

## **DRAFT MAP GUIDE Appendix 5 Architectural and Construction Analysis**

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### **5A. Common HUD Property Standards and Survey Criteria**

A. Minimum Property Standards (HUD Handbook 4910.1). The Minimum Property Standards for Housing (MPS) requirements are applicable as follows:

1. New construction and Substantial Rehabilitation. The design must meet all of the MPS.
2. Existing Buildings.
  - a. Properties that were originally constructed or substantially rehabilitated under Section 221(d)(4) must meet all of MPS when being acquired or refinanced under Section 223(f), refinanced under Section 223(a)(7) or altered or repaired under Section 241(a).
  - b. Other properties being acquired/refinanced under Section 223(f) or 223(a)(7), or submitted under Section 241(a) may meet only the following sections of the MPS:
    - 1) Chapter 1, Section 100-3, Requirements for Accessibility to Physically Disabled People.
    - 2) Chapter 2, The General Acceptability Criteria (all of Chapter 2);
    - 3) No other sections of the MPS apply retroactively for existing buildings.
3. Local Building codes or nationally recognized building codes accepted or designated by the local HUD Office are part of the MPS:
  - a. The Field Office enforces and interprets accepted local building codes for HUD.
  - b. The Field Office does not enforce local building codes for the local Government.
4. Minimum Design Standards for Community Sewerage (HUD Handbook 4940.3) requirements must be met for community sewage systems design and construction.

B. Commercial Use and Daycare Facilities. The term "Commercial"<sup>1</sup> is applied to any space or facility permitted and acceptable for "Nonresidential Use" from which income is derived or anticipated. However, facilities such as swimming pools and garages to be used solely by tenants are not considered commercial even though fees may be collected.

5. Generally, the nature and extent of nonresidential uses should serve the commercial needs of tenants and residents of the neighborhood in which the property is located.

6. The aggregate commercial floor area may not exceed the percentage limits established by program as described in Chapter 3. When calculating commercial space as a percent of floor area, the numerator is the aggregate commercial area including corridors, stairs, elevators, lobbies, garage parking and other service areas used for commercial purposes, but excludes laundry space, project storage space, and resident garage parking. The denominator is building area for all uses.

7. Design of commercial facilities must be harmonious with the project and conform to standards of design and construction and local zoning and building codes.

8. Do not include fixtures, equipment, furnishings or finish for commercial spaces in the mortgage unless customarily provided in competitive projects. But a commercial lease build-out allowance may be needed and may be required as a required escrow. In addition, future commercial tenant build-out costs (for releasing after initial lease-up) may be budgeted as part of future capital costs and included in the Reserve for Replacements.

9. Space for day care facilities must be adequate, appropriate to the market need, and conform to local and state requirements. In processing, it is considered as commercial space.

### C. Equipment

1. Equipment included as part of the mortgage security must be acknowledged by the Borrower and Lender to be part of the real estate and:

- a. Be essential for successful operation and market acceptance.
- b. Have qualities in design, construction, materials and finishes that are not subject to early deterioration or obsolescence.
- c. Be appropriate to the location, the design of the building, and the anticipated occupants.

2. Equipment needed for operation and market acceptance, such as ranges and refrigerators, should be included. The equipment should be durable and selected to balance current capital cost against the need to fund future replacements.

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<sup>1</sup> The term "Commercial" is not the same in definition or in reference to the term used in International Building Code or a term that may exist in other building standards.

- a. Replacement is paid for from a reserve for replacements account sized in the CNA prepared in the CNA e Tool and funded annually from project income.
- b. Market-based expectations for borrower-furnished equipment change over time. If doubts arise as to legal precedent concerning whether an item is chattel or real estate, essential and required items may be covered by a security agreement or chattel mortgage, as well as being covered by the mortgage on the real estate if deemed necessary by the Lender and its attorneys.

D. Ineligible equipment includes supply items, utensils, tools, vehicles, mowers and tractors, portable equipment, furniture, furnishings, or accessories normally provided by residents or management and maintenance firms. But furniture, furnishings and equipment (FFE) for tenant common use spaces (e.g., recreation and gym facilities, lobbies, tenant entertainment or hospitality spaces, etc.) may be allowed as chattel items and budgeted as described in Chapter 5.11, subsection D.

E. Air Conditioning of residential spaces is required for all properties except in markets located in climate zones where new units without air conditioning are commonly accepted. Where air conditioning is required to provide year-round indoor comfort, assure continued marketability, and prevent premature obsolescence, projects must be air-conditioned. Particular attention should be given to the need for air conditioning and ventilation in elevator structures, especially for senior citizens.

F. Water and Sewer. Public water and sewerage facilities are generally required for multifamily projects. Lack of public water and sewer service is an indicator of the local jurisdiction's inability or unwillingness to provide such services and in most cases is a bar to new development. Construction of private water and sewer facilities may be considered only when such services can be provided at reasonable rates including consideration of long-term capital needs and when such facilities are supported and supervised by state or local authorities with jurisdiction. Existing properties relying on private water and sewer facilities must meet the same test of reasonable cost including long-term capital needs and local government support and supervision.

Water and/or sewerage facilities must:

1. Provide a sufficient supply of water with adequate pressure and satisfactory purification, anti-bacterial and chemical qualities approvable by municipality.
2. Provide a sanitary waste system with adequate collection, treatment and final disposal of domestic waste that requires minimum maintenance and will not endanger the public health.

G. Duplicate water and sewerage systems are not acceptable except where it is determined that the construction of a single system will be infeasible due to the topography of the site.

H. Individual septic systems or sewerage systems designed to dispose of effluent by subsurface soil absorption methods are generally not suited for multifamily construction because of maintenance problems. Satisfactory operation can be expected only under unusually favorable soil conditions. When these methods of sewerage disposal are proposed, an environmental (sanitary) engineer, with no other interest in the project, should be hired by the Borrower to investigate soil and site conditions and make recommendations. A copy of the report must be available to the project architect and be included in the exhibits submitted for review by the lender's construction analyst. When an existing property relies on a septic system, the lender and needs assessor must conduct an intrusive examination by a qualified third party (environmental or sanitary engineer) who must investigate the maintenance history of the septic system and recommend current and future repairs, alterations or replacements needed to assure continued satisfactory operation. An Operations and Maintenance Plan must be prepared as guidance to management and tenants on routine care and maintenance of the septic system

I. Privately Owned Offsite Water and Sewerage Systems.

1. Evidences of acceptable control are:

- a. Certificate of Convenience and Necessity from the State Utility Regulatory Commission.
- b. Franchise from local unit of Government.
- c. Trust Deed.
- d. Third Party Beneficiary Agreement; and
- e. An incorporated non-profit owner's association.

2. If control of continuity of service and the equitability of the service rate schedule is other than (a) above, all legal documents and other appropriate exhibits must be acceptable to HUD's Counsel.

3. All community systems and privately-owned systems must meet local health authority or U.S. Environmental Protection Agency Maximum Contaminant Level (EPA MCL) standards.

J. Subsurface Exploration. For new construction proposals reliable information about subsurface conditions and foundation recommendations must be available to the project architect and the lender's construction analyst prior to foundation design. In some cases subsurface exploration may be needed for existing buildings.

1. The project architect must advise the owner of the scope and type of soils information and/or subsurface investigation required for structural design.

2. The Borrower must provide the services of a registered design professional for determining subsurface conditions. These services shall be provided in accordance with the Owner-Architect Agreement.
3. The lender's construction analyst will assess that the architect has comprehensive, well documented soils information and that project foundation design follows the report recommendations. When necessary, the lender's construction analyst should consult an engineer specializing in reviewing soil reports and related designs.
4. Soils investigation shall be in accordance with Chapter 18 of the International Building Code, except that an investigation and report is required for every project involving new construction, whether or not required by the building official.
5. In some cases, observed conditions at existing properties (e.g., foundation failure, history or indications of sink holes in the immediate vicinity) may require subsurface exploration. In such cases the lender and needs assessor must retain the services of a licensed professional/engineer to conduct intrusive examination to identify the nature of subsurface problems and recommend appropriate action.

K. ALTA Survey General Requirements (see Chapter 19)

An ALTA/NSPS Land Title Survey is required and must conform to the instructions set forth on form HUD-91073M, *HUD Survey Instructions and Surveyor's Report* (including the Table A items listed and certification set forth in the form), which instructions relate both to form HUD-91073M, *HUD Survey Instructions and Surveyor's Report*, and to the Survey that the surveyor must produce. The Survey shall be dated, signed and sealed within 120 days before initial closing, meaning that the field work was performed or updated no earlier than 120 days prior to closing. Local discretion, in accordance with local waiver procedures as applicable, is given to the HUB Director to waive the 120-day limit. (Download the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Survey at [https://cdn.ymaws.com/www.nsp.us.com/resource/resmgr/ALTA\\_Standards/2016\\_Standards.pdf](https://cdn.ymaws.com/www.nsp.us.com/resource/resmgr/ALTA_Standards/2016_Standards.pdf) ).

The Survey shall show all easements, apparent interests (including railroads) or encroachments upon the property or from the property onto contiguous parcels of land. These easements or encroachments must be acceptable to HUD.

1. All easements, restrictions and exceptions on the title policy shall be shown. Blanket easements that cannot be plotted shall be listed with their recording information.
2. Maintenance, joint use, easement and other agreements may be required. In cases where common facilities exist between the insured parcel and an adjacent parcel, Borrower must provide for recordation of an agreement for the common use of land and facilities (e.g., common drives, common lobbies, elevators, walkways, utility roads, parking structures, recreation facilities, storm water management facilities (retention ponds, detention ponds, swales and culverts) or other common facilities). The agreement must grant rights to the HUD project site and its tenants to use the

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- common facilities and provide for an equitable and certain method for funding shared costs for repair and replacement of common facilities.
3. If the HUD project is subject to condominium and property/homeowner association documents, these documents may provide for maintenance, access and cost sharing.
  4. All access roads must be labeled as public or private roads.
  5. **Surveyor's Report.** Lender must provide form HUD-91073M, *HUD Survey Instructions and Surveyor's Report*, signed within 120 days before initial closing by a licensed surveyor, not by an engineer, and bearing the surveyor's original signature and professional seal. Local discretion, in accordance with local waiver procedures as applicable, is given to the Regional Center/Satellite Office director to waive the 120-day limit. The Surveyor's Report supplements the ALTA/NSPS Land Title Survey and must describe with specificity where the conditions described in the Surveyor's Report are physically observed on the property. For refinance transactions, i.e., Section 223(a)(7) and 223(f), Surveyor's Report is not required at the time of Firm Application.
  6. **Surveys Submitted with Refinancing Applications.** Note that when surveys are required as exhibits with an application for refinancing of an existing property and the time line from the date of the application to the anticipated endorsement is beyond the 120-day shelf life for the required survey, the lender and borrower may provide a previously existing survey that reflects existing conditions, provided that the lender and borrower bear the entire risk that the new or updated survey dated within 120 days of endorsement may disclose conditions that are not acceptable to HUD. Also, in the event that proposed alterations and repairs in a proposed refinancing include site grading or site utility work to remedy an observed drainage or other problem related to site elevations, then the HUD office may require Item 5 of Table A (topographic contour intervals) of the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Survey.

