



ILLINOIS HOUSING DEVELOPMENT AUTHORITY STANDARDS FOR ARCHITECTURAL PLANNING AND CONSTRUCTION

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Content in *italic* indicates a revision from a previous version.

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.

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 it's agents shall have the right of access to the property.



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(I) 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.

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 the Fair Housing Act, Illinois Accessibility Code, , Americans with Disabilities Act, local building codes, and Section 504 of the 1973 Rehabilitation Act.

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.

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.

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 2012 International Building Code package.

Change Order: 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 IHDA 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.

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 300 square feet of floor area for new construction projects and not less than 250 square feet for rehabilitation projects, including the floor areas for bathrooms and closets.

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 Historic Preservation Agency (IHPA) or as determined by a "Certified Local Government" designated by the IHPA, 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 Governmental 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 2012 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 replaces; 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.

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. The 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 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.

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.



2) Fees and Costs

IHDA 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. IHDA 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. IHDA 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 supervision shall be conducted by the "Architect of Record". The Architect is responsible for certifying that all the work requested for payment 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 Owner* and overall supervision 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.

Architectural Fee in excess of the IHDA limits listed below cannot be kept in basis and may be paid from a non-IHDA source.

Total Construction Costs \$	% Architect Fee (New Construction)	% Architect Fee (Renovation)	% Civil Engineering Fee
0-1,000,000	7.2	8.4	2.0
1,000,001-5,000,000	6.2	7.3	1.8
5,000,001-10,000,000	4.8	6.7	1.5
10,000,001-15,000,000	4.1	5.9	1.3
15,000,001-25,000,000	3.4	5.1	1.0
Over 25,000,000	2.8	4.4	1.0

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 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 if funding is lost because of unauthorized activity.

1.06 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.

1.07

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. As the GC is responsible for these functions any subcontracting of these out to lower tier subcontractors will reduce the amount of the GC’s General Conditions accordingly.

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.

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 contingency eligible on change order requests.*

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, etc. 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. The Authority will allow the GC functions to be subcontracted out but will only pay once for these services. Subsequently the GC needs to be on the site during construction and at least daily. 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.*



1.08 All Construction Related Costs required to complete the project shall be determined prior to the project obtaining IHDA Board approval. 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 IHDA Architectural and Construction Standards, QAP requirements, etc.) from the scope due to costs will not be approved, nor will the utilization of the contingency to pay for these items.* Additional funding for increased construction budget costs shall be the responsibility of the Developer or General Contractor and not the Authority.

In all instances where there is a Construction-Cost Plus contract or other contract agreement that may result in cost savings at the completion of the Project, the disposition of any savings shall be in the sole discretion of IHDA.

Material suppliers for construction related products shall be identified on the contractors sworn 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 IHDA Field Construction Representative.*

1.09 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.

1.10 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 2012 International Energy Conservation Code.



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 his architect 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 **2012 International Code Package** will apply. IRC Section R313 is deleted. The **2012 International Energy Conservation Code** is mandatory in all jurisdictions in the state of Illinois.
- 2.02** *The **Americans with Disabilities Act** applies to the common areas open for public use, such as a property management or rental office.*
- 2.03** **Fair Housing Act** applies to all **new** multi-family housing consisting of four or more dwelling units 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 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** **Minimum Property Standards for Housing (MPS) U.S. Department of Housing and Urban Development (HUD)**
- 2.10** **24 CFR Parts 3280 of the Manufactured Home Construction and Safety Standards**
- 2.11** **Title 89 Illinois Administrative Code, Subpart B: Supportive Living Facilities**
- 2.12** **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>. 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.



- 2.13 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.
- 2.14 Radon:** All federally-assisted projects must comply with the Illinois Emergency Management Agency Radon program and the EPA's radon guidelines. When radon mitigation is required at a minimum a passive-future active system shall be installed. For further information, visit:
<http://radon.illinois.gov/> and
<http://www.epa.gov/radon/index.html>
- 2.15 Mold considerations:**
Fact Sheets from IDPH:
<http://www.idph.state.il.us/envhealth/factsheets/mold.htm>
<http://www.idph.state.il.us/envhealth/factsheets/moisture.htm>
EPA Mold Site: <http://www.epa.gov/mold/>
- 2.16** Illinois State Prevailing Wages or Federal Davis-Bacon Prevailing Wage requirements will be *mandated* on IHDA financed projects having construction related activities. Section 3 will apply were required. See links below to respective guidelines and websites.
- **IHDA Davis Bacon Compliance Guide**
<http://www.ihda.org/developer/architectureConstructionServices.htm>
 - **Illinois Prevailing Wage Website**
<http://www.state.il.us/agency/idol/RATES/RATES.HTM>
 - **Section 3 Plan and Compliance Guide**
<http://www.ihda.org/developer/architectureConstructionServices.htm>

