroom consisting of a toilet, sink and shower.

If the Project has four or more bedroom units:

- The units must contain at least two full bathrooms.

Recreation space:

- Elderly Projects, Supportive Housing Projects and SLF Projects, must include a furnished multipurpose or activity room sized as indicated in Section 17 of these standards.
- All non-elderly Projects must include a fully equipped indoor or outdoor playground or tot lot appropriately sized for the Project unless otherwise approved by the Authority.

8) Accessibility Standards

Accessibility Codes and Acts: One or more of the following accessibility Codes and Acts shall be applicable to any development funded by the Authority. When there is a conflict in the design requirements of the various Acts and Codes, the most stringent requirements will prevail. If unsure as to which standards shall apply, Authority Architectural Services staff should be consulted.

8.01 Federal Fair Housing Act:

All new construction projects of four or more dwelling units and all buildings constructed for first occupancy after March 13, 1991 are required to comply with accessibility standards and design requirements mandated by Federal Fair Housing Act and ICC/ANSI A117.1, Latest Edition.

http://www.hud.gov/offices/fheo/disabilities/fhefhag.cfm

8.02 Illinois Accessibility Code:

Housing units that are owned or financed by a governmental unit (Authority) that consist of five or more dwelling units on each project site, shall comply with all requirements of Section 233, Multi-Story Housing requirements Section 233.6, Requirements for Adaptable Dwelling Units of The Illinois Accessibility Code. Renovation projects must comply with Section 233.3.4 of the Code to determine the level of accessibility required.


8.03 ICC/ANSI A117.1-Latest Edition:

Projects seeking Tax Credits, either through tax-exempt bonds (4% Tax Credits), through the competitive round (9% Tax Credits) or other Authority financial resources must provide the percentage of Accessible and Sensory Impaired units as specified in the LIHTC Qualified Allocation Plan (QAP).

8.04 Section 504 of the 1973 Rehabilitation Act:
Projects that receive federal financial assistance (HOME, National Housing Trust Fund, Risk Share, Section 811, etc.) must comply with Section 504 of the 1973 Rehabilitation Act and 1984 Uniform Federal Accessibility Standards (UFAS):
www.access-board.gov/ufas/ufas.pdf
http://www.hud.gov/offices/fheo/library/UFASAccessibilityChecklistforPHAs-5-7-08.pdf

8.05 The Americans with Disabilities Act:
The common areas open for public use, such as a property management or rental office, community room kitchen, public toilet rooms, lobbies and corridors, etc. shall comply with the requirements of The Americans with Disabilities Act (latest edition):

8.06 Local Codes:
Projects must comply with the adopted local building and accessibility code.

Technical Requirements:

8.06 For new constructed buildings that do not have an elevator, 100% of the total number of Ground Floor units must comply with the requirements of the Federal Fair Housing Act and 20% of the total number of dwelling units must comply with the Requirements for Adaptable Dwelling Units, Section 233.6, of the Illinois Accessibility Code.

8.07 For new constructed buildings equipped with an elevator, 100% of the total number of units must comply with the requirements of the Federal Fair Housing Act and 20% of the total dwelling units must comply with the Requirements for Adaptable Dwelling Units, Section 233.6, of the Illinois Accessibility Code.

8.08 New construction projects that are recipients of Authority financial assistance, in whole, or in part, shall have a minimum of 10%, of the total number of units or at least one unit ( whichever is greater) constructed in compliance with ICC/ANSI A117.1 Section 1103 Type ‘A’ Units for persons with mobility impairments. A minimum of an additional 2% of the total number of dwelling units or a least one unit ( whichever is greater) must be suitable for occupancy by people with hearing or visual impairments. The number of hearing and visual impaired units shall not be included in the required unit count for accessible units. In projects where there is a variety of units are offered, at least one of each type of unit, including town houses, must be designed to the Type ‘A’ unit standard. The development must offer the same choices of unit location and variety of units to persons with mobility impairments as those who are not mobility impaired. This requirement will overlap some of the other required code requirements and together will satisfy all of the accessibility code requirements.

8.09 For rehabilitation projects, Section 400.510 of the Illinois Accessibility Code will determine the level of accessibility required. In addition, projects that receive federal financial assistance will also be required to comply with 24 CFR § 8.23, Alterations of existing housing facilities.

8.10 Unless technically infeasible, existing buildings where a change of occupancy occurs shall comply with the requirements for new construction mandated by the Illinois Accessibility Code and local building codes.

8.11 For projects renovating existing buildings, special accommodations to these standards may be allowed with approval from the Authority. Approval of conditions must be received prior to project board approval by submitting a written statement clarifying why accessible accommodations cannot be provided. Any request submitted must be based on code definitions, and adequate documentation must be provided for evaluation. A statement outlining the approval must be submitted with the final plans and specifications for plan review. Accommodations will only be granted if a development is deemed to be providing reasonable accommodation for accessible units as determined by the Authority.


8.13 The requirements described in Section 400.610 of the Illinois Accessibility Code will govern renovation of
buildings of a historic nature and any requirements of the State of Illinois Historical Agency.

8.14 For Multi-unit Single Family Home developments the committed number of fully accessible and adaptable units shall be designed to meet the minimum requirements of the codes above as defined by the selected funding source(s).

9) Visitability

Visitability design criteria allow persons with disabilities access to residential units by providing them with the opportunity to visit friends and family. It incorporates the following in all new construction, additions and alterations, and whenever practical and feasible, rehabilitation projects. Visitability design criteria will be required in all single-family, townhomes, single story dwelling units and multi-story dwelling units. In multi-story elevator buildings every unit shall be visitable, in multi-family non-elevator buildings only the ground floor units shall be visitable. Visitability shall not be used as a substitute for accessible or adaptable requirements described above.

Design Considerations

9.01 An accessible route must be provided from the point of arrival to the main entrance of each unit with a clear width of 36 inches and a running slope of not greater than 5% with a cross slope of not greater than 2%.

9.02 Each unit must have at least one zero-step entrance with a 36” wide entrance door. A zero-step entrance is one without a step at the entrance door and with less than ½” difference between the inside and outside surfaces, or with a threshold with less than a ½” rise. An overhang or porch roof is recommended to protect the entrance from the elements.

9.03 The main entrance door to each unit must be a minimum of 36 inches wide. All other doors on the main level shall be a minimum of 34 inches wide.

9.04 Provide an accessible powder room or a full bathroom on the main entrance floor in compliance with the requirements of Section 4.34.5 of the Uniform Federal Accessibility Code or Sections 1004.11.3.1.1 and 1004.11.3.1.2 of ICC/ANSI A117.1, latest edition.

10) Site Standards

10.01 All projects shall include proper stormwater design for the site meeting with local jurisdictional requirements, and an approved plan shall be submitted to the Authority with the final plans and specifications prior to the start of construction. All permits must be received by the State of Illinois Environmental Protection Agency prior to closing. If no jurisdictional requirements apply (city or county), all stormwater must be managed within the project site, and be connected into a clearly identified storm sewer system (dedicated or combined).

10.02 Finished grade at the exterior perimeter of the building shall be not less than 4-inches below the top of the exterior face of the foundation wall and slope away from the building at a slope of 5% for a minimum of 10-feet measured perpendicular to the wall.

10.03 Buildings located within the 1% flood plain shall be avoided and may not be financed. All projects located on the flood plain shall submit proof of flood insurance. Federally-funded projects located in the flood plain are subject to the 8-step process as determined by HUD.

10.04 Projects shall not be located in proximity to environmental hazards.

10.05 Sites that are divided by a heavily traveled major traffic artery shall be avoided and may not be financed.

10.06 All projects must specify method of irrigation (automated or manual) provided for the project for proper maintenance of planted material (e.g. trees, shrubs, sod, seeded areas, etc.).
Parking Areas and Sidewalks:

10.07 The design of private internal roadways and sidewalks must meet the local design requirements to enable them to be acceptable to the municipality in order to qualify for future dedication to the municipality. Parking areas must be paved and graded for proper drainage as set forth in the HUD Minimum Property Standards. A link can be found at:

http://portal.hud.gov/hudportal/HUD?src=/program_offices/administration/hudclips/handbooks/hsgh/4910.1

10.08 Parking spaces shall be provided as per local zoning ordinance but in no case be less than one parking space per dwelling unit for family housing, and 0.75 spaces per unit for senior housing except for the following:

1. Supportive Living Facilities for the Frail Elderly (Illinois Department of Public Aid)- one (1) parking space shall be provided for each 10 units plus one (1) parking space for every two staff members and ten percent (10) of the total number of units for visitor parking or as per local ordinance, whichever is greater.

2. Single Room Occupancy (SRO): one (1) parking space shall be provided for each 10 units or as per local ordinance, whichever is greater.

3. Supportive Family Housing: one (1) parking space shall be provided for each 5 units or as per local ordinance, whichever is greater.

4. Transit Oriented Development: Reduction of parking requirement as allowed by local zoning codes meeting with distance to transit requirements.

10.09 Parking areas shall be designed to meet the minimum parking space and drive aisle requirements within the local zoning or building codes. The following minimum dimensions shall be provided if there are no local standards:

- Double loaded 90-degree parking areas shall be a minimum width of 60-feet
- Single loaded 90 degree parking areas shall have a minimum width of 42-feet.
- Intermediate and access aisles shall be a minimum of 24-feet in width for two-way traffic, and 12-feet in width for one-way traffic.

10.10 A minimum number of accessible parking and accessible van parking stalls shall be provided meeting with local and state accessibility code requirements. When accessible parking spaces are provided, one space in every 6, or fraction thereof, shall be van accessible.

**Exception:** Where parking is provided for all residents, one accessible parking space shall be provided for each accessible dwelling unit. Where parking is provided for only a portion of the residents, an accessible parking space shall be provided on request of the occupant of an accessible dwelling unit.

10.10.1 Each accessible parking space must be adjacent to an access aisle as allowed by the Illinois Accessibility Code, applicable federal and local codes, whichever is most restrictive, and all access aisles shall blend to a common level with an accessible route.