## 5B. Accessibility for Persons with Disabilities

### 5B | I Statutory Requirements

A. Most properties proposed for multifamily mortgage insurance are subject to and must observe one or more accessibility statutes and related regulatory and architectural requirements. Lenders must ensure that accessibility requirements are accurately applied to projects by borrowers, design professionals, needs assessors and lender construction analysts and underwriters. Persons engaged in preparing applications must be knowledgeable in relevant Federal, State and local statutes and standards, which include:

1. The Fair Housing Act Design and Construction requirements. Apply to all covered multifamily dwellings built for first occupancy after March 13, 1991 (details in Section III).
2. Section 504 of the Rehabilitation Act of 1973. Applies to all Federally assisted programs, services and activities, including housing (details in Section IV).
3. The Americans with Disabilities Act of 1990 (ADA). Title III of the ADA applies to public accommodations and commercial facilities and to any such portion of a multifamily property. Title II obligates all state and local government organizations (including state and local housing and community development agencies) to make their programs and facilities, including multifamily housing programs and facilities, accessible in accordance with certain regulatory and architectural requirements (details in Section V).
4. State and Local Accessibility Laws. State and Local codes and standards may require greater accessibility than the Federal standards listed above. Where State or Local requirements exceed or vary from the Federal standards, the provisions applicable to particular elements of facilities that provide greater accessibility for persons with disabilities will prevail.

B. The following table summarizes the applicable Federal and HUD <sup>1</sup> accessibility requirements applicable to multifamily properties proposed for mortgage insurance.

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SUMMARY REQUIREMENTS FOR INSURED MULTIFAMILY PROPERTIES

ACTIVITY & YEAR BUILT	MARKET RATE APARTMENTS	AFFORDABLE (not assisted, e.g. LIHTC's)	FEDERALLY ASSISTED <sup>3</sup>
Projects built for 1 <sup>st</sup> occupancy <sup>2</sup> after 3/13/1991	Fair Housing Act Requirements	Fair Housing Act Requirements	Fair Housing Act Requirements & Sec 504 (UFAS or Deeming Notice <sup>4</sup> )
Projects built from 7/11/1988 to 3/13/1991	None	None	Sec 504 (UFAS or Deeming Notice <sup>4</sup> )
Sub-rehab or Refinance of projects built prior to 7/11/1988 or built prior to becoming assisted <sup>5</sup>	None	None	Sec 504 (UFAS or Deeming Notice <sup>4</sup> ) (Load-bearing wall and financial/administrative burden exceptions)
All Public Accommodations (Designed and built for 1 <sup>st</sup> occupancy <sup>2</sup> or altered after 1/26/1993	ADA Title III	ADA Title III	ADA Title III & Sec 504 (UFAS or Deeming Notice <sup>4</sup> )
State or Local Government Programs or Assistance, e.g., LIHTCs with construction start after 1/26/1992	ADA Title II <sup>6</sup>	ADA Title II <sup>6</sup>	ADA Title II & Sec 504 (UFAS or Deeming Notice <sup>4</sup> )

1. Unlike the Fair Housing Act where Congress assigned regulatory and enforcement authority to HUD, Section 504 of the Rehabilitation Act of 1973 obligates various Federal Agencies to develop implementing regulations.
2. 1<sup>st</sup> occupancy means a building that was never used for any purpose.
3. “Federally assisted” projects include those financed or assisted by Project Based Vouchers, 202/811, HOME, HOPWA, Rent Supplements, 236, TCAP, BMIR, etc. LIHTC alone does not constitute Federal assistance unless aforementioned funds are utilized.
4. See HUD’s Alternative Accessibility Standard set forth in HUD's notice at 79 Fed. Reg. 29,671 (May 23, 2014) (“Deeming Notice”), permitting HUD recipients of Federal financial assistance to use an alternative standard for purposes of complying with Section 504 and HUD’s implementing regulation at 24 CFR part 8. The Deeming Notice provides HUD recipients the option of using the 2010 ADA Standards (with certain exceptions) as an alternative to UFAS for new construction or alterations commencing on

or after May 23, 2014.

5. See Appendix 5B, Section IV, paragraph E for a discussion on projects built before July 11, 1988, or before the date of Federal assistance.
6. State and local governments are required to describe specific measures to make programs accessible. Such measures vary especially in reference to existing properties. Appropriate state and local officials must be consulted, particularly in reference to LIHTC transactions.
7. **Adaptable Does Not Mean Deferrable.** A common misinterpretation of the Fair Housing Act design and construction requirements holds that the term “adaptable” contemplates a delay or deferral of the time when “features of adaptable design” required by the statute or regulations may be completed. This is inaccurate. The “features of adaptable design” described in the Fair Housing Act design and construction standards are required at original design and construction. Adaptable for purposes of Section 504 is defined at 24 CFR 8.3 and contemplates limited future physical changes to meet specific needs of particular persons with disabilities.

## **5B | II            Implementing and Applying Accessibility Requirements**

- A. For new construction, all persons or parties involved in design and construction, including but not limited to borrowers, project architects, and general contractors are jointly responsible for compliance. When construction is proposed, design professionals, lenders, and contractors are obligated to assure that plans, specifications, and contract documents describe work that will result in such compliance.
  
- B. When developing a scope of work for existing structures, needs assessors, registered architects when involved, and lenders must identify the statutes and standards applicable to the property (or particular buildings or spaces thereof) and describe all deficiencies and violations and specify the work needed to remedy deficiencies.
  
- C. Lenders must retain persons or firms with particular experience and expertise in the recognition and evaluation of accessibility issues in the design of new construction or substantial rehabilitation projects as well as in the preparation of the CNA for existing properties.
  1. For substantial rehabilitation, observed deficiencies at existing properties must be itemized and clearly listed in the Cover Sheet of the plans (or, where General Notes are listed). The plans and specs must reflect proposed remedies addressing each of the deficiencies.
  2. For other existing properties (e.g., Section 223(f) with repairs and alterations), observed deficiencies and proposed remedies must be described as Accessibility Critical Repairs in the CNA eTool. Accessibility Critical Repairs must:

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- a. Addresses all accessibility deficiencies.
- b. Specify what accessibility requirement is not met in the 'Scope of Accessibility Compliance' field.
- c. Describe the remedies with enough details demonstrating that the remedies are appropriate. The description must be specific enough to be easily inspectable. Describe in the 'Scope of Required Replace/Refurbishment' field.
- d. Describe when the work will be completed as 'Months to Complete.' When the work involves a general contractor, a detailed construction schedule must be submitted as an attachment in the CNA eTool.
- e. The lender must ensure that the schedule requested for corrective action is the minimum possible given the physical characteristics of the remedies and the reasonably anticipated impact of the repairs on tenants and or the costs of displacement.
- f. Provide any additional information and clarifications in the 'Comments' field. For example, describe any circumstance where the implementation of a remedy to a deficiency would compromise other architectural design requirements, (e.g., requires the elimination of closet space).

D. In unusual circumstances (e.g., extensive displacement or large scope of work or excessive costs) accessibility remedies may require more than 12 months to complete. Any corrective work requiring more than 12 months for completion must be referred to HUD Headquarters to the attention of the Director of Technical Support (in the case of new applications) or to the Director of the Office of Asset Management and Portfolio Oversight (in the case of corrective action plans prepared after Endorsement).

E. When completion of remedies for accessibility deficiencies is deferred, the funds required (including amounts assuring completion) should be provided and disbursed in accordance with the applicable escrow requirements for non-critical repairs for new applications under Sections 223(f) or 223(a)(7) of the National Housing Act or, when no new insured financing is proposed, in accordance with HUD Handbook 4350.1.

F. Where a deficiency is identified arising from a state or local accessibility requirement that exceeds the applicable Federal standard(s) and the proposed corrective action does not result in full compliance with that state or local requirement, it is the responsibility of the owner and/or the lender to obtain written confirmation that the proposed corrective work is acceptable to the state or local entity with enforcement jurisdiction.

G. The lender must ensure that the professional preparing the plan has skill and experience commensurate with the scale of work required (see Chapter 5.3, subsection A.1). When compliance with multiple statutes and standards is required or when design documents are needed, the scope of work must be prepared by other qualified professionals (e.g., a registered architect, engineer) retained either by the owner or the lender provided that the

identity and qualifications of the author(s) are fully disclosed. All resulting reports and drawings should be attached to the CNA when it is submitted via the CNA e Tool.

H. Accessibility Critical Repairs list in the CNA eTool does not constitute a safe harbor for compliance with the Fair Housing Act, Section 504 of the Rehabilitation Act of 1973 or the ADA. Proposed remedies in the CNA eTool do not preclude an individual from filing a fair housing complaint with the Department and do not preclude the Department from investigating a complaint or pursuing administrative or legal action under applicable civil rights accessibility laws and regulations to ensure full compliance. Similarly, any corrective action described in the eTool does not preclude the Department of Justice from investigating or filing a lawsuit for Fair Housing Act, Section 504, or ADA violations.

I. The Fair Housing Act, Section 504 of the Rehabilitation Act of 1973, and the American with Disabilities Act require owners to make reasonable accommodations (that is, exceptions to or changes in rules, policies, practices or services) and/or reasonable modifications (physical changes to premises) for persons with disabilities. These requirements are separate and distinct from the requirement to address accessibility deficiencies identified in a CNA. Reasonable accommodations and modifications will not be addressed in CNA reports or corrective action plans. References to detailed guidance on reasonable accommodations and modifications may be found in this Appendix Section III subsection C.

## **5B | III                      Summary of Fair Housing Act Requirements**

A. The Fair Housing Act established certain design and construction requirements for covered multifamily dwellings built for first occupancy after March 13, 1991. The obligation to comply is permanent. Compliance must be maintained through any subsequent repairs, replacements, alterations or rehabilitation. If covered multifamily dwellings (and any associated common areas) are built for first occupancy after March 13, 1991 as an addition to an existing property, the added dwellings and common areas must meet the Fair Housing Act design and construction requirements.

Note that “first occupancy” means that the building has never before been used for any purpose. Thus, the requirements do not apply to any building converted to multifamily use from any other use nor to any substantial rehabilitation of multifamily buildings that were occupied before March 13, 1991. See 42 USC 3604(f)(3)(C), 24 CFR 100.205 and HUD’s Fair Housing Act Design Manual published at 56 Federal Register 9472-9515 [Mar. 6, 1991]. “Covered multifamily dwellings” is defined at 42 U.S.C. 3604(f)(7) and 24 C.F.R. 100.201 and means all units in buildings consisting of 4 or more dwelling units if such buildings have one or more elevators; and ground floor units in other buildings consisting of 4 or more units. A “ground floor” is a floor of a building with a building entrance on an accessible route. A building may have more than one ground floor. Buildings consisting of 1, 2 or 3 units do not contain any “covered multifamily dwellings.”