CONSTRUCTION PHASE

3) Preconstruction Meeting

- The preconstruction conference is convened by the Authority prior to the construction start. The sponsor, their Architect and the General Contractor must attend the meeting. In addition, the sponsor's and GC's representative responsible for completing and forwarding the various documents should be present.

The following items will be reviewed at the preconstruction meeting:

- Payout Procedures for both sponsor and GC.
 - The Authority does not pay for stored materials or furniture, fixtures and equipment (FF&E) until installed *and inspected by the IHDA Construction Field Representative*.
 - Retention reduction; 10% retention must be retained up to 95% completion, then reduced to 5% if occupiable, has a C of O, G704, IHDA Permission to Occupy, IHDA Completion Certificate and IHDA's *Field* Inspector approval. Retention does not apply to change orders, insurance, bonds or permits.
 - *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 Inspector at least two 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.

Payout Procedures

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



4) Change Orders and Contingency Funds

When a modification to the construction contract is requested, an AIA G701 Change Order form executed by the owner/developer, general contractor and architect must be submitted to the Authority's Construction Field Representative at least one month prior to submitting the change order to the Authority for payment. The owner/developer must also include along with the change order a letter clearly explaining the reasons for the change order and any other documents to justify the change. The IHDA Construction Field Representative needs to verify the pre-existing condition and the change order's finished product. *The Architect and GC needs to insure the items being requested on the change order are not already included in the plans, specifications or the various contract documents.* It is the GC's responsibility to fully document the before and after conditions and provide the Authority with photographs, if requested.

The Authority's Architecture Staff will determine if the change order qualifies for contingency funding. If it does not qualify for contingency funding, the funding will be made from some other source, including the realized developer fee. The Architecture Staff will inform the Construction Staff of the funding determination, who will then notify the owner/developer of that determination. It is important to keep change orders up-to-date to avoid delays in payment.

Failure to submit change orders in a timely manner may result in payment delay or non-payment. The owner/developer assumes all risk (both monetary and construction rework) in completing change order work without prior IHDA approval. Any non-approved change order work completed which results in non-compliance with any building, accessibility, sustainability, municipal codes or IHDA standards will be the responsibility of the owner/developer.

The construction contingency will only be available to fund unforeseen construction costs and not to be used to fund soft costs, developer fees, up-grades and betterments, reserves or other costs the Authority deems ineligible at the time. When the project has been determined by IHDA Staff to be $\geq 75\%$ complete and sufficient funds remain in the construction contingency, the owner/developer may seek reimbursement from the construction contingency for all new change orders (including up-grades or betterments) and previously paid change orders funded from any other source. *Typically, upgrades and betterments will not be reimbursed unless approved by the Authority. Any deviation of the IHDA change order process could result in the loss of all or a portion of Authority funding.*

Construction contingency funds are available only to the owner/developer and shall be reflected accordingly on the owner's sworn statement. Contractors shall not include any contingency amount in their bid. **Contractors shall not enter into any agreement with the owner in accessing or splitting owner contingency funds. In addition there shall be no utilization of cost savings (difference between contractors bid and actual subcontractor amount) on the project without prior approval from IHDA. Cost savings under a fixed price contract do not automatically accrue to the Contractor or owner.**

- 4.01** The following criteria will be followed to determine the allowance and funding source for change orders:
- a. **Concealed Condition** – Unforeseen items may be approved for payment from the construction contingency.
 - b. **Construction Cost Increases** – If the cost increases were 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
 - c. **Contractor Negligence** – Any damage or neglect by the Contractor will not be paid from the construction contingency but may be paid from the available escrowed realized developer fee, if approved by the developer, or another source of funding.
 - d. **Building Code Related Issues** – are foreseeable costs and will not be approved for payment from the construction contingency but may be paid from the available escrowed realized developer fee or another source of funding.
 - e. **Upgrades (Betterments)** – will not be approved for payment from the construction contingency but may be paid from the available escrowed realized developer fee or another source of funding.
 - f. **Architects, Engineers and Contractors Errors and Omissions and Additional Architectural and Engineering Fees** - will not be approved for payment from the construction contingency but may be paid



from the available escrowed realized developer fee or another source of funding.