10.10.2 In multi-family developments, when covered parking is provided a minimum of two percent (2%) of the covered parking spaces shall be accessible. If garages are provided, the minimum dimensions shall be per applicable code and the door shall be 9’ wide. Covered parking shall be defined as either an indoor parking garage or an outside parking lot carport.

10.10.3 Accessible parking spaces and access aisles shall be designed so that cars and vans, when parked, cannot obstruct the required clear width of adjacent accessible routes. They shall not have a slope greater than 2% in all directions.

10.11 In single family developments with single car garages, the minimum garage dimension will be 11’ wide by 20’ deep with an 8’ wide door.

10.12 Concrete curbs at all access drives and parking lots must be provided. A single family driveway is not
considered a parking lot or an access drive and therefore does not require a curb. However, any parking lot provided at public use spaces in single family developments will require a curb per this requirement. If a site is developed within an existing neighborhood where curbs are not provided for the existing roads, new roadways shall be allowed to meet existing conditions, and shall be built per local municipality requirements.

10.13 Access for fire-fighting equipment must be provided in accordance with the requirements of the local authorities.

10.14 All sidewalks along the accessible route must be a minimum of 5-feet in width with the exception of service walks which may be 3-feet in width.

Exceptions:
1. A minimum 6-foot wide sidewalk is required when parking spaces abut sidewalks and the edge of the sidewalk becomes the wheel stop. If pre-cast concrete wheel stops are provided and set a minimum of 30-inches from the edge of the sidewalk to the centerline of the wheel stop, then a 5-foot wide sidewalk will be permitted.
2. Public sidewalks provided for multi-unit single family developments shall be designed to meet local municipality requirements for public sidewalks for neighborhoods.

Refuse collection stations must be on an accessible route and screened with permanent enclosures. Paved areas adjacent to the collection stations must be designed to provide adequate bearing for heavy garbage trucks.

11) Building Standards

Foundations:
11.01 The owner/developer must submit a soils report including a boring log. In projects composed of one building exceeding 2000 SF, there shall be a minimum of three borings within the building footprint and 2 borings along sidewalks and roadways. In projects with multiple buildings exceeding 2000 SF, there shall be a minimum of nine borings within the building footprints and evenly distributed throughout the project or as otherwise directed by the structural engineer. In addition for both single family and multi-family, on previously developed lots at a minimum one boring is required within the footprint of each former structure. Borings shall extend to a minimum of 15 feet below the natural grade. For high-rise buildings at least one boring shall extend down to 100’ below the natural grade or hardpan.

11.02 Wall and column support footings shall be constructed of cast-in-place concrete. They shall be reinforced to accommodate the design loads. Timber, steel grillage, or other material used for footings will not be permitted. Wall and column footings shall extend to the appropriate frost depth for the site, or bear on suitable soil meeting the specified soil bearing capacity identified by the soils report.

11.03 Cast-in-place concrete, precast concrete and masonry foundation walls will be permitted and shall be designed to meet the requirements of the local building code. Steel sheet piles or helical pier foundations shall be allowed, with Authority approval, prior to board submission. Wood foundation systems, rubble stone or any other similar materials used for foundation walls will not be permitted.

11.04 An under slab drainage system must be installed when the water table is 5-feet or less below the bottom of the floor slab to prevent hydrostatic pressure build-up from groundwater fluctuation.

Exterior Walls:
11.05 Exterior wall facings shall consist of 4-inch face brick, stone, concrete masonry units, aluminum siding, vinyl siding, metal lath and cement stucco, glass and aluminum curtain wall systems, prefinished metal panels, cementitious siding, treated engineered wood siding, insulated precast concrete decorative panels, wood siding or Authority approved equal.

11.06 Exterior Insulation and Finish Systems (EIFS) are permitted in limited areas as an exterior facing with the approval of the Authority only, and shall not be allowed as a primary building facing. EIFS shall not be allowed as a finish material to be placed over the face of exterior cladding on existing buildings.
11.07 Special attention shall be given to a review of the lintels and mortar joints when rehabilitating masonry structures. A detailed repair scheme must be incorporated in the plans and specifications including the clearly defined areas where lintel repair and tuckpointing work is to be performed.

Stairs:
11.08 Open risers are not permitted.
11.09 Outdoor stairs and their approaches shall be designed so that water will not accumulate on walking surfaces.
11.10 When stairs are installed along routes that are required to be accessible, there must be an alternative way to get between levels. If the alternative way is an elevator or lift, the stairs do not need to comply with Section 504 of ICC/ANSI A117.1-Latest Version. If the alternative way is a ramp, the stairs must comply with Section 405 of ICC/ANSI A117.1- Latest Version. When an accessible route consists of both a ramp and stairs, it is recommended they are located in close proximity so people who can use only one of the two (such as the ramp), need not travel an unreasonable additional distance.
11.11 Exterior fire escapes shall not be permitted in new construction projects but will be acceptable as a means of egress component in existing buildings only.

12) Dwelling Unit Standards

12.01 The following table indicates the Authority’s minimum acceptable dwelling unit size:

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Area (Inside dimensions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency (Studio) Unit not including SRO Unit (see below)</td>
<td>300 SF (New Construction) 250 SF (Rehabilitation)</td>
</tr>
<tr>
<td>Supportive Living Facility</td>
<td>300 SF (for one occupant) 450 SF (for two occupants)</td>
</tr>
<tr>
<td>One Bedroom Unit</td>
<td>525 SF (New Construction) 500 SF (Rehabilitation)</td>
</tr>
<tr>
<td>Two Bedrooms/One Bath Unit</td>
<td>700 SF</td>
</tr>
<tr>
<td>Two Bedrooms/One One-Half or Two Bath Unit</td>
<td>750 SF</td>
</tr>
<tr>
<td>Three Bedrooms/One Three-Quarters Bath Unit</td>
<td>950 SF</td>
</tr>
<tr>
<td>Four Bedrooms/Two Bath Unit</td>
<td>1100 SF</td>
</tr>
<tr>
<td>Five Bedrooms/Two Bath Unit</td>
<td>1250 SF</td>
</tr>
</tbody>
</table>

Single Room Occupancy (SRO) Unit:
1. A SRO unit shall contain not more than one habitable room consisting of not less than 180 square feet and not more than 250 square feet of floor area (for one occupant) / 400 square feet of floor area (for two occupants) for new construction projects and not less than 150 square feet for rehabilitation projects, excluding the floor areas for bathrooms, toilet rooms, laundries, pantries, foyers, corridors, storage spaces, stairways and closets.
2. Any SRO project must include both a private bathroom including a sink, toilet and bathing facilities and a kitchen within the unit

Exception: When financial assistance also includes the Illinois Department of Healthcare and Family Services, the SRO unit shall have a minimum of 300 SF for a single occupant unit and 450 SF for a two-occupant unit. This is required for both new construction and rehabilitation projects.
Room Sizes: Unit living rooms (excluding Efficiency, Studio, SLF units, or combined living areas) shall contain a minimum of 150 SF (120 SF for rehabilitation) and have a minimum dimension of 10-feet in any horizontal dimension. Units other than Efficiency or Studios must have bedrooms of at least 100 SF, not including closets, and a minimum dimension of 9-feet in any horizontal dimension.

12.02 The minimum ceiling height in all habitable rooms shall be 7-feet 6-inches. Soffits may be dropped to 7'-0" A.F.F. if soffit area does not exceed 20% of room area.

12.03 Carpet shall not be permitted as a floor finish in laundry areas, kitchens, and bathrooms.

12.04 Prefabricated shower and/or bathtubs units shall be specified and provided with factory installed integral reinforcing, cast into the unit for installation of grab bars at code compliant locations of the unit walls. When prefabricated units are installed in multi-unit apartments they must have a single layer of water resistant wall sheathing installed prior to the unit being placed behind the unit, along with a cover layer of sheathing installed over the unit wall flange.

Exception: The installation of grab bars at all water closets, bath tubs and shower units complying with ICC/ANSI A117.1 – Latest Version shall be required in dwelling unit bathrooms to be occupied by elderly, severely disabled people, and units required to be fully access.

13) Mechanical, Plumbing, Fire Protection and Electrical Systems

All HVAC, plumbing, Fire Protection and electrical floor and wall penetrations must be properly sealed to maintain both the proper fire rating as required by the applicable building code, and/or acoustic control of adjacent spaces.

Heating, ventilating, and air-conditioning systems:

13.01 All units shall be heated and air-conditioned. Design of the system shall be such to maintain a consistent temperature in all habitable spaces evenly throughout the day. Heating, ventilating, and air-conditioning systems shall be designed and installed according to the requirements of the local building code. If no building code is adopted within the jurisdiction the International Mechanical Code, 2015 edition shall apply. They shall also comply with the efficient utilization of energy in accordance with the 2015 edition of the International Energy Conservation Code with Illinois Amendments. Lastly, the United States Department of Energy REScheck or COMcheck compliance verification and code requirements must be submitted to the Authority for review.

13.02 The installation and approval of fuel gas distribution piping and equipment, fuel gas-fired appliances, and fuel gas–fired venting systems shall be in accordance with the 2015 edition of the International Fuel Gas Code or the local building code whichever is most stringent.

13.03 Any change orders submitted requiring changes to mechanical room design as a result of layouts not complying with code or equipment manufacturer clearance requirements will be determined to be errors and omissions, and subject to the requirements of Section 4. It is expected coordination of all equipment clearances is complete prior to submitting design documents for review.

Plumbing

13.04 The Illinois State Plumbing Code, the local plumbing code, and these standards shall govern all plumbing work performed on new construction and new work on the renovation, rehabilitation or preservation of existing buildings. Whenever there is a conflict in the requirements between the regulations, the more stringent requirement will prevail.

13.05 No Project shall be served by a well or septic system.

13.06 All plumbing work shall be performed only by Illinois licensed plumbers and apprentice plumbers under the direction of a licensed plumber.