All covered multifamily dwellings must be designed and constructed to have at least one building entrance on an accessible route unless it is impractical to do so because of the terrain

or unusual characteristics of the site. The burden of establishing impracticality because of terrain or unusual site characteristics is on the person or persons who designed or constructed the housing facility. Even if a property meets the impracticability standard for some or all units, it is not wholly exempt from the design and construction requirements. See 24 CFR 100.205(a).

There are seven design and construction requirements under the Fair Housing Act as follows:

1. Accessible building entrance on an accessible route.
2. Accessible and usable public and common use areas.
3. Usable doors (all the doors allowing passage into and within the units are sufficiently wide to allow passage by persons in wheelchairs).
4. Accessible route into and through the covered dwelling unit.
5. Light switches, electrical outlets, thermostats and other environmental controls in accessible locations.
6. Reinforced walls for grab bars in bathrooms (i.e., to allow later installation of grab bars around the toilet, tub, shower, stall and shower seat, where such facilities are provided).
7. Usable kitchens and bathrooms (i.e., such that an individual in a wheelchair can maneuver about the space).

The needs assessor must measure clear door openings, wheelchair maneuverability areas, slopes and cross slopes of sidewalks and other accessible routes, and other dimensioned aspects of the housing to determine compliance with the Fair Housing Act Accessibility Guidelines or another identified safe harbor standard recognized by HUD. Measurements should be made in typical or representative units of each unit type and of typical common spaces and these must be noted and reported. The use of templates or rods of fixed dimension to confirm measurements not less than (or greater than) required is acceptable. Photographs are encouraged. It is insufficient to merely state that a project, building, or a particular feature “appears to” or “seems to” meet (or not meet) the design and construction requirements.

B. HUD Recognized Safe Harbors. Presently there are ten HUD-recognized safe harbors for compliance with the Act’s design and construction requirements as listed below. Any one of the referenced safe harbors may be relied upon, but only when used in its entirety without the designer or builder selecting provisions from more than one safe harbor or a variety of sources and without any waiver(s) of provisions as might be obtained from a state or local agency. (See HUD’s final rule Design and Construction Requirements, Compliance with ANSI A117.1 Standards, published in the Federal Register on October 24, 2008. See Resources, Subsection C, #5, below.) When conducting an assessment for a building, the needs assessor should use the safe harbor standard referenced in the original design documents whenever the identity of the standard is known. If unknown, the Fair Housing

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Accessibility Guidelines (safe harbor # 1 below) should be used. The needs assessor must name the standard used in the CNA Narrative Section 7.1 of the CNA e Tool.

1. HUD's March 6, 1991, Fair Housing Accessibility Guidelines and the June 28, 1994, Supplemental Notice to Fair Housing Accessibility Guidelines: Questions and Answers About the Guidelines.
2. ANSI A117.1-1986 – Accessible and Usable Buildings and Facilities, used in conjunction with the Act, HUD's Regulations and the Guidelines.
3. CABO/ANSI A117.1-1992 – Accessible and Usable Buildings and Facilities, used in conjunction with the Act, HUD's Regulations, and the Guidelines.
4. ICC/ANSI A117.1-1998 - Accessible and Usable Buildings and Facilities, used in conjunction with the Act, HUD's Regulations, and the Guidelines.
5. HUD's Fair Housing Act Design Manual published in 1996 and revised in 1998.
6. Code Requirements for Housing Accessibility 2000 (CRHA), approved and published by the International Code Council (ICC), October 2000.
7. International Building Code (IBC) 2000, as amended by the IBC 2001 Supplement to the International Codes.
8. 2003 International Building Code (IBC), with one condition. Effective February 28, 2005, HUD determined that the IBC 2003 is a safe harbor, conditioned upon the International Code Council publishing and distributing the following statement to jurisdictions and past and future purchasers of the 2003 IBC:  
  
ICC interprets Section 1104.1, and specifically, the exception to Section 1104.1, to be read together with Section 1107.4, and that the Code requires an accessible pedestrian route from site arrival points to accessible building entrances, unless site impracticality applies. Exception 1 to Section 1107.4 is not applicable to site arrival points for any Type B dwelling units because site impracticality is addressed under Section 1107.7.
9. ICC/ANSI A117.1-2003 - Accessible and Usable Buildings and Facilities, used in conjunction with the Act, HUD's Regulations, and the Guidelines.
10. 2006 International Building Code, published by ICC, January 2006, with the 2007 erratum (to correct the text missing from Section 1107.7.5), and interpreted in accordance with relevant 2006 IBC Commentary.

### C. Resources and Guides for Fair Housing Act Requirements

1. The Fair Housing Act is codified at 42 U.S.C. §§ 3601-3619. It is posted at <http://www.justice.gov/crt/about/hce/title8.php> with implementing regulations, including 24 C.F.R. Part 100, posted at <http://www.archives.gov/federal-register/index.html>

In particular, see 24 C.F.R. §§ 100.203-100.205 for the sections on reasonable modifications of existing premises, reasonable accommodations, and the design and construction requirements.

2. *Final Fair Housing Accessibility Guidelines*, 56 Fed. Reg. 9472 (Mar. 6, 1991), available at [https://www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp/disabilities/fhefhag](https://www.hud.gov/program_offices/fair_housing_equal_opp/disabilities/fhefhag)
3. *Supplement to Notice of Fair Housing Accessibility Guidelines: Questions and Answers about the Guidelines*, 59 Fed. Reg. 33,362-68 (June 28, 1994), available at [https://www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp/disabilities/fhefhasp](https://www.hud.gov/program_offices/fair_housing_equal_opp/disabilities/fhefhasp)
4. *Fair Housing Act Design Manual* (August 1996, Revised April 1998), available at <https://www.huduser.gov/portal/publications/PDF/FAIRHOUSING/fairfull.pdf>
5. *For how to use the safe harbor standards see* HUD's final rule Design and Construction Requirements, Compliance with ANSI A117.1 Standards, published in the Federal Register on October 24, 2008, Section IV, HUD Policy Regarding HUD-Recognized Safe Harbors for Compliance with the Fair Housing Act's Design and Construction Requirements. See 24 CFR 100.205(e) for a list of safe harbors. See 73 Fed. REG. 63610-63616, October 24, 2008 which may be found at <http://www.gpo.gov/fdsys/pkg/FR-2008-10-24/pdf/E8-23785.pdf>
6. *For specific guidance on the Fair Housing Act's design and construction requirements see* Joint Statement of the Department of Housing and Urban Development and the Department of Justice, Accessibility Design and Construction Requirements for Covered Multifamily Dwellings Under the Fair Housing Act, April 30, 2013, available at <https://www.hud.gov/sites/documents/JOINTSTATEMENT.PDF>
7. *For specific guidance on reasonable accommodations in rules, policies, practices, or services for particular tenants see* Joint Statement of the Department of Housing and Urban Development and the Department of Justice, Reasonable Accommodations under the Fair Housing Act (May 17, 2004), available at [https://www.justice.gov/sites/default/files/crt/legacy/2010/12/14/joint\\_statement\\_ra.pdf](https://www.justice.gov/sites/default/files/crt/legacy/2010/12/14/joint_statement_ra.pdf)
8. *For specific guidance on tenant requests for physical modifications to premises see the* Joint Statement of the Department of Housing and Urban Development and the Department of Justice, Reasonable Modifications under the Fair Housing Act (Mar. 5, 2008), available at [https://www.hud.gov/sites/documents/reasonable\\_modifications\\_mar08.pdf](https://www.hud.gov/sites/documents/reasonable_modifications_mar08.pdf)
9. *For Federally Assisted Housing or programs see also* 24 CFR §§ 8.20 to 8.33.
10. For additional technical assistance, see the Fair Housing Act Accessibility FIRST website at [www.fairhousingfirst.org](http://www.fairhousingfirst.org) or call the Fair Housing Accessibility First assistance line at 888-341-7781 on weekdays from 9 a.m. to 5 p.m. ET.

11. See also HUD Office of Fair Housing and Equal Opportunity's disabilities website at:

[https://www.hud.gov/program\\_offices/fair\\_housing\\_equal\\_opp](https://www.hud.gov/program_offices/fair_housing_equal_opp)

## **5B | IV Summary of Section 504 Requirements for Assisted Housing**

### **A. Definition of Assisted Housing**

Section 504 of the Rehabilitation Act of 1973 applies to recipients of Federal financial assistance (Assistance). The Section 504 regulations define "recipient" as any state or its political subdivision, any instrumentality of a state or its political subdivision, any public or private agency, institution, organization, or other entity or any person to which Federal financial assistance is extended for any program or activity directly or through another recipient, including any successor, assignee, or transferee of a recipient, but excluding the ultimate beneficiary of the assistance (24 CFR 8.3). Multifamily housing facilities receiving Assistance from HUD (Assisted Housing) are subject to HUD's Section 504 regulations, including all program accessibility requirements.

1. "Federal financial assistance" is broadly defined to include, among many things, grants, loans, contracts or other arrangements which may take the form of funds, services from Federal personnel, community development grants, and the use of real or personal property (24 CFR 8.3). A few but not exhaustive examples of Assisted Housing subject to Section 504 requirements relevant to FHA loan transactions include:
  - a. HUD funded Section 811 or Section 202 developments and any developments that have project-based rental certificates or vouchers (i.e., rent supplement, rental assistance program, Section 8 project-based assistance);
  - b. A HUD mortgagor receiving a subsidy through the Section 221(d)(3) Below Market Interest Rate Program or the 236 Rental Housing Program.
  - c. Any project assisted with Community Development Block Grant (CDBG), Neighborhood Stabilization Program (NSP), HOME, or HOPWA (Housing Opportunities for Persons With AIDS) funds or any contribution of Federal land or services.
  - d. In 2009, the American Recovery and Reinvestment Act (ARRA) and the Tax Credit Assistance Program (TCAP) became added sources of Federal financial assistance for some multifamily properties.
2. Assistance is provided to the entire property and not to particular buildings or a subset of units, even when the result of the Assistance is the designation of, or a set-aside of, portions of the property for affordable housing or other federal objectives.



Accordingly, Section 504 requirements apply to the property as a whole. However, a property owner's receipt of housing assistance payments from a recipient on behalf of eligible families under a housing assistance payment or voucher program, i.e., tenant-based rental assistance, does not make a project assisted (24 CFR 8.3). However, a recipient of federal financial assistance administering tenant-based assistance must, among other requirements, assist tenants in locating accessible dwelling units (24 CFR 8.28).