- g. **Building Inspector or any Municipal Official Requirements** – if not required by the Building Code, will not be approved for payment from the construction contingency but may be paid from the available escrowed realized developer fee or another source of funding.
- h. **Separate contracts outside of the General Contract:** When a separate contract is let by the owner for work to be performed outside of the General Contractor's Scope of work and there are additional costs incurred, these costs will **not** be paid from the construction contingency. A separate contingency should be established within that contract to address any cost overruns.
- i. **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. Claiming to have a large deductible or a potential increase in the insurance premium will not be considered.
- j. **Seasonal Constraints-** *such as winter conditions, water extraction from recent rains or other costs that could result in scheduling delays will not be approved from the construction contingency. These items should be anticipated and included in the construction budget.*
- k. **Other:** Any additional architectural, engineering, or other services outside of the scope of work that may be required will not be paid from the construction contingency but may be paid from the Developer's Fee or some other source of funding. *In addition, extended warranties or contractor incentives are not eligible.*

5) Construction Close Out

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

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%.

1. The building must be occupiable.
2. *Certificate of Occupancy or Final Inspection from the governing jurisdiction (if applicable).*
3. Two copies of the Architect G704 must be submitted to the Construction Field Representative.
4. Two copies of the IHDA Certificate of Completion (Form CD-4) must be submitted to the Construction Field Representative. Showing hold back for punch list items. Form can be found at: <http://www.ihda.org/developer/architectureConstructionServices.htm>
5. Two copies of the IHDA Permission to Occupy must be submitted to the Construction Field Representative. Form can be found at: <http://www.ihda.org/developer/architectureConstructionServices.htm>
6. IHDA Construction Field Representative approval.
7. For projects receiving tax credits for Enhanced Accessibility and/or Green Initiatives, IHDA Architectural Services final inspection approval.
 - a. At final project close-out: 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).

When the project is 100% complete, including punch list items, the *IHDA* Construction Field Representative will verify and inform the *IHDA* Construction Field Representative Supervisor. The *IHDA* Construction Field Representative Supervisor 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 IHDA Board.

Before construction begins, two signed and sealed copies of the complete “For Construction” drawings (one full size and one half-size), two specifications and a CD with PDFs of the drawings *and specifications* shall be submitted to the Authority. 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 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 project drawings must be current (\leq six 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.
- 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 elevations.
- 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, structural steel sizes and layout.
 - Column schedule, 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.
 - 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 2012 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.*
 - Location of all lighting fixtures.
 - 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 **2012 International Energy Conservation Code**. (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 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 (\leq six months old) **ALTA/ACSM Land Title Survey**.
- 6.16** A current (\leq 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
 - Endangered Species
 - Completion of the IHDA Phase I Environmental Consultant Report Requirements. The IHDA Phase I Environmental Consultant Report Requirements may be found on the IHDA 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 IHDA PNA standards can be found on the IHDA website. (www.ihda.org). The selected vendor can be neither the Architect of Record for the project nor the preparer of the owners/developers scope of work for the project.

The completed project drawings must be current (\leq six 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.
 - Other necessary details required for a complete set of landscape drawings.
- 6.19 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 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.
 - 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 schedule, 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.
 - 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.*
 - 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.
 - 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 (\leq six months old) **ALTA/ACSM Land Title Survey**
- 6.29** A current (\leq 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 IHDA Lead Based Paint Construction Guidelines.
<http://www.ihda.org/developer/architectureConstructionServices.htm>
 - Asbestos considerations (HUD, IEPA and EPA 40 CFR 61.145 and Illinois Department of Public Health regulations).
- 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/moisture.htm>
 - EPA Mold Site: <http://www.epa.gov/mold/>
- 6.30** *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 IHDA 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, etc. appropriate for the population served and the location of the Project.
- The capability for each unit to access high-speed internet either through wireless service to all residents or hard-wire connection, such as coaxial or Cat-5 cable.
- 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.) one washer for every *ten (10)* units with one dryer for every two (2) washers, 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. (See section 13.03 of this Standard.)