13.07 All equipment used for heating water or storing hot water shall be provided, at the time of installation of such equipment, with an appropriate relief valve or valves to protect against excessive or unsafe temperature and/or pressure.
13.08 On renovation, rehabilitation or preservation projects, replacement of the lead pipe incoming water service shall be required.

13.09 Water distribution piping from the water meter throughout the building shall be “Type K” or ductile iron for below ground piping, and copper or PEX for above ground piping. CPVC or Polybutylene water distribution pipe shall not be permitted. PEX piping below grade shall be allowed to be installed following industry best practices) and code requirements.

13.10 Dielectric isolation shall be provided between ferrous and non-ferrous metals. Provide dielectric unions at points of connection of copper piping to ferrous piping and equipment or fittings.

Electrical

13.11 The National Electrical Code, the local electrical code, and these standards shall govern all electrical work performed on new construction and new work on the renovation, rehabilitation or preservation of existing buildings. Whenever there is a conflict in the requirements between the regulations, the more stringent requirement shall prevail.

13.12 The electric service to each dwelling unit shall be metered separately in all new construction projects. One central meter shall only be permitted with a letter of approval from the electric utility company.

13.13 The minimum electric service to a dwelling unit shall be 60-amperes. Appropriately sized and rated, existing electrical service may be allowed to remain for apartment unit rehabilitations. A load calculation for the each unit of the proposed design should be provided to ascertain if the service is properly sized for the project.

13.14 Copper wiring is required in all branch circuits and within all units. Aluminum and aluminum clad copper wiring is ONLY allowed in feeders 60 amps or larger terminating in disconnects and electrical panels with lugs that are rated and suitable for aluminum wiring. The line from the transformer to the meter is regulated by the National Electrical Code and/or the local utility company whichever is most stringent.

13.15 In existing buildings that have existing aluminum wiring, all switches and outlets rated 20-ampere or less directly connected to aluminum conductors must be marked CO/ALR.

13.16 Every dwelling unit in buildings serviced by natural gas shall be equipped with at least one approved carbon monoxide (CO) alarm meeting the installation and operational requirements of the Carbon Monoxide Alarm Detector Act (Public Act 094-0741) and the local municipal requirements, whichever is more restrictive. All CO alarms shall be hard wired in new construction with appropriate battery back-up. Rehabilitation project may utilize battery powered or plug in CO detectors if allowed by local Authority Having Jurisdiction.

13.17 Every dwelling unit shall be equipped with at least one approved smoke detector in accordance with the location and operation requirements of the Smoke Detector Act (Public Act 425 ILCS 60/) and local code requirements, whichever is more restrictive.

13.18 Exposed conduit is prohibited unless concealment of the conduit is not physically possible. Contact The Authority in the design stage for prior approval. If approved, the conduit or Wiremold must be painted to match the mounting surface.

Fire Protection Systems

13.19 Fire protection systems, if required by code, must be properly priced to include all equipment and accessories required for a fully operational system for the building. This value shall be represented on the CSS submitted for review prior to Initial Closing of the project.

13.20 The price of the system included on the CSS must meet all applicable code requirements. Change orders requiring additional expenses related to the fire protection system, if as a result of code compliance after Initial Closing, will be classified as errors and omissions.

13.21 Exposed piping of fire protection systems is prohibited unless concealment is not physically possible. Contact the Authority in the design stage for prior approval. If approved, the pipe must be painted to match the mounting surface.
14) Energy Efficiency and Green Criteria

The energy efficiency and green criteria below apply to all Authority financed projects.


This section outlines some of the energy code compliance requirements based upon the prescriptive option of the Illinois 2015 IECC for single family and low rise residential buildings, 3 stories or less. The full code, information on the performance option and the provisions for buildings 4 stories and over can be found at: www.ildceo.net/energycode or www.iccsafe.org.

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Fenestration U-Factor</th>
<th>Skylight U-Factor</th>
<th>Glazing Fenestration Factor</th>
<th>Ceiling R-Value</th>
<th>Wood Frame Wall R-Value</th>
<th>Mass Wall R-Value</th>
<th>Floor R-Value</th>
<th>Basement Wall R-Value</th>
<th>Slab R-Value And Depth</th>
<th>Crawl Space Wall R-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone 5</td>
<td>0.32</td>
<td>0.55</td>
<td>NR</td>
<td>49</td>
<td>20 or 13 + 5</td>
<td>13/17</td>
<td>30</td>
<td>15/19</td>
<td>10, 2 ft.</td>
<td>15/19</td>
</tr>
<tr>
<td>Zone 4</td>
<td>0.35</td>
<td>0.55</td>
<td>0.40</td>
<td>49</td>
<td>20 or 13 + 5</td>
<td>8/13</td>
<td>19</td>
<td>10/13</td>
<td>10, 2 ft.</td>
<td>10/13</td>
</tr>
</tbody>
</table>

NR indicates No Requirements

a. Air Leakage - Blower Door Test (IECC Section R402.4)

The building is required to be properly sealed, tested and verified as having an air leakage rate no higher than allowed by state amendments to the IECC.

The Authority shall allow all exceptions identified in Sections R503.1 or C503.1 (for defined buildings) of the IECC for renovations projects. The listed exemptions are based upon individual components. Meeting a single exemption does not exempt the remaining components, or an entire project, from testing.

Tests shall be provided in all units of projects containing buildings with 4 units per building or less, and in each unit configuration type on every floor of any multi-unit apartment building containing more than 4 units.

b. Documentation

1. Maintenance instructions shall be furnished for equipment and systems as applicable as defined by the IECC.

2. A permanent certificate listing all energy efficiency material and equipment values as required by the IECC shall be posted on or in the electrical panel.

3. Blower door test results shall be provided to the Authority for review prior to approval of the final closing pay out.

Duct leakage test results, where applicable, shall be provided to the Authority for review prior to approval of the final closing pay request.

Additional Mandatory Design Requirements above the 2015 Illinois Energy Conservation Code

All projects seeking funding from the Authority must comply with the following criteria. If projects are seeking 3rd party certification from Enterprise Green Communities, U.S. Green Building Councils LEED certification or ICC 700 – 2012 National Green Building Bronze Level or higher certification, the specific
### 3\textsuperscript{rd} party certification requirements will supersede the mandatory requirement outlined below.

<table>
<thead>
<tr>
<th><strong>Authority Mandatory Requirements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Requirement</strong></td>
</tr>
</tbody>
</table>
| Site Improvements | Only if providing landscaping.  
**Landscaping:** Provide a tree or plant list certified by the architect or landscape architect that the selection of new trees and plants are at least 50 percent native and/or adaptive species, 100 percent appropriate to the site’s soils and microclimate and do not include invasive species. The minimum cost for the landscaping shall be 2\% of the hard construction cost of the project. (Landscaping hard cost include: vegetation, hardscape, fencing, irrigation, lighting and furnishings.)  
Exception: Authority approval will be required for the amount of landscaping provided for projects where the open land for landscaping is limited. |
| Water Conserving Fixtures | **(New Construction Only):** Indicate on the drawings that water-conserving fixtures with the following minimum specifications will be used: toilets-1.28 GPF, urinals – 0.5 GPF, showerheads - 2.0 GPM, kitchen faucets - 2.0 GPM, bathroom faucets – 1.5 GPM  
**(Rehab Only):** Install water-conserving fixtures with the following minimum specifications wherever and whenever they are replaced: toilets-1.28 GPF, urinals – 0.5 GPF, showerheads - 2.0 GPM, kitchen faucets - 2.0 GPM, bathroom faucets – 1.5 GPM |
| Energy Efficiency | **Energy Star Appliances:** Install Energy Star clothes washers, dishwashers, range hoods, refrigerators, bathroom exhaust and electric dryers. |
| Operation and Maintenance | **Building Maintenance Manual:** Provide a manual that includes the following: a routine maintenance plan, operations and guidance for all appliances, HVAC operation, water-system turnoffs, lighting equipment, paving materials, landscaping, green cleaning products and schedule, pest control, and other systems that are part of each occupancy unit; and an occupancy turnover plan  
**Warranty Matrix**  
*Provide a matrix outlining the warranty period for all items and systems covered* |

### 14.03 New technologies

New technologies (items such as: alternative building systems, new design components and/or materials, etc.) for the purposes of decreasing operating costs must be proven and not experimental. Any new technology incorporated for energy savings will need to be justified through a cost benefit analysis. Applicable new technologies shall include any proposed efficiencies in excess of those indicated in the 2015 International Energy Conservation Code/ASHRE Standard 90.1-2010, the Authority Green Criteria or beyond those typically employed in similar housing. New technologies shall have a payback period within 18 years. Simple payback analysis shall at a minimum be utilized, or: the initial cost of the technology (or differential cost over its equivalent) divided by the annual energy savings due to the new technology. The payback period shall be calculated using the current Authority underwriting forecasting assumptions and shall incorporate maintenance costs, adjustments for any needed life cycle repairs and/or reserves.
15) Community Facilities

15.01 Where a community room is provided it shall have a kitchen that at a minimum has a sink, range/oven, refrigerator, base and overhead storage and complies with the requirements of Section 8.00 “Accessibility Standards” of this Standard. In municipalities requiring a commercial range hood above any community room range, the range/oven may be omitted, but a letter confirming this requirement as part of the municipal code must be provided to the Authority for review. Other than for SRO occupancies, a microwave is not a substitute for a range/oven.

15.02 Common-use laundry facilities, if provided, should be in accordance with the Illinois Plumbing Code and shall be on an accessible route.

Five percent (5%) of the total automatic washing machines and clothes dryers in laundry rooms, or a minimum of one (1) each, shall be front loading.

When common-use laundry facilities are not provided on-site, automatic washers and clothes dryers must be provided within all the dwelling units by the owner/developer. Utility hook ups alone are not considered compliant with this requirement, except as per Section 15.03 below.

15.03 When common-use laundry facilities are provided on-site to satisfy the requirements of section 15.02 above, washer and dryer hook-ups may be provided within individual dwelling units without the need to supply the automatic washer and clothes dryer.