3. Owners of Assisted Housing are required to make and pay for physical changes as reasonable accommodations at the request of tenants or prospective tenants unless doing so would impose an undue financial or administrative burden on the housing provider (24 CFR 8.4, 8.20, 8.21, 8.24, 8.33).

#### B. Section 504 requirements for Assisted Housing.

Federally assisted multifamily housing projects must comply with the requirements in 24 CFR Part 8. Such properties include properties that were originally built with Assistance or became Assisted regardless of the time of original construction or receipt of Assistance. HUD's Section 504 regulations require that periodic repair and replacement actions and alterations completed at such projects contribute to a gradual process of change until such time as compliance is achieved. Given that a significant number of years have passed since the enactment of the law, the assisted properties have had much time to undergo gradual process of change to be in full compliance, regardless the date of original construction.

1. All Federally assisted properties must be either: 1) in full compliance with 24 CFR 8.22 requirements for accessibility, or; 2) brought to full compliance by remedying the deficiencies identified through the loan transaction. Such properties must provide:
  - a. A minimum of 5% of the units or at least one unit, whichever is greater, for residents with mobility disabilities.
  - b. An additional minimum of 2% of the units or at least one unit, whichever is greater for residents with sensory disabilities, and;
  - c. Accessible common areas and facilities readily usable by persons with disabilities. See 24 CFR 8.21(b); 8.23(b)(1).
2. HUD may prescribe a higher percentage or number upon demonstration of greater need (see 24 CFR 8.22(c)). Compliance with the Uniform Federal Accessibility Standards (UFAS) is deemed to comply with the accessibility requirements of Section 504 and 24 CFR §§ 8.21, 8.22, 8.23 and 8.25 (24 CFR 8.32). Departures from particular technical and scoping requirements of the UFAS by the use of other methods are permitted where substantially equivalent or greater access to and usability of the building is provided (24 CFR 8.32). Additionally, the Deeming Notice (79 Fed. Reg. 29,671 (May 23, 2014)) permits HUD recipients to use an alternative standard for purposes of complying with Section 504 by using the 2010 ADA Standards (with certain exceptions)

as an alternative to UFAS for new construction or alterations commencing on or after May 23, 2014.

3. Exception. For existing properties, an owner is “never required to undertake a degree of accessibility which would impose undue financial and administrative burdens” but when alterations were (are) undertaken, accessibility was (is) required “up to the point of infeasibility or undue financial and administrative burdens.” (53 Fed. Reg. 20216, 20224 (June 2, 1988)). In addition, measures to achieve compliance with UFAS which had “little likelihood of being accomplished without removing or altering a load-bearing structural member,” are not required. See 24 CFR 8.32(c).

a. When considering the term “undue financial and administrative burden” borrowers and lenders should understand that the scope of the exemption is narrowly construed. Burden is measured against the resources not only of the mortgagor entity but also of its sponsors and members.

b. The term is also intended to exclude possible remedies that would require an owner to engage in activities beyond those normal for an owner of multifamily property, e.g. hiring personal aides to assist tenants in climbing stairs or overcoming similar obstacles to accessibility.

4. Accordingly, the needs assessor or inspector should identify deficient accessibility features as measured against the requirements for new construction described at 24 CFR 8.22. The Lender must review and evaluate the identified accessibility deficiencies and propose remedies unless the Lender demonstrates that:

a. The remedy cannot be accomplished without “removing or altering a load-bearing structural member”<sup>2</sup> or;

b. The remedy would impose an “undue financial and administrative burden,”

#### C. When Both Section 504 and the Fair Housing Act Apply

With respect to physical accessibility requirements, both Section 504 (applies to programs or activities that receive Federal financial assistance) and the Fair Housing Act (applies to covered multifamily dwellings designed and constructed for first occupancy after March 13, 1991) may apply. Recipients subject to both laws must be aware of, and comply with, the requirements of both laws and their implementing regulations. (See Notice H 01-02).

#### D. ADA 2010 Standards as an Alternative to UFAS

In March 2011, the Department of Justice (DOJ), pursuant to its coordination authority under Section 504, advised Federal agencies that they may permit covered entities to use the 2010 ADA Standards for Accessible Design (the “2010 Standards”) as an alternative to UFAS until such time as agencies update their regulation implementing the Federally assisted provisions of Section 504. Accordingly on May 23, 2014, HUD published a notice (the

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<sup>2</sup> The Lender must consult with licensed structural engineer or an architect for the determination.

“Deeming Notice”) permitting HUD recipients of Federal financial assistance to use the 2010 Standards (along with certain additional requirements found in 24 CFR Part 8) for purposes of complying with Section 504 for new construction, substantial alterations and other alterations commenced on or after May 23, 2014. (See citation for the Deeming Notice in Subsection G, Resources, #2, below.) The Deeming Notice is particularly useful for designers and owners of projects required to meet both the requirements of Section 504 as well as the 2010 Standards under the ADA, (e.g., LIHTC deals with Federal assistance such as HOME or Section 8.)

E. Section 504 and UFAS Resources

1. The *Uniform Federal Accessibility Standards* may be found at United States Access Board <http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/ufas#intro>
2. The *Deeming Notice* was published in the Federal Register on May 23, 2014 at 79 Fed Reg. 29,671 and may be seen at <https://www.regulations.gov/document?D=HUD-2014-0042-0001>
3. Further information on Section 504 may be found at:  
[https://portal.hud.gov/hudportal/HUD?src=/program\\_offices/fair\\_housing\\_equal\\_opp/disabilities/sect504](https://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/disabilities/sect504)
4. A useful Field Inspection checklist and guide may be found at:  
<https://www.hudexchange.info/resource/796/ufas-accessibility-checklist/>

**5B | V      The Americans with Disabilities Act (ADA)**

A. Title III

Title III of the ADA applies to any portion of an insured multifamily property that is a public accommodation, i.e., a portion of the facility owned, operated, or leased to or by a private entity for use by, and open to, the general public. This includes any leasing office or facility together with public restrooms and public lobbies.

1. Common areas available only for use by tenants or the guests of tenants are not subject to the ADA (but are subject to the Fair Housing Act and/or Section 504).

2. Any commercial uses included in an insured multifamily property are also covered by the ADA. This includes any retail, office, hotel, or special purpose facility, such as a day care center, senior center, etc.
3. When evaluating physical characteristics of leased commercial space at insured multifamily projects, tenant improvements and/or furnishings should not be considered as they are not a responsibility of the mortgagor. Particular attention should be given to aspects of accessibility related to the structure, means of ingress, egress, and public safety (e.g., emergency warnings, exits, etc.).

The regulations implementing Title III of the ADA are found at 28 CFR Part 36 and extensive regulatory and technical assistance is available at <http://www.ada.gov/>.

ADA information and technical assistance is available at 800-514-0301 (voice) and 800-514-0383 (TTY).

**B. Title II**

Title II of the ADA obligates state and local governments to make all public programs and facilities readily accessible to and useable by persons with disabilities if construction or alteration of facilities began on or after January 26, 1992. This includes the activities and programs of state and local government housing and community development entities such as state housing finance agencies. A significant factor is that state housing finance agencies allocate Low Income Housing Tax Credits (LIHTCs), a funding resource common in the multifamily marketplace. For a time, state and local governments had a choice of standards to be used to measure compliance but now are required to use the 2010 ADA Standards. The change in options available over time has resulted in an inventory of LIHTC (and some other properties) that may have different standards for compliance depending on the year built and the state or local agency involved. The possible standards and dates are as follows:

<b>Date of Construction or Alteration</b>	<b>Applicable Standards</b>
January 26, 1992 to September 15, 2010	1991 ADA Standards or UFAS
On or after September 15, 2010, and before March 15, 2012	1991 ADA Standards, UFAS, or 2010 ADA Standards
On or after March 15, 2012	2010 ADA Standards

Current requirements for new construction are readily discernable: the 2010 ADA Standards. But requirements that may apply currently to existing properties or that may have applied to existing properties at the time of construction may be uncertain. When preparing a needs assessment for an application for a property assisted by a state or local program the lender and needs assessor should consult the relevant Qualified Allocation Plan (for LIHTCs) or

other state/local program guidance to determine the standard to be applied and/or directly inquire of the relevant agency concerning the accessibility requirements applicable to the property.

In all cases involving the accessibility requirements of state and local programs the role of the lender and needs assessor is to compare the conditions at a specific property to the requirements imposed upon the state/local program. Whether or not the state or local program properly addresses the requirements of ADA Title II is not an issue to be determined when underwriting or preparing a CNA for a particular property.

## **5B | VI                      Meaning of Accessible, Adaptable and Features of Adaptive Design**

### **A. Accessible**

For purposes of Section 504, “accessible,” when used with respect to the design, construction, or alteration of a facility or a portion of a facility other than an individual dwelling unit, means that the facility or portion of the facility can be “approached, entered and used by individuals with physical handicaps. The phrase *accessible to and usable by* is synonymous with accessible”. 24 CFR 8.3.

In reference to the Fair Housing Act, 24 CFR 100.201 defines “accessible,” when used with respect to the public and common use areas of a building containing covered multifamily dwellings, with the same language as Section 504. However, the Fair Housing Act definition of “accessible” references different standards (the safe harbor standards, not UFAS) and the premises within the dwellings must include certain “features of adaptive design” as described in this Appendix 5B Section III above.

### **B. Accessible Routes**

For purposes of the Fair Housing Act, an accessible route is defined as a “continuous unobstructed path connecting accessible elements and spaces in a building or within a site” negotiable by a person with a severe disability using a wheelchair and that is also safe and usable by persons with other disabilities. 24 CFR 100.201. Any route that complies with ANSI A117.1-1986 or a comparable standard is an *accessible route*. For Section 504, 24 CFR 8.3 defines an accessible route as a continuous unobstructed path connecting accessible elements and spaces in a building or facility that complies with the space and reach requirements of applicable standards prescribed by § 8.32. Currently UFAS is the standard under 8.32.

### C. Accessible Units

In regard to dwelling units, the Fair Housing Act requires that all “covered multifamily dwellings” (see Section III, subsection A of this Appendix 5B) with a building entrance on an accessible route have accessible public and common use areas and doors wide enough to allow passage into and within the premises by persons in wheelchairs. Unit interiors must have the following “features of adaptive design:” an accessible route into and through the dwelling; light switches, electrical outlets, thermostats and other environmental controls in accessible locations; reinforcements in bathroom walls to allow later installation of grab bars; and usable kitchens and bathrooms such that an individual in a wheelchair can maneuver about the space. 24 CFR 100.205(c).