If the Project has three-bedroom units:

- The units must contain 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 appropriately sized for the development.
- All non-elderly Projects must include a fully equipped indoor or outdoor playground or tot lot appropriately sized for the Project.

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 IHDA. 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 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 400.350, Multi-Story Housing requirements Section 400.360, Requirements for Adaptable Dwelling Units of The Illinois Accessibility Code. Renovation projects must comply with Section 400.510 of the Code to determine the level of accessibility required.

http://www.illinoisattorneygeneral.gov/rights/environmental_barriers.html

8.03 ICC/ANSI A117.1-Latest Edition:

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

http://www.ihda.org/developer/documents/2014QAP-FINALGOVAPPROVED_001.pdf

8.04 Section 504 of the 1973 Rehabilitation Act:

Projects that receive federal financial assistance 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, shall comply with the requirements of The Americans with Disabilities Act (latest *edition*).

8.06 Local Building Codes:

Projects must comply with the adopted local building 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 Fair Housing Act and 20% of the total number of dwelling units must comply with the Requirements for Adaptable Dwelling Units, Chapter I, §400.360 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 Fair Housing Act and 20% of the total dwelling units must comply with the Requirements for Adaptable Dwelling Units, Chapter I, §400.360 of the Illinois Accessibility Code.
- 8.08 New construction projects that are recipients of federal financial assistance, in whole or in part, shall have a **minimum** of 5%, or percentages as required by the QAP when applicable, of the total number of units or at least one unit (whichever is greater) constructed as being fully accessible 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 accessible to persons who are mobility impaired. The development must offer the same choices 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.
- 8.12** Common use areas exclusively for tenants and their guests must meet the requirements the Illinois Accessibility Code and ICC/ANSI A117.1, latest edition.
- 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.

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 rehabilitation projects whenever practical and feasible. 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.

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 1/2" difference between the inside and outside surfaces, or with a threshold with less than a 1/2" 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 603-610 and 1002.11 of ICC/ANSI A117.1, latest edition.

10) Site Standards

- 10.01** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system if permitted by the jurisdiction, or to an approved place of disposal.
- 10.02** Where approved, storm water from the roofs, paved areas, yards, courts and court yards, may be permitted to discharge onto flat areas, such as streets, parking areas, or lawns, provided that the storm water flows away from the building.
- 10.03** Storm water discharge and disposal must be acceptable to the local authorities and the State of Illinois Environmental Protection Agency.
- 10.04** 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.
- 10.05** 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.*



- 10.06** Projects shall not be located in proximity to environmental hazards.
- 10.07** Sites that are divided by a heavily traveled major traffic artery shall be avoided and may not be financed.
- 10.08** 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:

- 10.09** 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/hsg/4910.1

- 10.10** Parking spaces shall be provided as per local zoning ordinance but in no case be less than one parking space per dwelling unit 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.

- 10.11** Double loaded 90-degree parking areas shall be a minimum width of 60-feet and single loaded 90 degree parking areas shall have a minimum width of 42-feet. The intermediate aisle shall be a minimum of 24-feet in width.

- 10.12** A minimum of two percent (2%), but not less than one of the total number of parking spaces provided shall be accessible or as per local ordinance whichever is greater. 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.

- 10.12.1** Each accessible parking space shall have its own access aisle and all access aisles shall blend to a common level with an accessible route.

- 10.12.2** 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.

- 10.12.3** 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.

- 10.13** In single family developments with single car garages, the minimum garage dimension will be 11' wide by 20' deep with an 8' wide door.

- 10.14** Concrete curbs at all access drives and parking lots must be provided.

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

- 10.16** 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.



Exception: 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.