15.04 All projects must include bulk storage areas within closets in the apartment unit or in a common tenant storage room. If provided within a closet, the provided volume must be free and clear from the floor to the ceiling without any shelving. The total volume provided within all bulk storage areas shall be as follows:

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficiency/ Single Room Occupancy SRO</td>
<td>32 cubic feet</td>
</tr>
<tr>
<td>1-bedroom unit</td>
<td>72 cubic feet</td>
</tr>
<tr>
<td>2-bedroom unit</td>
<td>128 cubic feet</td>
</tr>
<tr>
<td>3-bedroom unit</td>
<td>200 cubic feet</td>
</tr>
<tr>
<td>4-bedroom unit</td>
<td>288 cubic feet</td>
</tr>
</tbody>
</table>

15.05 If provided, bicycle storage facilities shall be located in exterior areas with bicycle racks, and/or in a separate room in the building or in a separate storage building. Exterior bike racks, if used, must be anchored and have the requisite space for a parked bike which will not reduce the required width of an accessible path or parking stall.

16) Management, Office and Maintenance Spaces

16.01 If the size of the project warrants a separate common space for the management staff and rental office, it shall include an office large enough to accommodate a secretarial space, a waiting/reception area, at least one accessible public restroom, and a storage/coat closet. These areas must be located on an accessible route from the point of arrival and accessible to persons with disabilities. These areas may be in separate buildings, such as a clubhouse, or on the ground floor to allow for maximum site and building surveillance.

16.02 When a separate workroom or repair shop having vehicular access is provided, it shall be appropriately sized and include storage facilities, a utility sink, toilet facilities, and work bench.

16.03 Refuse collection and compactor rooms shall be mechanically ventilated and be in a room completely separated from the remainder of the building with walls and ceiling meeting code defined fire separation requirements. Where the room is serviced by a trash chute, code required and maintenance sprinkler
heads shall be provided. All openings to trash rooms shall meet code requirements in terms of fire rating and hardware. A concrete slab shall directly link access from this area to the exterior pick up point. Floor drains and hose bibs shall be provided at these trash termination locations.

16.04 Refuse and laundry chutes shall not be used for any other purpose. The chutes shall have a fire resistive rating of not less than what is required by the applicable building code. An automatic sprinkler system shall be installed as required by code. Chutes extending three or more floors shall have additional sprinkler heads installed within the chute on alternate floors and be accessible for servicing. Trash chute access doors shall have lever operating device and closers if not automatically actuated.

16.05 Retail stores and other commercial space shall not be included as part of the Authority financing, and must be tracked on a separate contractor’s sworn statement provided as part of each draw request.

16.06 Office facilities within the Project are substantially restricted by various rules and regulations. If office space is contemplated, it must be for the exclusive use of the tenants or for the operation of the building. The sponsor shall discuss the plans with Authority’s staff at the earliest opportunity.

17) Recreational Facilities

17.01 Indoor recreational facilities, if provided, shall be located within the Project and shall comply with the following minimum size requirements:

<table>
<thead>
<tr>
<th>Dwelling Type</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-100 dwelling units</td>
<td>600 square feet</td>
</tr>
<tr>
<td>101-300 dwelling units</td>
<td>800 square feet</td>
</tr>
<tr>
<td>301-500 dwelling units</td>
<td>1200 square feet</td>
</tr>
</tbody>
</table>

17.02 Outdoor recreation facilities, if provided must be on an accessible route. Swimming pools and wading pools must meet the Minimum Sanitary Regulations for the Design and Operation of Swimming Pools and Bathing Beaches by the Department of Public Health, State of Illinois, any local Public Health Department regulations and the Americans with Disabilities Act.

17.03 Play areas for younger children shall be centrally located and surrounded by dwelling units. An accessible route must be provided to the play area. The ground surface of the play area shall be stable, firm, and slip resistant. Where play components are provided, they shall be ADA approved.

18) Supportive Living Facilities (SLF)

An SLF is a residential setting in Illinois that provides or coordinates flexible personal care services, 24 hour supervision and assistance (scheduled and unscheduled), activities, and health related services with a service program and physical environment designed to minimize the need for residents to move within or from the setting to accommodate changing needs and preferences; has an organizational mission, service programs and a physical environment designed to maximize residents’ dignity, autonomy, privacy and independence; and encourages family and community involvement.

Building Construction:

18.01 All SLF developments must be approved by the State of Illinois Department of Healthcare and Family Services. Written approval from DHFS must be provided to the Authority at the time the application is submitted. The SLF’s architectural plans shall conform to Title 89, Social Services, Chapter 1: Department of Healthcare and Family Services, Subchapter d: Medical Programs, Part 146.210 Structural Requirements, An SLF’s architectural plans shall conform to the current State building codes for the respective building type, local Fire and Life Safety Standards for health care occupancy or the 2000
National Fire Protection Association Life Safety Code (NFPA) 101, Chapter 32, Residential Board and Care Occupancies, National Fire Protection Association, 1 Batterymarch Park, Quincy MA 02269 (March 11, 2003, no later amendments or editions included) or local building codes if more stringent.

18.02 Each SLF shall meet accessibility standards as related to the Americans with Disabilities Act of 1990, the Illinois Accessibility Code, Section 504 of the Rehabilitation Act of 1973 (if applicable), the Fair Housing Act and the local building code.

19) Factory Built Homes

This section Factory Built Homes refers to both manufactured and modular housing. The proposed manufacturer must have at least five-years of experience in manufacturing similar housing units. In addition, the installer/general contractor must have prior experience in setting and finishing factory built housing. Factory built housing units for multi-family applications will only be allowed for up to one-story in height unless approved by the Authority prior to having the design coordinated by the fabricator. Please contact Authority architectural staff for review of potential fabricators prior to commencing work. Factory built housing units for single-family, detached units will be allowed for up to two-stories in height. The design, construction and installation of the Factory Built Homes must incorporate all applicable wind, live, dead, snow and seismic design loads including geotechnical characteristics based on the specific geographical site conditions.

As applicable, all factory built housing must comply with the requirements of Title 24, Part 3280 Manufactured Home Construction and Safety Standards, Housing and Urban Development, the Authority Standards including the following modifications. Factory built housing must also comply with the Illinois Department of Public Health requirements including: Approved Manufacturers, Regulations for Factory Built Structures in Illinois, and Guidelines for Installing Manufactured Homes in Illinois. The last link, “Guidelines for Installing,” is only intended to be used for installations where the manufacturer’s installation instructions are not available.

19.01 The minimum ceiling height in all habitable rooms shall be 7-feet 6-inches.

19.02 All exterior doors shall have a 32-inch clear width measured from the face of the door to the opposing stop when the door is open at 90-degrees and a minimum height of 80-inches.

19.03 All interior doors shall have a nominal 32-inch clear width measured from the face of the door to the opposing stop when the door is open at 90-degrees and a minimum height of 80-inches.

19.04 Living rooms shall contain a minimum of 150 SF and a minimum dimension of 10-feet in any horizontal dimension. All other habitable rooms shall have a minimum size of 100 SF not including closets and a minimum dimension of 9-feet in any horizontal dimension.

19.05 Hallways shall have a minimum horizontal dimension of 36 inches measured from the interior finished surface to the interior finished surface of the opposite wall.

19.06 Carbon monoxide detectors shall comply with the State of Illinois Carbon Monoxide Detector Act and shall be hardwired. Smoke detectors shall be hardwired with battery back-up.

19.07 All manufactured housing must comply with the energy conservation requirements of the International Energy Conservation Code, latest edition, and the energy conservation measures outlined in these standards.

19.08 Water distribution piping from the water meter throughout the building shall be “Type K” for below ground piping, and “Type L” copper or PEX for above ground piping. CPVC and Polybutylene water distribution pipe shall not be permitted. PEX piping shall be allowed to be installed below floor slabs as allowed by code and industry best practices.

19.09 Water distribution piping from the water meter throughout the building shall be “Type K” for below ground piping, and “Type L” copper or PEX for above ground piping. CPVC and Polybutylene water distribution pipe shall not be permitted. PEX piping shall be allowed to be installed below floor slabs as allowed by code and industry best practices.
19.10 All plumbing shall comply with the State of Illinois Plumbing Code and the HUD regulations. If there is a conflict, the more stringent requirement will prevail.

19.11 Copper wiring is required in all branch circuits and within all units. Aluminum and aluminum clad copper wiring is ONLY allowed in feeders 60 amps or larger terminating in disconnects and electrical panels with lugs that are rated and suitable for aluminum wiring. The line from the transformer to the meter is regulated by the National Electrical Code and/or the local utility company whichever is most stringent.

19.12 The minimum electric service to the dwelling unit shall be 60-amperes.
20) General Contractor Certification

ADDENDUM #1

GENERAL CONTRACTOR CERTIFICATION

The General Contractor (GC) needs to comply with the following minimum requirements and provide a written response as indicated below:

Resume of the GC’s experience that demonstrates a history of having performed similar work and type required for this development (number of projects, number of units, location of projects, contract value and capacity of the involvement).

The developments proposed project manager and site superintendent each has at least 5-years’ experience with multifamily residential construction/rehabilitation.

A statement identifying all identities of interest with the project and subcontractors/vendors for this development. Provide the names of any other construction companies in which the GC had an affiliation.

A statement indicating the GC has not failed to construct or rehabilitate a project. That the GC has never started a project which was completed by another GC. That the GC was not a party to any project where a bonding, insurance or surety company claim was instituted against the GC due to lack of performance.

A statement that the GC has no legal or creditor related concerns. Specifically indicating that the GC entity, in addition to the individual members (owners, partners, officer, etc.) do not have any pending lawsuits, pending unresolved claims and has not declared bankruptcy within the past three years.

A statement that the controlling persons (owners, partners, officer, etc.) have not been convicted, are not in custody, are not under parole or under any other non-custodial supervision resulting from conviction in a court of any jurisdiction for the commission of a felony or criminal offense of whatever degree.