By contrast, HUD’s Section 504 regulations require that multifamily housing projects contain a minimum of 5% of units or at least one unit, whichever is greater, accessible for persons with mobility impairments and an additional 2% of units or at least one unit, whichever is greater, accessible for persons with hearing or vision impairments. In circumstances where greater need is shown, HUD may prescribe higher percentages. Further, accessible units must, to the maximum extent feasible and subject to reasonable health and safety requirements, be distributed throughout projects and sites and shall be available in a sufficient range of sizes and amenities so that a qualified individual with disabilities’ choice of living arrangements is, as a whole, comparable to that of other persons eligible for housing assistance under the same program. 24 CFR 8.26. An accessible dwelling unit is defined as a unit “on an accessible route and adaptable and otherwise in compliance with the standards set forth in Section 8.32”.

### D. Adaptability

HUD’s Section 504 regulations permit recipients to construct or convert “adaptable” units. A dwelling unit is “accessible” when: 1) is on an accessible route, as defined by HUD’s Section 504 regulations and UFAS; and 2) is adaptable and otherwise in compliance with the standards set forth in 24 CFR § 8.32. “Adaptable” or “adaptability” means the ability to add or alter certain building spaces and elements (e.g., kitchen counters, sinks, and grab bars) to accommodate the needs of either the disabled or nondisabled persons, or to accommodate the needs of persons with different types or degrees of disability. “Adaptability,” as defined for Section 504 purposes, does not contemplate adding or altering features in a manner requiring construction. But for Section 504, “adaptable” does include the concept that a unit designed in compliance with UFAS may lack certain particular items needed by a tenant (e.g. grab bars or countertops at a different elevation) and when required by a tenant, such particular items must be provided at no cost to the tenant.

As noted above, the Fair Housing Act requires that the interior of covered units have certain “features of adaptive design”. The phrase “features of adaptive design” must not be confused with “adaptability” as defined in HUD’s Section 504 regulations and UFAS. The “features of adaptive design” required by the Fair Housing Act must be accomplished at the time of construction and not later as alterations or on an “as needed” basis. Accordingly, needs assessors must not describe any construction required to remedy accessibility deficiency as “adaptation” and thereby omit from the Critical repairs list, or defer to a later or “as needed” time.

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## 5C. Seismic Resistance and Fire Protection Standards for Existing Buildings

### 5C | I Seismic Resistance Standards for Existing Buildings

#### A. General

1. To improve seismic safety in older buildings and to preserve existing housing, project applications for substantial rehabilitation and refinance/acquisition must comply with the relevant standards published by the American Society of Civil Engineers (ASCE) and its affiliate, the Structural Engineering Institute (ASCE/SEI). The relevant standard is ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings.
2. For all applications, the Earthquake Spectral Response Acceleration Parameters  $S_{XS}$  and  $S_{X1}$  values for hazard level BSE-1E must be entered in the CNA eTool. The values for  $S_{XS}$  and  $S_{X1}$  may be obtained from a Seismic Design Maps obtained from tools available online. The US Geological Survey website lists third-party Graphical User Interfaces (GUIs) available to use:

<https://www.usgs.gov/natural-hazards/earthquake-hazards/design-ground-motions>

3. The following are the parameters for generating the  $S_{XS}$  and  $S_{X1}$  values that will be used for determining whether a seismic evaluation will be required:
  - a. Building Code Reference Document must be “ASCE 41-13”.
  - b. Earthquake Hazard Level analysis procedure should be “BSE-1E” whereas the hazard level applied in the seismic analysis shall be per ASCE 41-13 requirements.
  - c. Site Soil Classification should be entered as one of the five International Building Code defined possibilities (1-hard rock, 2-rock, 3-very dense soil and soft rock, 4-stiff soil, 5-soft clay), which may be obtained from the relevant local building code official with jurisdiction.
  - d. Latitude & Longitude (or site address) of the property.
  - e. The values generated should be entered in the identified spaces for  $S_{XS}$  and  $S_{X1}$  in the CNA eTool and a report printout in “.pdf” file format should be attached and uploaded in the eTool.
4. A seismic hazard and building performance analysis report (Seismic Report) must be submitted with the loan application unless the property is exempt as described in Section B below.
  - a. The Seismic Report should include an examination of the structure for continuity, ductility and resistance to lateral forces.
  - b. The analysis shall assume a building performance objective of “life safety” as defined by ASCE 41-13.



c. Mitigation must be provided to meet minimum life safety requirements. In general this means that for a design earthquake (i.e. a measure of the anticipated event) the building may be expected to avoid partial or total structural collapse, or damage to nonstructural components which damage would be life threatening, e.g., damage leading to fire, blocked egress, release of hazardous materials, etc.

5. Section 223(a)(7) applications. A new Seismic Report is not required if such study was done as part of the original insurance application. A new report must be submitted with the application if the property site's Design Earthquake Spectral Response Acceleration Parameters exceeds the threshold for exempt buildings as defined below in Section B and no Report was completed previously.

## B. Exempt Properties

1. Benchmark Buildings. A "benchmark building" is an existing building originally built to or later retrofitted to an identified design code that equals or exceeds the standards defined by ASCE 41-13. A licensed design professional experienced with lateral force design must determine whether a building is a "benchmark building." The design professional must review the plans (if available) and perform a site visit to confirm that the building does in fact meet the benchmark building code. If a determination cannot be made by this means, a Seismic Report must be completed.
2. Exempt Buildings. Many buildings are exempt from the seismic hazard and building performance analysis required by ASCE 41-13. A property composed of exempt buildings as defined below do not require a Seismic Report:
  - a. Any single-story, wood or steel frame building with total building area equal to or less than 3,000 square feet.
  - b. Any single-story accessory building (i.e., no dwellings in structure).
  - c. Any detached or semi-detached structure where the Design Earthquake Spectral Response Acceleration Parameter  $S_{XS}$  for hazard level BSE-1E is less than .400 g.
  - d. Any building on a site with both Design Earthquake Spectral Response Acceleration Parameters of:
    - 4)  $S_{XS}$  for hazard level of BSE-1E is less than .330 g, and;
    - 5)  $S_{X1}$  for hazard level of BSE-1E is less than .133 g.

## 5C | II Fire Protection

A. Fire/smoke detection, alarm and communication systems must comply with the Life Safety Code, NFPA 101, for the entire project.

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1. The 2006 NFPA 101, paragraph 31.3.4.5.1, states that “approved single station smoke alarms shall be installed outside every sleeping area in the immediate vicinity of the bedrooms and on all levels of the dwelling unit, including basements”, and the regulation in 24 CFR 200.76 requires that smoke detectors must also be installed inside each sleeping area.
  2. Accordingly, smoke detectors must be installed:
    - a. Inside all bedrooms.
    - b. Outside every sleeping area in the immediate vicinity of the bedrooms, and
    - c. On all levels of the dwelling unit, including basements.
  3. For Section 223(f) & 223(a)(7) projects, installation of required smoke detectors is a Critical Repair.
  4. The regulation does not specify whether the required smoke detectors must be hard wired, or battery powered. However, Section 3.3.9.1 of NFPA 101 permits a battery-operated device.
    - a. For substantial rehabilitation projects, regardless of the scope of work, hard-wired (for power) smoke detectors with interconnectivity are required.
    - b. Considering the difficulty, time and expense of feeding electrical wiring through the walls of existing buildings, battery-operated smoke detectors are acceptable in Section 223(f) and 223(a)(7) projects.
    - c. If battery powered, the smoke detectors must have power cells with the following characteristics:
      - 1) The cells must have a ten-year life.
      - 2) The cells must be tamper resistant.
      - 3) The cells cannot be used in any other toy or appliance.
      - 4) The smoke detector may have a manual (but not automatic) silencing device to clear unwanted alarms such as cooking smoke.
      - 5) Smoke detectors as described above appear to meet the intent of the smoke alarm requirements in Section 9.6.2.10 of NFPA 101.
- B. Any new construction must have a sprinkler system as required by NFPA 101.
- C. For substantial rehabilitation, Level 3 Alterations must comply with NFPA 101 fire protection provisions for new construction.
- D. New additions must be separated from existing structures, even if the entire facility is included under one mortgage. Separation must equal or exceed:
1. Two-hour rated firewall;

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2. One and one half (1 ½) hour protected openings;
3. Class B labeled fire doors;

E. New construction of additions in substantial rehabilitation projects must comply with standards for new construction.

### **5D. Standard Construction and Architectural Documents and Related Costs Exhibits for Firm Commitment Applications**

#### **5D | I Required Exhibits for New Construction**

##### **A. Property Site Related Exhibits**

1. Location map.
2. Aerial photograph or satellite images for each site showing existing conditions and full site labeled by property name and site address.
3. Soils investigation, geotechnical and foundation design report.
4. USGS Seismic Threshold Report.
5. Municipal and utility company letters of confirming availability of service.
6. Documents evidencing site ingress and egress and other general criteria per MPS (Handbook 4910.1) Chapter 2.

##### **B. Property Legal Exhibits**

1. Zoning compliance and Building Department Review permit, including Fire Department approval.
2. City/County Health Officer's report/permit where private water supply or sewage treatment systems are involved.
3. Drafts of proposed joint use, access and maintenance agreements where common use easements are anticipated.

##### **C. Construction Documents**

1. Drawings and Specifications conforming to Appendix 5E.
2. Offsite Construction descriptions conforming to Appendix 5E.

##### **D. Contracts and Certifications**

1. AIA B108 with HUD Amendment to AIA Document B108 (HUD-92408-M)
2. Appendix 5H.1 Architect's Certification
3. HUD-92442M, Construction Contract
4. AIA A201 with HUD Supplementary Conditions to the Contract for Construction (HUD

92554M)

**E. Architectural and Cost Analysis Report, with Cost Related Exhibits**

1. Architectural Analysis Report
2. Cost Analysis Report
3. HUD-2328, Contractor's and/or Mortgagor's Cost Breakdown
4. HUD-92326, Project Cost Estimate
5. HUD-92331-B, Cost Certification Review Worksheet

**F. CNA eTool with Required Data Entered to Produce the Following:**

1. Completed physical inventory of the property to be constructed (i.e., Assessment Entry Screens for Sites, Buildings, Unit Types, Units and Common Spaces, Parking, Components Alternatives and Recommendations, Financial Factors).
  - a. Units Inspected and Narrative Sections are not required to be completed.
  - b. TCO (Total Cost to Operate) and Energy-related fields are required only for Green MIP transactions.
2. Estimate of Replacement Costs (form HUD-92329, Schedule of Insurable Values Report) related information.
3. Financial Factors, Future Needs and Financial Schedule/Estimate Period Recap for Reserve for Replacement escrow deposit amounts.

**5D | II Required Exhibits for Substantial Rehabilitation**

**A. Property Site Related Exhibits**

1. Location map.
2. Aerial photograph or satellite images for each site showing all structures and full site labeled by property name and site address.
3. USGS Seismic Threshold Report.
4. A seismic report per Appendix 5C for existing properties if the values for SXS and SX1 exceed prescribed parameters.

**B. Property Legal Exhibits**

1. Certificate of Occupancy or Final Inspection Report, if available, or a statement from the jurisdiction with building and/or zoning code enforcement authority recognizing any legal non-conforming use.