- 10.17** 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 not bear on frozen ground or unsuitable soil.
- 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. Wood foundation systems, rubble stone or any other similar materials used for foundation walls will not be permitted.
- 11.04** A 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 steel panels, cementitious siding, treated engineered wood siding, insulated precast concrete decorative panels, wood siding or Authority approved equal.
- 11.06** Exterior Finish and Insulation System (EFIS) is permitted in limited areas as an exterior facing with the approval of the Authority.
- 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 ANSI A117.1-2003. If the alternative way is a ramp, the stairs must comply with Section 405 of ANSI A117.1-2003. 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:

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

12.02 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. 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.

12.03 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.

12.04 Carpet shall not be permitted as a floor finish in *laundry rooms*, kitchens, and bathrooms.

12.05 Prefabricated shower and/or bathtubs units shall be specified and provided with factory installed integral reinforcing, cast into the grab bar 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.

Exception: The installation of grab bars shall be required in dwelling unit bathrooms to be occupied by elderly, severely disabled people, and units required to be fully accessible.

13) Mechanical, Plumbing and Electrical Systems

Penetrations of floor/ceiling assemblies and assemblies required to have a fire-resistance rating shall be protected in accordance with the 2012 edition of the applicable International Building Code, as well as: all cutting, notching, and



boring in wood and steel framing.

To the greatest extent feasible, mechanical rooms shall be designed with maintenance in mind. The layout of the equipment should be accessible (i.e. the servicing of one component should not require the removal of another).

Heating, ventilating, and air-conditioning systems:

- 13.01** All units shall be heated and air-conditioned. 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, 2012 edition shall apply. They shall also comply with the efficient utilization of energy in accordance with the 2012 edition of the International Energy Conservation Code. 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 2012 edition of the International Fuel Gas Code or the local building code whichever is most stringent.

Plumbing

- 13.03** 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.
- 13.04** No Project shall be served by a well or septic system.
- 13.05** All plumbing shall be performed only by Illinois licensed plumbers and apprentice plumbers under the direction of a licensed plumber.
- 13.06** 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.
- 13.07** On renovation, rehabilitation or preservation projects, replacement of the lead pipe incoming water service shall be required.
- 13.08** 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, Polybutylene and "Type M" copper water distribution pipe shall not be permitted. PEX piping shall be allowed to be installed below floor slabs of slab-on-grade construction with the following restrictions:
- Tubing must be continuous – no fittings shall be allowed below the slab
 - Tubing must be completely buried by a suitable, easily compacted, backfill material such as sand or pea gravel
 - Tubing shall not be mounted between the slab and reinforcing
 - PEX tubing shall be protected with a non-metallic sleeve where it penetrates the slab, and may be carefully tied to vertical re-bar, wood stakes or rigid drain pipe for support to prevent movement of the pipe as the slab is installed. This sleeve must extend a minimum of 6" above or below the slab
 - The space between the PEX and the sleeve should be sealed to prevent any leakage into the building. Sealant used shall meet with manufacturer's instructions.
 - If termiticides or pesticides are required to be applied, the exposed ends of the tubing shall be capped prior to installation of the chemicals, and installer must ensure no pooling or puddling of chemicals occurs between the sleeve and slab penetration
 - Maximum length of PEX allowed under slab is limited to a horizontal run of 10'-0".



13.09 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

13.10 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.

13.11 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.

13.12 The minimum electric service to a dwelling unit shall be 100-amperes. Existing electrical service may be allowed to remain for apartment unit rehabilitations. A load calculation for the proposed design should be provided to ascertain if the existing service is adequate or if it needs be increased accordingly. In no event shall the service be less than 60 amps.

13.13 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.

13.14 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.

13.15 Every dwelling unit in buildings serviced by natural gas shall be equipped with at least one approved carbon monoxide (CO) alarm in an operating condition within 15 feet of every room used for sleeping purposes and meet the requirements of the Carbon Monoxide Alarm Detector Act (Public Act 094-0741). 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, and approved in advance of construction by the Authority.

13.16 *Every dwelling unit at a minimum shall be equipped with at least one approved smoke detector in an operating condition within 15 feet of every room used for sleeping purposes and meet the requirements of the Smoke Detector Act (Public Act 425 ILCS 60).*

14) Energy Efficiency and Green Criteria

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

14.01 Minimum 2012 Illinois Energy Conservation Code Design Requirements

This section outlines some of the energy code compliance requirements based upon the **prescriptive option** of the Illinois 2012 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.