A statement that the controlling person (owners, partners, officer, etc.) is not currently under indictment or has not been changed under any State or Federal laws with the crime of bribery.

A statement that the GC is not debarred from working with the Federal government.

A statement that the GC has no past projects which were cited by HUD, the local or state agency for any wage/labor compliance issues.

If applicable, evidence of the firms status as a Minority Business Enterprise (MBE) /Women Business Enterprise (WBE).

The GC is capable of obtaining either: (a) Payment and performance bond by a company approved by the Authority equal to one hundred (100%) percent of the cost of construction of the development or (b) Unconditional, irrevocable commercial letter of credit, issued by a financial institution approved by the Authority, in an amount equal to twenty-five (25%) of the cost of construction of the development.

The GC must be able to provide evidence of the following insurance coverage amounts: Commercial General Liability Insurance in the minimum amounts of $1,000,000 for each occurrence and $2,000,000 in the aggregate. Evidence of Automobile Liability Insurance, Statutory Worker’s Compensation and Excess/Umbrella Liability Insurance in the amount of $5,000,000. The Owner and Illinois Housing Development Authority must be listed as Additional Insured on the Liability Insurance.

I, __________________________ am duly authorized to execute this document and as the General Contractor certify that the statements in this certification are true, correct and complete. I understand that any misrepresentation, false information, or omission may result in disqualification of this and future projects.
In addition to the Standards noted above, for all projects having Authority provided HOME funding the following provisions will be applicable as per The Department of Housing and Urban Development, 24 CFR Parts 91 and 92, HOME Investment Partnerships Program: Improving Performance and Accountability; Updating Property Standards, Effective August 23, 2013.

**Article I.§92.251 Property standards.**

(a) New construction projects. (1) State and local codes, ordinances, and zoning requirements. Housing that is newly constructed with HOME funds must meet all applicable State and local codes, ordinances, and zoning requirements. HOME-assisted new construction projects must meet State or local residential and building codes, as applicable or, in the absence of a State or local building code, the International Residential Code or International Building Code (as applicable to the type of housing) of the International Code Council. The housing must meet the applicable requirements upon project completion.

(2) HUD requirements. All new construction projects must also meet the requirements described in paragraphs (a)(2)(i) through (v) of this section:

(i) Accessibility. The housing must meet the accessibility requirements of 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. Covered multifamily dwellings, as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619).

(ii) [Reserved]

(iii) Disaster mitigation. Where relevant, the housing must be constructed to mitigate the impact of potential disasters (e.g., earthquakes, hurricanes, flooding, and wildfires), in accordance with State and local codes, ordinances, or other State and local requirements, or such other requirements as HUD may establish.

(iv) Written cost estimates, construction contracts and construction documents. The Authority (or its sub recipient) will ensure the construction contract(s) and construction documents describe the work to be undertaken in adequate detail so that inspections can be conducted. The Authority (or its sub recipient) will review and approve written cost estimates for construction and determine that costs are reasonable.

(v) Construction progress inspections. The Authority (or its sub recipient) will conduct progress and final inspections of construction to ensure that work is done in accordance with the applicable codes, the construction contract, and construction documents.

(b) Rehabilitation projects. All rehabilitation that is performed using HOME funds must meet the requirements of this paragraph (b).

(1) Rehabilitation standards. The Authority has established rehabilitation standards for all HOME-assisted housing rehabilitation activities that set forth the requirements that the housing must meet upon project completion (Addendum #3). The Authority’s (or its sub recipient) description of its standards must be in sufficient detail to determine the required rehabilitation work including methods and materials. The standards may refer to applicable codes or they may establish requirements that exceed the minimum requirements of the codes. The rehabilitation standards must address each of the following:
(i) Health and safety. Life-threatening deficiencies must be identified as per the UPCS inspection and if present must be addressed immediately if the housing is occupied.

(ii) Major systems. Major systems are: structural support; roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning. For multifamily housing projects, a capital needs assessment shall be used to determine the remaining useful life of major systems. For rental housing, if the remaining useful life of one or more major system is less than the applicable period of affordability, the Authority will ensure that a replacement reserve is established either through capitalization from an eligible fund source, and/or that monthly payments are made to the reserves that are adequate to repair or replace the systems as needed. For homeownership housing, upon project completion, each of the major systems shall have a remaining useful life for a minimum of 5 years or for such longer period specified by the Authority, or the major systems must be rehabilitated or replaced as part of the rehabilitation work.

(iii) Lead-based paint. All applicable housing will meet the lead-based paint requirements at 24 CFR part 35.

(iv) Accessibility. All applicable housing will meet the accessibility requirements in 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. Covered multifamily dwellings, as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619). Rehabilitation may include improvements that are not required by regulation or statute that permit use by a person with disabilities.

(v) [Reserve]

(vi) Disaster mitigation. Where relevant, the housing to be improved will mitigate the impact of potential disasters (e.g., earthquake, hurricanes, flooding, and wildfires) in accordance with State and local codes, ordinances, and requirements.

(vii) State and local codes, ordinances, and zoning requirements. The rehabilitated portion of the housing shall meet all applicable State and local codes, ordinances, and requirements or, in the absence of a State or local building code, the International Existing Building Code of the International Code Council.

(viii) Uniform Physical Condition Standards. Upon completion, the HOME-assisted project and units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. HUD will establish the minimum deficiencies that must be corrected based on inspectable items and inspected areas from HUD-prescribed physical inspection procedures (Uniform Physical Conditions Standards) pursuant to 24 CFR 5.705.

(ix) Capital Needs Assessments. For multifamily rental housing projects of 26 or more total units, the Authority will determine all work that will be performed in the rehabilitation of the housing and the long-term physical needs of the project through a capital needs assessment (a.k.a. physical needs assessment) of the project.

(2) Construction documents and cost estimates. The Authority (or its sub recipient) will ensure that the work to be undertaken will meet the rehabilitation standards. The construction documents (i.e., written scope of work to be performed) must be in sufficient detail to establish the basis for a uniform inspection of the housing to determine compliance with the standards. The Authority (or its sub recipient) will review and approve a written cost estimate for rehabilitation after determining that costs are reasonable.

(3) Frequency of inspections. The Authority (its sub recipients or third parties) will conduct an initial property inspection to identify the deficiencies that must be addressed including progress and final inspections to determine that work was done in accordance with work write-ups.
(c) Acquisition of standard housing. (1) Existing housing that is acquired with HOME assistance for rental housing, and that was newly constructed or rehabilitated less than 12 months before the date of commitment of HOME funds, must meet the property standards of paragraph (a) or paragraph (b) of this section, as applicable, of this section for new construction and rehabilitation projects. The Authority (or its sub recipient) must document this compliance based upon a review of approved building plans and Certificates of Occupancy, and an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance.

(2) All other existing housing that is acquired with HOME assistance for rental housing must meet the rehabilitation property standards requirements of paragraph (b) of this section. The participating jurisdiction (or its sub recipient) must document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance. If the property does not meet these standards, HOME funds cannot be used to acquire the property unless it is rehabilitated to meet the standards of paragraph (b) of this section.

(3) Existing housing that is acquired for homeownership (e.g., down payment assistance) must be decent, safe, sanitary, and in good repair. The participating jurisdiction (or its sub recipient) must establish standards to determine that the housing is decent, safe, sanitary, and in good repair. At minimum, the standards must provide that the housing meets all applicable State and local housing quality standards and code requirements and the housing does not contain the specific deficiencies proscribed by HUD based on the applicable inspectable items and inspected areas in HUD-prescribed physical inspection procedures (Uniform Physical Condition Standards) issued pursuant to 24 CFR 5.705. The participating jurisdiction (or its sub recipient) must inspect the housing and document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HOME assistance. If the housing does not meet these standards, the housing must be rehabilitated to meet the standards of this paragraph (c) (3) or it cannot be acquired with HOME funds.

(d) Occupied housing by tenants receiving HOME tenant-based rental assistance. All housing occupied by tenants receiving HOME tenant-based rental assistance must meet the standards in 24 CFR 982.401, or the successor requirements as established by HUD.

(e) Manufactured housing. Construction of all manufactured housing including manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must meet the Manufactured Home Construction and Safety Standards codified at 24 CFR part 3280. These standards preempt State and local codes which are not identical to the federal standards for the new construction of manufactured housing. Participating jurisdictions providing HOME funds to assist manufactured housing units must comply with applicable State and local laws or codes. In the absence of such laws or codes, the installation must comply with the manufacturer’s written instructions for installation of manufactured housing units. All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must be on a permanent foundation that meets the requirements for foundation systems as set forth in 24 CFR 203.43f(c)(i). All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must, at the time of project completion, be connected to permanent utility hook-ups and be located on land that is owned by the manufactured housing unit owner or land for which the manufactured housing owner has a lease for a period at least equal to the applicable period of affordability. In HOME-funded rehabilitation of existing manufactured housing the foundation and anchoring must meet all applicable State and local codes, ordinances, and requirements or in the absence of local or state codes, the Model Manufactured Home Installation Standards at 24 CFR part 3285. Manufactured housing that is rehabilitated using HOME funds must meet the property standards requirements in paragraph (b) of this section, as applicable. The Authority (or its sub recipient) will document this compliance in accordance with inspection procedures that the participating jurisdiction has established pursuant to §92.251, as applicable.

Article II.§92.352 Environmental review.

(a) General. The environmental effects of each activity carried out with HOME funds must be assessed in accordance with the provisions of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321) and the related authorities listed in HUD’s implementing regulations at 24 CFR parts 50 and 58. The applicability of the

42
provisions of 24 CFR part 50 or part 58 is based on the HOME project (new construction, rehabilitation, acquisition) or activity (tenant-based rental assistance) as a whole, not on the type of the cost paid with HOME funds.