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2. Municipal Code Violation Report/Clear Report, and Fire Marshall's Report/Clear report.
3. City/County Health Officer's report/clear report where private water supply or sewage treatment systems are involved.
4. Zoning compliance and Building Department Review permit, including Fire Department approval for the proposed rehabilitation.

### **C. Property Physical Condition Related Exhibits**

1. Set of as-built plans, if available. This may be submitted separately if the file-size is prohibitive or included in the plans and specs.
2. Joint Inspection Report (per Chapter 5.9.B.2) and Scope of Work Summary (per Chapter 5.9.C.3)
3. Any O&M plans in use or proposed for use at the property (e.g., Lead Based Paint, Asbestos Containing Material).
4. The borrower's written narrative describing the operational policy to distinguish capital needs verses operating expense items for maintenance (see Appendix 5G.IV.A) when the borrower proposes or claims to include capital expenditure items in the operating expense.

### **D. Construction Documents**

1. Drawings and Specifications conforming to Appendix 5E.
2. Offsite Construction descriptions conforming to Appendix 5E.

### **E. Contracts and Certifications**

1. AIA B108 with HUD Amendment to AIA Document B108 (HUD-92408-M)
2. Appendix 5H.1 Architect's Certification
3. HUD-92442M, Construction Contract
4. AIA A201 with HUD Supplementary Conditions to the Contract for Construction (HUD 92554M)

### **F. Architectural and Cost Analysis Report, with Cost Related Exhibits**

1. Architectural Analysis Report
2. Cost Analysis Report
3. HUD-2328, Contractor's and/or Mortgagor's Cost Breakdown
4. HUD-92326, Project Cost Estimate
5. HUD-92331-B, Cost Certification Review Worksheet

### **G. CNA eTool with Required Data Entered to Produce the Following:**

1. Completed physical inventory of the property to be constructed (i.e., Assessment Entry Screens for Sites, Buildings, Unit Types, Units and Common Spaces, Parking, Components Alternatives and Recommendations, Financial Factors).
  - a. Units Inspected and Narrative Sections are not required to be completed.
  - b. TCO (Total Cost to Operate) and Energy-related fields are required only for Green MIP and underwriting energy savings transactions.
2. Estimate of Replacement Costs (form HUD-92329, Schedule of Insurable Values Report) related information.
3. Financial Factors, Future Needs and Financial Schedule/Estimate Period Recap for Reserve for Replacement escrow deposit amounts.

## **5D | III Required Exhibits for Refinance or Acquisition of Existing Property**

### **A. Property Site Related Exhibits**

1. Location map.
2. Aerial photograph or satellite images for each site showing all structures and full site labeled by property name and site address.
3. USGS Seismic Threshold Report.
4. A seismic report per Appendix 5C for existing properties if the values for SXS and SX1 exceed prescribed parameters.

### **B. Property Legal Exhibits**

1. Certificate of Occupancy or Final Inspection Report, if available, or a statement from the jurisdiction with building and/or zoning code enforcement authority recognizing any legal non-conforming use.
2. Municipal Code Violation Report/Clear Report, and Fire Marshall's Report/Clear report.
3. City/County Health Officer's report/clear report where private water supply or sewage treatment systems are involved.

### **C. Property Physical Condition Related Exhibits (Attached to CNA eTool)**

1. Set of as-built plans, if available. This may be submitted separately if the file-size is prohibitive.

2. Supporting documents and Reports for describing the condition of the property such as Intrusive Inspection Reports, etc., as relevant.
3. Annotated photography for existing properties showing:
  - a. Sites and buildings, unique and typical common spaces, each unit type (but not model units used for marketing purposes) including all rooms and baths, and typical conditions together with any photos necessary to document specific locations and/or the nature or content of immediate repairs. Photos of unit types should include any common areas (hallway, breezeway, elevator) that must be transited to access the unit.
  - b. If Fair Housing Act units or designated UFAS accessible units are present, provide photographs of one unit of each unit type that is covered or designated. These photos should include documentation of compliance (or not) with dimensional requirements.
  - c. Where distinct conditions characterize groups of units, (e.g., renovated units vs. un-renovated units) provide photos of the unit of each distinct condition as though the distinct condition defined a separate unit (e.g., 1-BR/1-BA renovated vs. 1-BR/1-BA unrenovated).
  - d. Annotate or label photos indicating the location (building and/or unit or location on site) as well as the description of the photographed object and relevant comments, if any.
  - e. While photos or text documents may be attached to address a particular component or topic, it is recommended that the needs assessor and/or lender assemble photography and comments in a single or multiple pdf documents organized by Need Category, i.e., by ASTM outline, e.g., 3.2 Site, 3.3 Mechanical & Electrical Systems, etc. These attachments should cover all Need Categories identified at the property. See the Standard Estimated Useful Life Table.
4. Any O&M plans in use or proposed for use at the property (e.g., Lead Based Paint, Asbestos Containing Material).
5. The borrower's written narrative describing the operational policy to distinguish capital needs verses operating expense items for maintenance (see Appendix 5G.IV.A) when the borrower proposes or claims to include capital expenditure items in the operating expense.

**D. Hired Third-Party and Professionals Related Exhibits**

1. A statement of qualifications and experience for the Needs Assessor unless such a statement has been entered on the "Narrative" section of the CNA eTool.
2. Third party certifications for the lender's needs assessor consistent with Chapter 11.2 subsections G and H.
3. If a Project Architect has been retained, submit the following:
  - a. The architect's resume and other supporting documents evidencing qualification.

- b. The Owner-Architect Agreement, AIA B104.
  - c. The project architect's certification for a refinancing transaction substantially in the form of Appendix 5H.2.
  - d. Plans and Specifications, file size permitting (otherwise, submit separately);
  - e. The plans and specifications must be submitted at the time of closing in the same manner as the requirements described for new construction or substantial rehabilitation applications. (See Chapter 5.8.C.4 and 5.).
  - f. Lender's 223(f) Repairs & Alterations Cost Worksheet (See Appendix 5L)
4. If a General Contractor has been retained, submit the following:
- a. The general contractor's resume and other supporting documents evidencing qualification.
  - b. The Owner-Contractor Agreement, AIA A104. A104 must incorporate the lists of repairs and alterations as well as the Project Architect's plans and specs by reference.
  - c. Detailed Construction Schedule, in addition to the "Months to Complete" entries for the listed repairs in the CNA e-Tool. Note that repairs that correct accessibility deficiencies must be completed as soon as possible, notwithstanding the standard 12-month term of the Repair Escrow.
  - d. The contractor's cost breakdown of the total estimate that is consistent with Section 5.3.C.5.

**E. CNA eTool Fully Completed per Appendix 5G.**

**5E. Firm Commitment Drawings and Specifications to be Submitted by the Borrower's Architect**

**New Construction and Substantial Rehabilitation**

**A. Cover sheet:**

1. Project name and identification number.
2. Spaces for signatures of Project Architect, Architect administering contract, owner, contractor, Lender, and bonding company.
3. Tabulation of units, buildings and parking spaces with gross square footages and net rentable square footages:
  - a. Number of units for each type.
  - b. Number of units and type in each building.



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- c. Non-rental living unit.
- d. Number of parking spaces, open, covered, common area garage spaces, in-unit garage spaces (garage part of dwelling unit and available only to tenant of that unit), and accessible standard, van and covered spaces.

B. Index of drawings by name, numbered consecutively, with date of preparation and latest revision date. Consecutive numbering is required for each drawing category (Architectural, Land Improvements, Structural, Plumbing, HVAC, Electrical, etc., shown as A-1, A-2, A-3... L-1, L-2, L-3, etc.), but absolute consecutive numbering of the entire set is optional and would appear only in addition to the categorical numbering.

C. ALTA/ACSM Land Title Survey including items 5 and 6a and 6b of Table A of the ALTA/ACSM Minimum Standard Detail Requirements at a scale of 1" = 40' dated not more than 6 months prior to the date of application for firm commitment. Note that the survey and the HUD 91073M must be updated and certified not earlier than 120 days before initial endorsement.

D. Proposed Plot plan/site plan at a scale not less than 1" = 40' - 0" showing:

- 1. Land boundaries, dimensions, and North Point.
- 2. Streets, alleys, or roads adjacent or within the property boundaries, together with walks, curbs, pavements, steps, ramps, play areas, parking areas, and drying yards, and utilities such as gas, water, electric, and sewer lines.
  - a. Dimension or size with distance from location points, material indication for such items as walks and pavements, and extent of each.
  - b. Indications of "new" or "existing" and public dedication of any streets or alleys in the project.
- 3. Buildings, building designations, location dimensions, and overall dimensions.
- 4. Elevations of first floor, elevations of finish and existing grade at building corners and entrances, elevations of curbs and streets, and invert elevations of main sewer and direction of flow.
- 5. Utilities servicing the property, or distance to point of connection and utility lead-ins of service connections; yard lighting; lawn hydrants and lawn sprinkler systems with the pipe sizes and controls; drains; and fire hydrants.
- 6. Retaining and garden walls, fences, guard rails, garages and accessory structures, with dimensions.
- 7. Existing trees and other natural features and whether to be removed or preserved.

E. Grading and drainage plan at a scale not less than 1" = 40' - 0" when essential information cannot be clearly shown entirely on the plot plan/site plan.

1. Grade elevations at all building corners and at entrances, walks, drives, parking areas, terraces, yards, walls and steps, and first floor elevations. Existing and proposed grading contours at appropriate intervals.
2. Yard and roof drainage with controlling grades and dimensions of drainage lines, culverts, catch basins, drainage inlets, gutters, curbs, drainage disposals, and any existing facilities.

F. Planting plan at a scale not less than 1" = 20' - 0" indicating:

1. Outline of buildings and other improvements with physical features of the site to establish the location and relationship of planting and landscape construction.
2. Distribution of plant material, location, quantity and key number of each general species in each group; outline of planting beds, primary lawn areas, secondary lawn areas and existing trees to be preserved or transplanted.
3. List of plant material using English and Latin names, key number for each variety for reference to plan, and the size, quality or other description.

G. Basement plans for each building type at a scale not less than 1/8" = 1' - 0." (Foundation plans when no basements.)

1. Dimensions and names indicating use of spaces, with the layout of permanent equipment.
2. Location of structural elements with dimensions or notes as to: thickness and size; windows; vents; areaways; doors; lights and switches; drains; sumps; etc. Unless there is a separate foundation plan, show locations and size of footings, piling and other substructure work.
3. Large-scale drawings or details of spaces not clearly shown.

H. Floor plans:

1. Unit floor plans at a scale not less than 1/4" = 1' - 0" for each basic type living unit and any major variation. Separate unit plans are not required when the general floor plans are provided at 1/4-inch scale and contain all essential information.