A quick reference guide for the 2012 IECC can be found at: www.reca-codes.com

Single Family and Low Rise Residential Buildings, 3 Stories or Less										
2012 IECC: Table R402.1.1 for climate zones 4 and 5										
Climate	Windows			Insulation				Foundation		
	Fenestratio	Skylight	Glazing	Ceiling	Wood	Mass	Floor	Basement	Slab	Crawl



Zone	n U-Factor	U-Factor	Fenestration Factor	R-Value	Frame Wall R-Value	Wall R-Value	R-Value	Wall R-Value	R-Value And Depth	Space Wall R-Value
Zone 5	0.32	0.55	NR	49	20 or 13 + 5	13/17	30	15/19	10, 2 ft.	15/19
Zone 4	0.35	0.55	0.40	49	20 or 13 + 5	13/17	19	10/13	10, 2ft	15/19

NR indicates No Requirements

a. **Air Sealing - 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 5 ACH.

Existing buildings undergoing additions, alterations, renovations, repairs, changes in use, changes in space conditioning or mixed occupancies shall meet the above Air Sealing – Blower Door Test requirements unless the project meets the exceptions listed in IECC Section R101.4 and the energy use is not increased.

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

b. **Duct Leakage Test** (IECC Section R403.2)

Ducts must be tested and verified to have a total leakage of no more than 4cfm/100 sf. ft. Exception: Where air handler and all ducts are inside the conditioned space no duct leakage test is required.

c. **Documentation**

- Maintenance instructions shall be furnished for equipment and systems that require preventative maintenance. R303.3
- A permanent certificate listing all energy efficiency material and equipment values shall be posted on or in the electrical panel. A complete list of required values can be found in Section R401.3 of the IECC.
- Blower door test results.
- Duct leakage test results were applicable.

14.02 Additional Mandatory Design Requirements above the 2012 Illinois Energy Conservation Code

All projects seeking funding from the Authority must comply with the following criteria from the Enterprise Green Communities Criteria 2011 below. 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 3rd party certification requirements will supersede the mandatory requirement outlined below.

Additional information regarding the mandatory sections outlined below can be found at:

<http://www.greencommunitiesonline.org/tools/criteria/index.asp>

IHDA Mandatory Requirements Enterprise Green Communities Criteria 2011	
Requirement	Mandatory Section
Section 3: Site Improvements	Only if providing landscaping. 3.4 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: IHDA approval will be required for the amount of landscaping provided for projects where the open land for landscaping is limited.
Section 4: Water Conserving Fixtures	<p>4.1 (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</p> <p>(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</p>
Section 5: Energy Efficiency	5.4 Energy Star Appliances: Install Energy Star clothes washers, dishwashers and refrigerators.
Section 8: Operation and Maintenance	<p>Section 8.1 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.</p> <p>Section 8.4 Project Data Collection and Monitoring System Collect and monitor project performance data on energy, water, and, if possible, healthy living environments for a minimum of five years. Allow IHDA access to that data. For sub-metered projects, property owner /developer must agree to collect utility release forms from a percentage of residents to track actual utility data of a sample of homes. The following table identifies the percentage of residents for which the property owner /developer must collect and track utility data, as based on the project size in total number of units.</p> <p>Number of units / Percentage of units 0 – 25 units / 50% 25 – 100 units / 25% 100+ units / 15%</p> <p>Provide IHDA with access to the performance data annually for a five-year period through the IHDA Utility Release Form submitted prior to final closing and /or the EPA's Portfolio Manager account information to help populate its database intended to collect national information on green affordable housing.</p> <p>Multifamily building data can be tracked and analyzed using EPA's Portfolio Manager tool: www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager The Portfolio Manager Overview is an interactive energy management tool that allows the project team to track and assess energy and water consumption across its entire portfolio of buildings in a secure online environment.</p>

14.03 New technologies: Projects incorporating new technologies (items such as: alternative building systems, new design components and/or materials, etc.) for the purposes of decreasing operating costs will need to be justified through the use of a cost benefit analysis. Applicable new technologies shall include any proposed efficiencies in excess of those indicated in the 2012 International Energy Conservation Code/ASHRE Standard 90.1-2010, the IHDA 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 IHDA underwriting forecasting assumptions and shall incorporate maintenance costs, adjustments for any needed life cycle repairs and/or reserves. In any event the technology employed needs to be proven and not experimental.