(b) Responsibility for review. (1) The jurisdiction (e.g., the participating jurisdiction or State recipient) or insular area must assume responsibility for environmental review, decision making, and action for each activity that it carries out with HOME funds, in accordance with the requirements imposed on a recipient under 24 CFR part 58. No funds may be committed to a HOME activity or project before the completion of the environmental review and approval of the request for release of funds and related certification, except as authorized by 24 CFR part 58.

(2) A State participating jurisdiction must also assume responsibility for approval of requests for release of HOME funds submitted by State recipients.

(3) HUD will perform the environmental review, in accordance with 24 CFR part 50, for a competitively awarded application for HOME funds submitted to HUD by an entity that is not a jurisdiction.

[61 FR 48750, Sept. 16, 1996, as amended at 78 FR 44678, July 24, 2013]

Article III.§92.354   Labor.

(1) Every contract for the construction (rehabilitation or new construction) of housing that includes 12 or more units assisted with HOME funds must contain a provision requiring the payment of not less than the wages prevailing in the locality, as predetermined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141), to all laborers and mechanics employed in the development of any part of the housing. Such contracts must also be subject to the overtime provisions, as applicable, of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701).

(2) The contract for construction must contain these wage provisions if HOME funds are used for any project costs in §92.206, including construction or nonconstruction costs, of housing with 12 or more HOME-assisted units. When HOME funds are only used to assist homebuyers to acquire single-family housing, and not for any other project costs, the wage provisions apply to the construction of the housing if there is a written agreement with the owner or developer of the housing that HOME funds will be used to assist homebuyers to buy the housing and the construction contract covers 12 or more housing units to be purchased with HOME assistance. The wage provisions apply to any construction contract that includes a total of 12 or more HOME-assisted units, whether one or more than one project is covered by the construction contract. Once they are determined to be applicable, the wage provisions must be contained in the construction contract so as to cover all laborers and mechanics employed in the development of the entire project, including portions other than the assisted units. Arranging multiple construction contracts within a single project for the purpose of avoiding the wage provisions is not permitted.

(3) Participating jurisdictions (or their sub recipients), contractors, subcontractors, and other participants must comply with regulations issued under these acts and with other Federal laws and regulations pertaining to labor standards, as applicable. Participating jurisdictions (or their sub recipients) shall be responsible for ensuring compliance by contractors and subcontractors with labor standards described in this section. In accordance with procedures specified by HUD, participating jurisdictions shall:

(i) Ensure that bid and contract documents contain required labor standards provisions and the appropriate Department of Labor wage determinations;

(ii) Conduct on-site inspections and employee interviews;

(iii) Collect and review certified weekly payroll reports;
(iv) Correct all labor standards violations promptly;

(v) Maintain documentation of administrative and enforcement activities; and

(vi) Require certification as to compliance with the provisions of this section before making any payment under such contracts.

(b) Volunteers. The prevailing wage provisions of paragraph (a) of this section do not apply to an individual who receives no compensation or is paid expenses, reasonable benefits, or a nominal fee to perform the services for which the individual volunteered and who is not otherwise employed at any time in the construction work. See 24 CFR part 70.

(c) Sweat equity. The prevailing wage provisions of paragraph (a) of this section do not apply to members of an eligible family who provide labor in exchange for acquisition of a property for homeownership or provide labor in lieu of, or as a supplement to, rent payments.

[61 FR 48750, Sept. 16, 1996, as amended at 78 FR 44678, July 24, 2013]

Article IV.§92.355 Lead-based paint.

Housing assisted with HOME funds is subject to the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), the Residential Lead-Based Paint Hazard Reduction Act of 1992 (42 U.S.C. 4851-4856), and implementing regulations at part 35, subparts A, B, J, K, M and R of this title.

[64 FR 50224, Sept. 15, 1999]
22) HOME Rehabilitation Standards

ADDENDUM #3

HOME REHABILITATION STANDARDS

In addition to the current Authority’s “Standards for Architectural Planning and Construction” and the “HOME Rehabilitation and Construction Guidelines” the following Rehabilitation Standards (Standards) shall be included when financed with Authority provided HOME funds. These Standards shall include the “Property Standards” as noted above to be part of the Rehabilitation Standards, additional clarification is provided below:

These Standards are hereby incorporated into the scope of work, the sub-recipient, owner, general contractor and Architect shall ensure compliance with the applicable HOME provisions as noted. The Standards represent the minimum acceptable levels for construction completed through the rehabilitation and is the basis for a uniform inspection of the rehabilitated housing.

The project shall obtain a HUD Uniform Physical Condition Standards (UPCS) inspection (using the most current format) which shall identify all Observable Deficiencies and Health and Safety Concerns. The scope of work shall address all noted deficiencies and life threatening concerns so that at the completion of the rehabilitation the noted deficiencies and concerns have been cured.

Please visit the HUD Real Estate Assessment Center for information and documents to complete the UPCS inspections. HUD can be accessed at the following underlined hyperlinks: HUD Physical Inspection Training Materials and Documents and Physical Inspection Training Materials the UPCS Comprehensive ListingInspectable Area form is available in Excel. In addition, the HOME Project Checklist (Addendum #4) is recommended to insure all applicable items are addressed.

If any Health and Safety Concern is identified as a Life Threatening Concern it needs to be addressed immediately. Life threatening deficiencies such as the potential for electrical shock, structural failure, carbon monoxide poisoning or noxious fumes, fire safety concerns, etc. needs to be addressed immediately if housing is occupied.

Major Systems (as noted above) must be inspected to determine the condition and if it warrants replacement or repair. The Life Expectancy of Housing Components (Addendum #5) provides estimates of the effective life of the various building components. In the event where a Major System component is in satisfactory condition but has a remaining contributory life of less than the affordability period for multifamily/rental projects, or 5 years or less for single family units

In this instance these items need to be completed in the scope of work or if for rental housing an appropriately determined replacement reserve needs to be funded so as to address the repair or replacement of the component when it becomes due. The determination of the reserve amounts will be ascertained on a case by case basis and by using the following formula.

\[
\text{Cost of repair at time of replacement ÷ Remaining useful life estimate (years) of component = Annual reserve amount.}
\]

In the event the project does not include approved building plans and specifications, the scope shall provide adequate description of the materials including quantity and cost. All materials shall be new and free from defect. They shall be at a minimum “construction” or ‘builder” grade quality. The materials shall be installed as per the manufacturer, applicable code or trade standard. Specific methods, techniques or sequential procedures shall be included when required. Descriptions should also contain manufacturer cut sheets when available. Materials and methods should be in adequate detail so there is no confusion between owner and general contractor, that the
Authority or sub recipient inspector know exactly what is being constructed and to eliminate the need for change orders due to lack of specification.
23) HOME Project Checklist

ADDENDUM #4

HOME PROJECT CHECKLIST

New Construction
- Project meets State and local codes, ordinances, and zoning requirements
- Accessibility
- Disaster mitigation
- Written cost estimates, construction contracts and construction documents
- Construction progress inspections

Rehabilitation
- Rehabilitation standards
- Health and safety
- Major systems
- Lead-based paint
- Inspections
- Accessibility
- Disaster mitigation
- State and local codes, ordinances, and zoning requirements
- Uniform Physical Condition Standards
- Construction documents and cost estimates
- Frequency of inspections
- Acquisition of standard housing

Misc
- Occupied housing by tenants receiving HOME tenant-based rental assistance
- Manufactured housing
- 90 day inspection before HOME commitment or no less than 30 days for newly constructed/rehabilitated

Environmental Review
- General
- Responsibility for review

Labor
- General- Davis Bacon for 12 or more HOME assisted units in contract (IHDA Construction Rider)
- Volunteers
- Sweat equity

Lead-Based Paint
# 24) Life Expectancy of Housing Components

**ADDENDUM #5**

## LIFE EXPECTANCY OF HOUSING COMPONENTS

Life in Years

### Appliances

- Compactors 10, Dishwashers 10, Dryers 14, Disposal 10, Freezers, compact 12, Freezers, standard 16, Microwave ovens 11, Electric ranges 17, Gas ranges 19, Gas ovens 14, Refrigerators, compact 14, Refrigerators, standard 17, Washers, automatic and compact 13, Exhaust fans 20

- Wood/butcher block 20+
- Granite 20+
- Solid Surface 20+

### Bathrooms

- Cast iron bathtubs 50
- Fiberglass bathtub and showers 10–15, Shower doors, average quality 25, Toilets 50

### Cabinetry

- Kitchen cabinets 15–20
- Medicine cabinets and bath vanities 20

### Closet Systems

- Closet shelves Lifetime

### Countertops

- Laminate 10–15
- Ceramic tile, high-grade installation Lifetime
- Quartz Lifetime

### Doors

- Screen 25–50
- Interior, hollow core Less than 30
- Interior, solid core 30-lifetime
- Exterior, protected overhang 80–100
- Exterior, unprotected and exposed 25–30
- Folding 5
- Garage doors 20–50
- Garage door opener 10

### Electrical

- Copper wiring, copper plated, 100+copper clad aluminum, and bare copper
- Armored cable (BX) Lifetime
- Conduit Lifetime

### Finishes Used for Waterproofing

- Paint, plaster, and stucco 3–5
- Sealer, silicone, and waxes 1–5
Floors
Oak or pine Lifetime
Slate flagstone Lifetime
Vinyl sheet or tile 20–30
Terrazzo Lifetime
Carpentry 11 (depends on installation, amount of traffic, and quality of carpet)
Marble Lifetime (depends on installation, thickness of marble, and amount of traffic)

Footings and Foundation
Poured footings and foundations 200
Concrete block 100
Waterproofing, bituminous coating 10
Termite proofing (may have shorter life in damp climates)

Heating Ventilation and Air Conditioning
Central air conditioning unit 15 (newer units should last longer)
Window unit 10
Air conditioner compressor 15
Humidifier 8
Electric water heater 14
Gas water heater (depends on type 11–13 of water heater lining and quality of water)
Forced air furnaces, heat pump 15
Rooftop air conditioners 15
Boilers, hot water or steam 30 (depends on quality of water)
Furnaces, gas- or oil-fired 18
Unit heaters, gas or electric 13
Radiant heaters, electric 10
Radiant heaters, hot water or steam 25
Baseboard systems 20
Diffusers, grilles, and registers 27
Induction and fan coil units 20
Dampers 20
Centrifugal fans 25
Axial fans 20
Ventilating roof-mounted fans 20