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- a. Partitions to scale; rooms, closets and hall dimensions; over-all dimensions; window locations and type designations referring to schedule showing design, thickness, and size; dimensioned stair locations, runs and width, landings and handrails.
  - b. Plumbing fixtures; soil and vent stacks; kitchen cabinets and equipment; electric lights; switches, receptacles, and special power outlets; closet shelving and clothes rods; radiators or other heating devices, chimneys, and all other such items.
  - c. Location of structural elements such as columns, lintels, joists, beams, girders, and bearing partitions. Show sizes, spacing and direction of members. Separate structural drawings are required where the structural information would obscure other information.
  - d. All conditions where units are to join other units; end-unit conditions.
  - e. Identification of living unit types by a number or letter.
2. General floor plans at a scale not less than  $1/8'' = 1' - 0''$ .
    - a. Dimensional relation of living and building units with over-all dimensions of building units and buildings, partition arrangement and fenestration of end units, units at corners and units at offsets; other partitions as necessary to show variations from the typical unit plans and relation of rooms in adjacent living units, wall separating building units, and their material and thickness.
    - b. Buildings and those units identified by numbers or letters.
- I. Roof plans at a scale not less than  $1/8'' = 1' - 0''$ .
    1. Relation of intersection of the various building unit roofs; direction of slopes; parapets, chimneys, vents, and other projections; downspout locations and sizes.
    2. Omit where the essential information can be shown clearly on the plot plan or other drawings.
- J. Elevations:
    1. General elevations at a scale not less than  $1/8'' = 1' - 0''$ . Exterior design of all sides of buildings with existing and proposed grades at buildings, floor lines and elevations, floor height dimensions, roofs, attic vents, parapets, cornices, downspouts, openings, material notes, and other essential features.
    2. Typical elevations at a scale not less than  $1/4'' = 1' - 0''$  to show portions of facade with a special exterior design. Show materials, jointing, special features, windows, doorways, cornices, parapets, and details.

K. Sections:

1. Outline sections - scale not less than  $\frac{1}{4}'' = 1' - 0''$ . Show various height conditions, cross-sectional characteristics, and floor level relations, when other drawing information is not adequate.
2. Detail sections - scale not less than  $\frac{3}{8}'' = 1' - 0''$ . Show each type of exterior wall and bearing wall or partition, from footings to roof.
3. Exterior wall sections - scale not less than  $\frac{3}{8}'' = 1' - 0''$ . Show complete construction of walls with thickness at various stories, floors, furring, waterproofing, ceilings, roofs, including pitch and flashings, room heights, anchorage and bearings, cornice and gutter, insulation, vapor barrier, foundation walls and footings, conditions at various basement depths, basement floors or access space, roof space, attic and foundation vents.

L. Details at a scale not less than  $\frac{3}{8}'' = 1' - 0''$ . Provide the following except where such features do not occur:

1. Front and rear entrances, plan of each with elevations and sections.
2. Stair plans and sections showing stringers, treads, risers, newels, balusters, handrails, rise, run, and headroom.
3. Kitchen cabinet plans, elevations and sections.
4. Bathroom plans with elevations showing accessories and cabinets.
5. Standard location and elevation for electrical outlets, switches and controls.
6. Entrance lobbies.
7. Platforms and areaways.
8. Special exterior and interior details, such as bay windows, dormers, cupolas, vents, fireplaces, and built-in furniture.

M. Schedules:

1. Door schedules - size, thickness, material and design of each door, with plan identification. Fire doors show rating.
2. Window schedule - size, thickness, materials and design of each window, with plan identification.

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3. Finish schedule - material and type finish of floors, base or wainscot (with height), walls, ceilings and trim for various rooms or spaces.

N. Structural: Drawings and details as appropriate, with complete structural information, must be provided when such information cannot be shown on general drawings without obscuring other information.

O. Mechanical/Electrical/Plumbing (MEP): Heating, cooling, plumbing and electrical layouts on separate drawings unless the systems are simple enough to be shown on other drawings. Include all pertinent design data. Show special mechanical installations separately.

1. Heating drawings for each system.

- a. Location and size of boilers, furnaces, or heaters; the make, model number or type fuel input and net heat output of each.
- b. Layout, location, and sizes of supply and return piping, ducts, risers, and branches, and insulation locations.
- c. Location, sizes and output in BTU of radiators, registers, grille and panel surfaces, valves, vents, traps, dampers and other accessories; make, model number or type of each.
- d. Make, model number, and firing rate of all firing equipment, and similar detailed data on other components of each system, such as, controls, pumps, blowers, and filters.
- e. Location, type, manufacturer's name, and model number of domestic water heating and related equipment including: storage, arrangement and sizes of connecting piping; make and model number and other pertinent information for control equipment and safety devices.
- f. Design data for the system, including outside design temperature, boiler operating temperature, BTU output, pressure or temperature drops, air temperatures at registers, pump or fan capacities, volumes, and velocities, heat loss of each building and total calculated heat load connected to each heating system; net output in BTU of each boiler and system.
- g. Design data for each domestic hot water system and, when connected to a heating system, the additional heat load included in the total for the connected system.

2. Plumbing drawings:

- a. Horizontal sewer and drain systems with soil, waste, and vent stacks; branch wastes and vents; drains, cleanouts, traps, sump pumps, etc., connections to sewer, sizes of lines and stacks. Diagram of typical stack including soil, waste, and vents.

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- b. Cold water distribution system, size of mains and branches, location of hose bibs, valves and drains.
  - c. Hot water distribution system together with circulating lines and pumps, valves, sizes of mains and branches.
  - d. Gas distribution system, size of mains and branches, meters, etc.
3. Electrical drawings:
- a. Service lines, primary distribution and secondary distribution, service characteristics and wire sizes.
  - b. Meter and panel locations and manner of mounting.
  - c. Interior distribution and wiring of typical units.
  - d. Lights, receptacles, switches, special purpose outlets, and connections to equipment if not on the architectural plans.
  - e. Yard and grounds lighting and lighting of all public and common spaces and controls.
  - f. Power riser diagram and switchboard schedule.
  - g. Fire detection and alarm system riser diagram and schedule.
  - h. Symbol list.
4. Air conditioning drawings:
- a. Locations, cooling capacity, and horsepower of compressor; cooling tower condensing units; and individual cooling units. Make, model number, and rating.
  - b. Layout of system including ducts, grilles, registers, diffusers, pipe sizes, and location of valves, vents, dampers and controls.
  - c. BTU load for each space, size and rating of equipment.
  - d. Design data for the system, including: CFM space requirements; blower ratings, type condenser cooling; inlet and outlet water temperature; and GPM water-flow rate.
  - e. Electric wiring layout, location of motors, fans, pumps, switches, and their load requirements.

P. Any other drawings required by lender.

Q. Appropriate general and supplementary conditions and Davis-Bacon wage rates (where applicable).

R. Contract specifications: Use a currently supported version of CSI Master Format specifications of the Construction Specifications Institute (CSI).

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1. Describe all materials, equipment, and construction and include two, and preferably three, comparable products where practicable, or specify by performance characteristics.
2. Include the latest edition of the “General Conditions of the Contract for Construction”, AIA Document A201.
3. Fully describe all materials, including alternatives, and do not use general references to HUD’s Minimum Property Standards. Do not include the words “or equal”.
4. Divide into sections separately describing the work to be done by each trade essential to project completion. Consecutive page numbering is required for each trade category (Concrete, Masonry, Metals, etc.), but absolute consecutive numbering of the entire specification is optional and would appear only in addition to the trade numbering. Include the following items:
  - a. A cover sheet: Must include title of project, the lender, project number, project location, and a signature block setting forth:

IDENTIFICATION

Architect (Print Name) by (Signature)  
Owner (Print Name) by (Signature and Title)  
Contractor (Print Name) by (Signature and Title)  
Lender (Print Name) by (Signature and Title)  
Bonding Co. (Print Name) by (Signature and Title)  
Date\_\_\_\_\_

- b. Index.
  - 1) Divisions with name.
    - (a) Trade, name and page number.
    - (b) Trade section, name and page number.
  - 2) Pages numbered consecutively
- c. Conditions.
  - 1) General Conditions of the Contract for Construction, AIA Document A201, latest edition.
  - 2) Supplementary Conditions of the Construction Contract, Form HUD-2554, latest edition.

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- 3) Architect's Supplementary Conditions, if any.
  - d. Trade sections. Include:
    - 1) Complete description of all work to be performed. This will include scope of work, materials and workmanship.
    - 2) Necessary specific instructions for coordinating the work with other trades.
  - e. Methods of Specifying.
    - 1) Performance. List required qualities of products and assemblies and end result.
    - 2) Reference Standards. Incorporate references to nationally recognized standards published by industry associations, testing organizations and government, such as American National Standards Institute (ANSI), Underwriters' Laboratories (UL), and Department of Commerce (DOC).
    - 3) Proprietary. List products and assemblies by manufacturer or brand name, and grade or model.
      - (a) Include at least two comparable.
      - (b) Use a single brand only if there is no comparable.
  - f. Not acceptable.
    - 1) Use of the words "or equal".
    - 2) Reference to HUD or HUD publications, such as:
      - (a) Minimum Property Standards (MPS),
      - (b) Materials Bulleting (UM),
      - (c) Materials Releases (MR), and
      - (d) Structural Engineering Bulleting (SEB).
- 3) Cash or lump sum allowances.

### S. Offsite Drawings and Specifications.

1. Offsite improvements are those required to service the project but outside of the property boundary lines.
  - a. Include utilities, walks, curbs, gutters, streets, drainage structures, landscaping, and similar improvements beyond the property lines.
  - b. Do not include short extensions of utilities, walks, drives, drainage structures and similar improvements beyond the property lines which connect with those next to the property lines.



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2. Offsite improvements may be included in the overall contract drawings and specifications, but the extent must be clearly defined on the plot plan and in the specifications.
3. While offsite information may be included in the overall contract drawings and specifications, a set of complete separate offsite drawings and specifications are preferred.

T. Utility Analysis. See Chapter 6

## 5F. HUD Review Report Format

The following review reports formats are to be used to document Technical Reviews. The Technical Support Division Branch Chiefs and Production Division Directors have discretion to approve modifications or alternative formats.

### 5F.1 HUD Architectural Review Report for Pre-Application Exhibits

HUD Office Name \_\_\_\_\_  
Pre-Application Submission Date \_\_\_\_\_  
Project Name \_\_\_\_\_  
Project Location (City, State) \_\_\_\_\_  
MAP Lender Name \_\_\_\_\_

#### Summary of HUD Architectural Review

A. Architectural/Engineering exhibits (including project architect's draft Scope of Work Summary and Joint Inspection Report per Chapter 5.9.B for substantial rehabilitation projects)

*If incomplete or unacceptable, specify and indicate reasons:*

B. Development team (e.g. borrower, design professionals, general contractor) experiences and qualifications

*If not acceptable, indicate reasons:*

C. Conformance to HUD Standards as listed in Chapter 5.4.

*If not acceptable, indicate reasons:*

D. Site conditions:

1. Placement of residential building(s).

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2. Site ingress and egress related issues, including easements.
3. Access to public utilities, including required offsite work.
4. Unusual site conditions
5. Applicable accessibility requirements and any prohibitive conditions.