15) Community Facilities

Community facilities such as offices, dining, mail pick-up, and other necessary functions shall be situated where they can be easily found by the residents. Most of these facilities shall be centrally located in close proximity of the primary entrance.

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*. *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, shall be on an accessible route and comply with the following:

- a. Provide one automatic clothes washer for every *ten (10)* apartments.
- b. Provide one clothes dryer for every two (2) washers.
- c. 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.

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 Tenant bulk storage shall be provided in a separate closet or closets within 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:

Dwelling Type	Volume
Efficiency/ Single Room Occupancy SRO	32 cubic feet
1-bedroom unit	72 cubic feet
2-bedroom unit	128 cubic feet
3-bedroom unit	200 cubic feet
4-bedroom unit	288 cubic feet

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.

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 that has a fire rating of not less than 1-hour. Where the room is serviced by a trash chute, an automatic sprinkler head shall be provided at the top of the trash chute. Openings into the room shall be protected with a fire rating of not less than 1-hour and doors shall be equipped with closing devices. A concrete slab shall directly link access from this area to the exterior pick-up point. Floor drains shall be provided at these 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 two-hours for buildings containing four or more stories and 1-hour in buildings less than four stories. An automatic sprinkler system shall be installed at the top of refuse and linen chutes and in their terminal rooms. 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 if not automatically actuated.*
- 16.05 Retail stores and other commercial space shall not be included as part of the Authority financing.
- 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:

Dwelling Type	Area
5-100 dwelling units	600 square feet
101-300 dwelling units	800 square feet
301-500 dwelling units	1200 square feet

- 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 IHDA 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' 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. 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, 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.
- 13.17** 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, Polybutylene and "Type M" copper water distribution pipe shall not be permitted. PEX piping shall be allowed to be installed below floor slabs of slab-on-grade construction with the following restrictions:



- Tubing must be continuous – no fittings shall be allowed below the slab
- Tubing must be completely buried by a suitable, easily compacted, backfill material such as sand or pea gravel
- Tubing shall not be mounted between the slab and reinforcing
- PEX tubing shall be protected with a non-metallic sleeve where it penetrates the slab, and may be carefully tied to vertical re-bar, wood stakes or rigid drain pipe for support to prevent movement of the pipe as the slab is installed. This sleeve must extend a minimum of 6" above or below the slab
- The space between the PEX and the sleeve should be sealed to prevent any leakage into the building. Sealant used shall meet with manufacturer's instructions.
- If termiticides or pesticides are required to be applied, the exposed ends of the tubing shall be capped prior to installation of the chemicals, and installer must ensure no pooling or puddling of chemicals occurs between the sleeve and slab penetration
- Maximum length of PEX allowed under slab is limited to a horizontal run of 10'-0".

19.08 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.

19.09 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.

19.10 The minimum electric service to the dwelling unit shall be 100-amperes.

ADDENDUMS

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.

Name _____ Position _____ Date _____





21) HOME Provisions

ADDENDUM #2

HOME PROVISIONS

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) [Reserved]

(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., 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 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 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.



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Authority

<http://www.ihda.org>

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 Listing Inspectable 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.

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

- Compliance with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), the Residential Lead-Based Paint Hazard Reduction Act of 1992.**

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

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*

Wood/butcher block 20+

Granite 20+

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 30–lifetime

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

Carpeting (depends on installation, 11 amount of traffic, and quality of carpet)

Marble (depends on installation, Lifetime+ thickness of marble, and amount of traffic)

Footings and Foundation

Poured footings and foundations 200

Concrete block 100

Cement 50

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 of water heater lining and quality of water) 11–13

Forced air furnaces, heat pump 15

Rooftop air conditioners 15

Boilers, hot water or steam (depends on quality of water) 30

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 12

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 aluminum 7–10

Interior wall paint (depends on the acrylic content) 5–10

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 overlaid 25–35

Window glazing 20

Wood casement 20–50

Aluminum and vinyl casement 20–30

Screen 25–50

Rough Structure

Basement floor systems Lifetime

Framing, exterior and interior walls Lifetime

Shutters

Wood, interior Lifetime

Wood, exterior (depends on weather 4–5 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