Home Security
Intrusion systems 14 Smoke detectors
12 Smoke/fire/intrusion systems 10

Insulation
For foundations, roofs, ceilings, walls, Lifetime and floors

Landscaping
Wooden decks 15
Brick and concrete patios 24
Tennis courts 10
Concrete walks 24
Gravel walks 4
Asphalt driveways 10
Swimming pools 18
Sprinkler systems 18
Fences 12

Masonry
Chimney, fireplace, and brick veneer Lifetime
Brick and stone walls 100+
Stucco Lifetime

Millwork
Stairs, trim 50–100 Disappearing stairs 30

Paints and Stains
Exterior paint on wood, brick, and 7–10 aluminum
Interior wall paint (depends on 5–10 the acrylic content)
Interior trim and door paint 5–10
Wallpaper 7

**Plumbing**
Waste piping, cast iron 75–100
Sinks, enamel steel 5–10
Sinks, enamel cast iron 25–30
Sinks, china 25–30
Faucets, low quality 13–15
Faucets, high quality 15–20

**Roofing**
Asphalt and wood shingles and shakes 15–30
Tile (depends on quality of tile and climate) 50
Slate (depends on grade) 50–100
Sheet metal (depends on gauge of 20–50+metal and quality of fastening and application)
Built-up roofing, asphalt 12–25
Built-up roofing, coal and tar 12–30
Asphalt composition shingle 15–30
Asphalt overlay 25–35

**Rough Structure**
Basement floor systems Lifetime

Framing, exterior and interior walls Lifetime

**Shutters**
Wood, interior Lifetime
Wood, exterior 5 (depends on weather conditions)
Vinyl plastic, exterior 7–8
Aluminum, interior 35–50
Aluminum, exterior 3–5

**Siding**
Gutters and downspouts 30
Siding, wood (depends on maintenance) 10–100, steel 50–Lifetime
Siding, aluminum 20–50
Siding, vinyl 50

**Walls and Wall Treatments**
Drywall and plaster 30–70
Ceramic tile, high grade installation Lifetime

**Windows**
Window glazing 20
Wood casement 20–50
Aluminum and vinyl casement 20–30
Screen 25–50
25) NHTF Provisions

ADDENDUM #6

NATIONAL HOUSING TRUST FUND PROVISIONS

In addition to the Standards noted above, for all projects having Authority provided HTF funding the following provisions will be applicable as per The Department of Housing and Urban Development, 24 CFR Part 93, Housing Trust Fund, Subpart G: Project Requirements; Effective September 1, 2016. In addition, it shall be required all General Contractors for HTF funded projects submit the certification form provided in Addendum #1 of the Authority’s Standards for Planning and Construction.

Article V.§92.251   Property standards.

(a) New construction projects. (1) State and local codes, ordinances, and zoning requirements. Housing that is newly constructed with HTF funds must meet all applicable State and local codes, ordinances, and zoning requirements. HTF-assisted new construction projects must meet State or local residential and building codes, as applicable or, in the absence of a State or local building code, the International Residential Code or International Building Code (as applicable to the type of housing) of the International Code Council. The housing must meet the applicable requirements upon project completion.

(2) HUD requirements. All new construction projects must also meet the requirements described in paragraphs (a)(2)(i) through (v) of this section:

(i) Accessibility. The housing must meet the accessibility requirements of 24 CFR part 8, which implements section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. “Covered multifamily dwellings,” as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619).

(ii) Energy efficiency. The housing must meet the energy efficiency standards established pursuant to section 109 of the Cranston-Gonzalez National Affordable Housing Act (42 U.S.C. 12709).

(iii) Disaster mitigation. Where relevant, the housing must be constructed to mitigate the impact of potential disasters (e.g., earthquakes, hurricanes, flooding, and wildfires), in accordance with State and local codes, ordinances, or other State and local requirements, or such other requirements as HUD may establish.

(iv) Written cost estimates, construction contracts and construction documents. The Authority (or its sub recipient) will ensure the construction contract(s) and construction documents describe the work to be undertaken in adequate detail so that inspections can be conducted. The Authority (or its sub recipient) will review and approve written cost estimates for construction and determine that costs are reasonable.

(v) Construction progress inspections. The Authority (or its sub recipient) will conduct progress and final inspections of construction to ensure that work is done in accordance with the applicable codes, the construction contract, and construction documents.

(b) Rehabilitation projects. All rehabilitation that is performed using HTF funds must meet the requirements of this paragraph (b).
(1) Rehabilitation standards. The Authority has established rehabilitation standards for all HTF-assisted housing rehabilitation activities that set forth the requirements that the housing must meet upon project completion (Addendum #7). The Authority’s (or its sub recipient) description of its standards must be in sufficient detail to determine the required rehabilitation work including methods and materials. The standards may refer to applicable codes or they may establish requirements that exceed the minimum requirements of the codes. The rehabilitation standards must address each of the following:

(i) Health and safety. Life-threatening deficiencies must be identified as per the UPCS inspection and if present must be addressed immediately if the housing is occupied.

(ii) Major systems. Major systems are: structural support; roofing; cladding and weatherproofing (e.g., windows, doors, siding, gutters); plumbing; electrical; and heating, ventilation, and air conditioning. For rental housing, an estimate (based on age and condition) of the remaining useful life of these systems, upon project completion of each major system must be provided. For multifamily housing projects of 26 units or more, a capital needs assessment of the project must be completed to determine the useful life of major systems. For rental housing, if the remaining useful life of one or more major system is less than the applicable period of affordability, a replacement reserve must be established and monthly payments must be made to the reserve that are adequate to repair or replace the systems as needed. For homeownership housing, upon project completion, each of the major systems to have a remaining useful life for a minimum of 5 years or for such longer period specified in the CNA, or the major systems must be rehabilitated or replaced as part of the rehabilitation work.

(iii) Lead-based paint. All applicable housing will meet the lead-based paint requirements at 24 CFR part 35.

(iv) Accessibility. All applicable housing will meet the accessibility requirements in 24 CFR part 8, which implements Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794), and Titles II and III of the Americans with Disabilities Act (42 U.S.C. 12131-12189) implemented at 28 CFR parts 35 and 36, as applicable. Covered multifamily dwellings, as defined at 24 CFR 100.201, must also meet the design and construction requirements at 24 CFR 100.205, which implements the Fair Housing Act (42 U.S.C. 3601-3619). Rehabilitation may include improvements that are not required by regulation or statute that permit use by a person with disabilities.

(v) [Reserved]

(vi) Disaster mitigation. Where relevant, the housing to be improved must mitigate the impact of potential disasters (e.g., earthquake, hurricanes, flooding, and wildfires) in accordance with State and local codes, ordinances, and requirements, or such other requirements as HUD may establish.

(vii) State and local codes, ordinances, and zoning requirements. The rehabilitated portion of the housing shall meet all applicable State and local codes, ordinances, and requirements or, in the absence of a State or local building code, the International Existing Building Code of the International Code Council.

(viii) Uniform Physical Condition Standards. Upon completion, the HTF-assisted project and units will be decent, safe, sanitary, and in good repair as described in 24 CFR 5.703. HUD will establish the minimum deficiencies that must be corrected based on inspectable items and inspected areas from HUD-prescribed physical inspection procedures (Uniform Physical Conditions Standards) pursuant to 24 CFR 5.705.
(ix) Capital Needs Assessments. For multifamily rental housing projects of 26 or more total units, the Authority will determine all work that will be performed in the rehabilitation of the housing and the long-term physical needs of the project through a capital needs assessment (a.k.a. physical needs assessment) of the project.

(2) Construction documents and cost estimates. The Authority (or its sub recipient) will ensure that the work to be undertaken will meet the rehabilitation standards. The construction documents (i.e., written scope of work to be performed) must be in sufficient detail to establish the basis for a uniform inspection of the housing to determine compliance with the standards. The Authority (or its sub recipient) will review and approve a written cost estimate for rehabilitation after determining that costs are reasonable.

(3) Frequency of inspections. The Authority (its sub recipients or third parties) will conduct an initial property inspection to identify the deficiencies that must be addressed including progress and final inspections to determine that work was done in accordance with work write-ups.

(c) Acquisition of standard housing. (1) Existing housing that is acquired with HTF assistance for rental housing, and that was newly constructed or rehabilitated less than 12 months before the date of commitment of HTF funds, must meet the property standards of paragraph (a) or paragraph (b) of this section, as applicable, of this section for new construction and rehabilitation projects. The Authority (or its sub recipient) must document this compliance based upon a review of approved building plans and Certificates of Occupancy, and an inspection that is conducted no earlier than 90 days before the commitment of HTF assistance.

(2) All other existing housing that is acquired with HTF assistance for rental housing must meet the rehabilitation property standards requirements of paragraph (b) of this section. The Authority (or its sub recipient) must document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HTF assistance. If the property does not meet these standards, HTF funds cannot be used to acquire the property unless it is rehabilitated to meet the standards of paragraph (b) of this section.

(3) Existing housing that is acquired for HTF ownership (e.g., downpayment assistance) must be decent, safe, sanitary, and in good repair. The participating jurisdiction (or its sub recipient) must establish standards to determine that the housing is decent, safe, sanitary, and in good repair. At minimum, the standards must provide that the housing meets all applicable State and local housing quality standards and code requirements and the housing does not contain the specific deficiencies proscribed by HUD based on the applicable inspectable items and inspected areas in HUD-prescribed physical inspection procedures (Uniform Physical Condition Standards) issued pursuant to 24 CFR 5.705. The participating jurisdiction (or its sub recipient) must inspect the housing and document this compliance based upon an inspection that is conducted no earlier than 90 days before the commitment of HTF assistance. If the housing does not meet these standards, the housing must be rehabilitated to meet the standards of this paragraph (c) (3) or it cannot be acquired with HTF funds.

(d) Manufactured housing. Construction of all manufactured housing including manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must meet the Manufactured HTF Construction and Safety Standards codified at 24 CFR part 3280. These standards preempt State and local codes which are not identical to the federal standards for the new construction of manufactured housing. Participating jurisdictions providing HTF funds to assist manufactured housing units must comply with applicable State and local laws or codes. In the absence of such laws or codes, the installation must comply with the manufacturer’s written instructions for installation of manufactured housing units. All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must be on a permanent foundation that meets
the requirements for foundation systems as set forth in 24 CFR 203.43f(c)(i). All new manufactured housing and all manufactured housing that replaces an existing substandard unit under the definition of “reconstruction” must, at the time of project completion, be connected to permanent utility hook-ups and be located on land that is owned by the manufactured housing unit owner or land for which the manufactured housing owner has a lease for a period at least equal to the applicable period of affordability. In HTF-funded rehabilitation of existing manufactured housing the foundation and anchoring must meet all applicable State and local codes, ordinances, and requirements or in the absence of local or state codes, the Model Manufactured HTF Installation Standards at 24 CFR part 3285. Manufactured housing that is rehabilitated using HTF funds must meet the property standards requirements in paragraph (b) of this section, as applicable. The Authority (or its sub recipient) will document this compliance in accordance with inspection procedures that the participating jurisdiction has established pursuant to §92.251, as applicable.

Article VI. §92.352 Environmental review.

(a) General. The environmental effects of each activity carried out with HTF funds must be assessed in accordance with the provisions of the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321) and the related authorities listed in HUD’s implementing regulations at 24 CFR parts 50 and 58. The applicability of the provisions of 24 CFR part 50 or part 58 is based on the HTF project (new construction, rehabilitation, acquisition) or activity (tenant-based rental assistance) as a whole, not on the type of the cost paid with HTF funds, and will be reviewed to be in compliance with CPD Notice 16-14 initially issued on 8-8-2016, and all subsequent amendments.

(b) Responsibility for review. (1) The jurisdiction (e.g., the participating jurisdiction or State recipient) or insular area must assume responsibility for environmental review, decision making, and action for each activity that it carries out with HTF funds, in accordance with the requirements imposed on a recipient under 24 CFR part 58. No funds may be committed to a HTF activity or project before the completion of the environmental review and approval of the request for release of funds and related certification, except as authorized by 24 CFR part 58.

(2) A State participating jurisdiction must also assume responsibility for approval of requests for release of HTF funds submitted by State recipients.

(3) HUD will perform the environmental review, in accordance with 24 CFR part 50, for a competitively awarded application for HTF funds submitted to HUD by an entity that is not a jurisdiction.

[61 FR 48750, Sept. 16, 1996, as amended at 78 FR 44678, July 24, 2013]

Article VII. §92.354 Labor.

(1) Every contract for the construction (rehabilitation or new construction) of housing that includes 12 or more units assisted with HTF funds must contain a provision requiring the payment of not less than the wages prevailing in the locality, as predetermined by the Secretary of Labor pursuant to the Davis-Bacon Act (40 U.S.C. 3141), to all laborers and mechanics employed in the development of any part of the housing. Such contracts must also be subject to the overtime provisions, as applicable, of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701).

(2) The contract for construction must contain these wage provisions if HTF funds are used for any project costs in §92.206, including construction or nonconstruction costs, of housing with 12 or more HTF-assisted units. When HTF funds are only used to assist HTF buyers to acquire single-family housing, and not for any other project costs, the wage provisions apply to the construction of the housing if there is a written agreement with the owner or developer of the housing that HTF funds will be used to assist HTF
buyers to buy the housing and the construction contract covers 12 or more housing units to be purchased with HTF assistance. The wage provisions apply to any construction contract that includes a total of 12 or more HTF-assisted units, whether one or more than one project is covered by the construction contract. Once they are determined to be applicable, the wage provisions must be contained in the construction contract so as to cover all laborers and mechanics employed in the development of the entire project, including portions other than the assisted units. Arranging multiple construction contracts within a single project for the purpose of avoiding the wage provisions is not permitted.

(3) Participating jurisdictions (or their sub recipients), contractors, subcontractors, and other participants must comply with regulations issued under these acts and with other Federal laws and regulations pertaining to labor standards, as applicable. Participating jurisdictions (or their sub recipients) shall be responsible for ensuring compliance by contractors and subcontractors with labor standards described in this section. In accordance with procedures specified by HUD, participating jurisdictions shall:

(i) Ensure that bid and contract documents contain required labor standards provisions and the appropriate Department of Labor wage determinations;

(ii) Conduct on-site inspections and employee interviews;

(iii) Collect and review certified weekly payroll reports;

(iv) Correct all labor standards violations promptly;

(v) Maintain documentation of administrative and enforcement activities; and

(vi) Require certification as to compliance with the provisions of this section before making any payment under such contracts.

(b) Volunteers. The prevailing wage provisions of paragraph (a) of this section do not apply to an individual who receives no compensation or is paid expenses, reasonable benefits, or a nominal fee to perform the services for which the individual volunteered and who is not otherwise employed at any time in the construction work. See 24 CFR part 70.

(c) Sweat equity. The prevailing wage provisions of paragraph (a) of this section do not apply to members of an eligible family who provide labor in exchange for acquisition of a property for HTF ownership or provide labor in lieu of, or as a supplement to, rent payments.

[61 FR 48750, Sept. 16, 1996, as amended at 78 FR 44678, July 24, 2013]

Article VIII. §92.355 Lead-based paint.

Housing assisted with HTF funds is subject to the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), the Residential Lead-Based Paint Hazard Reduction Act of 1992 (42 U.S.C. 4851-4856), and implementing regulations at part 35, subparts A, B, J, K, M and R of this title.

[64 FR 50224, Sept. 15, 1999]
26) NHTF Rehabilitation Standards

ADDENDUM #7

NHTF REHABILITATION STANDARDS

In addition to the current Authority’s “Standards for Architectural Planning and Construction” and the “HTF Rehabilitation and Construction Guidelines” the following Rehabilitation Standards (Standards) shall be included when financed with Authority provided HTF funds. These Standards shall include the “Property Standards” as noted above to be part of the Rehabilitation Standards, additional clarification is provided below:

These Standards are hereby incorporated into the scope of work, the sub-recipient, owner, general contractor and Architect shall ensure compliance with the applicable HTF provisions as noted. The Standards represent the minimum acceptable levels for construction completed through the rehabilitation and is the basis for a uniform inspection of the rehabilitated housing.

The project shall obtain a HUD Uniform Physical Condition Standards (UPCS) inspection (using the most current format) which shall identify all Observable Deficiencies and Health and Safety Concerns. The scope of work shall address all noted deficiencies and life threatening concerns so that at the completion of the rehabilitation the noted deficiencies and concerns have been cured.

Please visit the HUD Real Estate Assessment Center for information and documents to complete the UPCS inspections. HUD can be accessed at the following underlined hyperlinks: HUD Physical Inspection Training Materials and Documents and Physical Inspection Training Materials the UPCS Comprehensive Listing Inspectable Area form is available in Excel. In addition, the HTF Project Checklist (Addendum #4) is recommended to insure all applicable items are addressed.

If any Health and Safety Concern is identified as a Life Threatening Concern it needs to be addressed immediately. Life threatening deficiencies such as the potential for electrical shock, structural failure, carbon monoxide poising or noxious fumes, fire safety concerns, etc. needs to be addressed immediately if housing is occupied.

Major Systems (as noted above) must be inspected to determine the condition and if it warrants replacement or repair. The Life Expectancy of Housing Components (Addendum #5) provides estimates of the effective life of the various building components. In the event where a Major System component is in satisfactory condition but has a remaining contributory life of less than the affordability period for multifamily/rental projects, or 5 years or less for single family units

In this instance these items need to be completed in the scope of work or if for rental housing an appropriately determined replacement reserve needs to be funded so as to address the repair or replacement of the component when it becomes due. The determination of the reserve amounts will be ascertained on a case by case basis and by using the following formula.

Cost of repair at time of replacement ÷ Remaining useful life estimate (years) of component = Annual reserve amount.

In the event the project does not include approved building plans and specifications, the scope shall provide adequate description of the materials including quantity and cost. All materials shall be new and free from defect. They shall be at a minimum “construction” or “builder” grade quality. The materials shall
be installed as per the manufacturer, applicable code or trade standard. Specific methods, techniques or sequential procedures shall be included when required. Descriptions should also contain manufacturer cut sheets when available. Materials and methods should be in adequate detail so there is no confusion between owner and general contractor, that the Authority or sub recipient inspector know exactly what is being constructed and to eliminate the need for change orders due to lack of specification.
27) NHTF Project Checklist

ADDENDUM #8

HTF PROJECT CHECKLIST

New Construction
☐ Project meets State and local codes, ordinances, and zoning requirements
☐ Accessibility
☐ Disaster mitigation
☐ Written cost estimates, construction contracts and construction documents
☐ Construction progress inspections

Rehabilitation
☐ Rehabilitation standards
☐ Health and safety
☐ Major systems
☐ Lead-based paint
☐ Inspections
☐ Accessibility
☐ Disaster mitigation
☐ State and local codes, ordinances, and zoning requirements
☐ Uniform Physical Condition Standards
☐ Construction documents and cost estimates
☐ Frequency of inspections
☐ Acquisition of standard housing

Misc
☐ Occupied housing by tenants receiving HTF tenant-based rental assistance
☐ Manufactured housing
☐ 90 day inspection before HTF commitment or no less than 30 days for newly constructed/rehabilitated

Environmental Review
☐ General
☐ Responsibility for review

Labor
☐ General- Davis Bacon for 12 or more HTF assisted units in contract (IHDA Construction Rider)
☐ Volunteers
☐ Sweat equity

Lead-Based Paint