*If not acceptable, indicate reasons:*

E. Residential building(s):

1. Lobby floor:
2. Typical floor:
3. Typical apartment layout(s):
  - a. Size and marketability (determined by appraiser).
  - b. Acceptability of design.
4. Structural system.
5. Exterior finish.
6. Rehabilitation of roof/roofing (for substantial rehabilitation).
7. Applicable accessibility requirements.

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_

Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

## 5F.2 HUD Architectural Review of Lender's Architectural Analyst's Report for Firm Exhibits - New Construction

HUD Office Name \_\_\_\_\_

Firm Commitment Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_ , \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

### **Include Appendix 5F.1 (B & C) if processing direct to Firm Commitment Application**

#### **Summary of HUD Architectural Review**

A. Architectural/Engineering exhibits, per Section 5D.I:

*If incomplete or unacceptable, specify and indicate reasons:*

B. Architectural Analysis and Review Reports by Lender's Construction Analyst (per Chapter 5.7.C.16):

1. Site design and conditions
2. Building and building systems design
3. Design features unusual for the particular structure type and/or system.
4. Accessibility:
  - a. Any noncompliance with Fair Housing Act Design and Construction requirements?
  - b. Any noncompliance with UFAS or the Deeming Notice for assisted housing?
  - c. Any noncompliance with Title III of the ADA?

*If not acceptable, indicate reasons:*

C. CNA eTool data entries (see Chapter 5.7.C.11):

1. Review of Architecture and Engineering (A/E) portion of lender's completed Form HUD-92264 and the CNA eTool entries for accuracy with respect to property characteristics and other A/E related.
2. Physical inventory (e.g., sites, buildings, units, components and replacement

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alternatives) consistent with the architect's plans and specs.

3. Estimate of replacement costs (form HUD-92329, Schedule of Insurable Values).
4. Financial plan for funding future capital replacement needs, per Appendix 5G. Future replacements are consistent with owners proposed distinctions between capital items and operating expense.

*If not acceptable, indicate reasons:*

D. Review of Construction Contracts.

1. AIA B108 and Amendments and project architect's certification, per Chapter 5.2.C.
2. Owner Contractor Agreement, Supplementary Conditions, Construction Contract, per Chapter 5.5.
3. Identities of interest disclosed and acceptable.

*If not acceptable, indicate reasons:*

E. Energy related requirements per Chapter 6.

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_

Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**5F.3. HUD Architectural Review of Lender’s Architectural Analyst’s Report for Firm Exhibits – Substantial Rehabilitation**

HUD Office Name \_\_\_\_\_

Firm Commitment Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_ , \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

NOTE: The following summary of Section 504 applies to any housing that has ever received Federal assistance, such as Project-Based Section 8, CDBG, HOME funds, etc. (see Appendix 5B for definition of “Federally assisted.”)

Summary of Section 504 of the Rehabilitation Act of 1973 and 24 CFR Part 8 - Uniform Federal Accessibility Standards (UFAS) Requirements or the Deeming Notice (See Appendix 5B):

Any property built with assistance, or became assisted prior to July 11, 1988 has been obligated since such time to bring the property into compliance with UFAS or the Deeming Notice requirements (including 5% of total units as mobility accessible and 2% of total units as sensory accessible units) through any replacements and alterations that took place over time, unless particular elements of compliance required alteration of a load-bearing wall or would have caused an undue financial and administrative burden (see 24 CFR 8.23).

In the decades since 1988 significant compliance should have been achieved. Some existing properties may have become assisted after 1988 and compliance should, (but may not), have been achieved at the time of assistance and these properties also must make all replacements and alterations conform so as to achieve compliance over time as well as addressing the needs of disabled tenants. No assisted property is exempt. All must either be in compliance or must be progressing toward compliance subject only to forbearance for particular items of non-compliance by reason of the “load bearing wall” and the “undue financial and administrative burden” exemptions.

**Include Appendix 5F.1 (B & C) if processing direct to Firm Commitment Application**

**Summary of HUD Architectural Review**

A. Architectural/Engineering exhibits, per Section 5D.II:

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*If incomplete or unacceptable, specify and indicate reasons:*

B. Review of Physical Conditions and Scope of Work:

1. Physical conditions:

- a. Condition of project and assessed RUL of components justified; photography supports assessment, level of investigation consistent with age, type of construction and condition of the buildings.
- b. If Seismic risk thresholds are exceeded and a seismic analysis and report are required per Appendix 5C, recommended retrofits have been included in scope of work.

2. Rehabilitation Scope of Work:

- a. Proposed rehabilitation work as described in Scope of Work Summary address identified deficiencies, repair needs, obsolescence and other improvement needs consistent with Join Inspection Report and other due diligence reports.
- b. Plans and specs describe all the proposed work, consistent with Scope of Work Summary and in compliance with Appendix 5E.
- c. Expected future repair, replacement, and major maintenance needs account for proposed rehabilitation as well as assessed condition of all other capital items not repaired or replaced as part of the rehabilitation.

*If not acceptable, indicate reasons:*

C. Architectural Analysis and Review Reports by Lender's Construction Analyst (per Chapter 5.7.C.16):

1. Site design and conditions
2. Building and building systems design
3. Design features unusual for the particular structure type and/or system.
4. Accessibility:
  - a. Any noncompliance with Fair Housing Act Design and Construction requirements?
  - b. Any noncompliance with UFAS or the Deeming Notice for assisted housing?
  - c. Any noncompliance with Title III of the ADA?

*If not acceptable, indicate reasons:*

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D. CNA eTool data entries:

1. Complies with the requirements in Chapter 5.7.C.11.
2. Complies with the requirements in Chapter 5.9.C.4 & 6.
3. Review of Architecture and Engineering (A/E) portion of lender's completed Form HUD-92264 and the CNA eTool entries for accuracy with respect to property characteristics and other A/E related exhibits.
4. Physical inventory (e.g., sites, buildings, units, components and replacement alternatives) consistent with the architect's plans and specs.
5. Estimate of replacement costs (form HUD-92329, Schedule of Insurable Values).
6. Financial plan for funding future capital replacement needs, per Appendix 5G. Future replacements are consistent with owners proposed distinctions between capital items and operating expense.

*If not acceptable, indicate reasons:*

E. Review of Construction Contracts.

1. AIA B108 and Amendments and project architect's certification, per Chapter 5.2.C.
2. Owner Contractor Agreement, Supplementary Conditions, Construction Contract, per Chapter 5.5.
3. Identities of interest disclosed and acceptable.

*If not acceptable, indicate reasons:*

F. Energy related requirements per Chapter 6.

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_



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Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**5F.4. HUD Architectural Review of Lender’s Architectural Analyst’s Report for Firm Exhibits - Section 223(f)**

HUD Office Name \_\_\_\_\_

Firm Commitment Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_ , \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

NOTE: The following summary of Section 504 applies to any housing that has ever received Federal assistance, such as Project-Based Section 8, CDBG, HOME funds, etc. (see Appendix 5B for definition of “Federally assisted.”)

Summary of Section 504 of the Rehabilitation Act of 1973 and 24 CFR Part 8-Uniform Federal Accessibility Standards (UFAS) or Deeming Notice Requirements (See Appendix 5B):

Any property built with assistance, or became assisted prior to July 11, 1988 has been obligated since such time to bring the property into compliance with UFAS or the Deeming Notice requirements (including 5% of total units as mobility accessible and 2% of total units as sensory accessible units) through any replacements and alterations that took place over time, unless particular elements of compliance required alteration of a load bearing-wall or would have an undue financial and administrative burden (see 24 CFR 8.23).

In the decades since 1988 significant compliance should have been achieved. Some existing properties may have become assisted after 1988 and compliance should, (but may not), have been achieved at the time of assistance and these properties also must make all replacements and alterations conform so as to achieve compliance over time as well as addressing the needs of disabled tenants. No assisted property is exempt. All must either be in compliance or must be progressing toward compliance subject only to forbearance for particular items of non-compliance by reason of the “load bearing wall” and the “undue financial and administrative burden” exemptions.

## Summary of HUD Architectural Review

### A. Firm Commitment deliverables:

1. Lender's Capital Needs Assessment with attachments delivered in the CNA eTool.
2. Attachments to the CNA:
  - a. A completed A/E portion of form HUD-92264.
  - b. Certificate of Occupancy or final inspection report, if available, or a statement from the Building Code/Zoning Code official recognizing any non-conforming use.
  - c. Municipal code violation report, fire marshal's report, both clear;
  - d. Local health officer's report/clear report for any private water supply or sewer treatment system.
  - e. Property/site location map(s);
  - f. Aerial photography or satellite view of site.
  - h. As built plans if available
  - i. Annotated photography of property conditions and any other due diligence reports, e.g. intrusive examinations by third parties, LBP, asbestos.
  - j. O&M plans proposed or in place.
  - k. If a project architect is engaged:
    - (1) The owner architect agreement, AIA B104.
    - (2) The project architect's certification, Appendix 5H.2.
    - (3) Drawings/sketches for reconfigured spaces and/or altered site improvements.
  - l. If a general contractor is engaged:
    - (1) The owner contractor agreement, AIA A104.
    - (2) The contractor's cost breakdown, form HUD 92328
  - m. EPA Portfolio Manager HUD Custom SEP, and the utility analysis report signed by the energy professional.
  - n. ASHRAE Level II Energy Audit if SEP Score is less than the minimum threshold

described in MAP Guide Appendix 5G. Conservation measures must be identified, and cost benefit analysis completed, but implementation of cost beneficial measures is not required.

- o. The borrower's chart of accounts (or relevant portions) describing capitalized vs operating expense items.
- p. A seismic report per Appendix C if threshold values for SXs and SX1 are exceeded.
- q. A statement of the needs assessor's and other third-party examiner's (e.g. energy professional, intrusive examiner, seismic engineer) qualifications (if not included in CNA e Tool narrative form.)

*If incomplete or unacceptable, specify and indicate reasons:*

B. Review of CNA:

1. Physical Inspection:

- a. Condition of project and assessed RUL of components justified; photography supports assessment, level of investigation consistent with age, type of construction and condition of the buildings.
- b. Project's:
  - (1) Immediate repair needs, both critical and non-critical, are detailed, cost estimated, with estimated months to complete for those which can be deferred beyond endorsement.
  - (2) Dimensioned sketches or drawings are provided for reconfigured spaces sufficient to confirm accessibility and to support inspection of completed work.
  - (3) Expected future repair, replacement, and major maintenance needs reflect assessed condition of all capital items at property consistent with owner's distinction between capital items and operating expense.
  - (4) Scope of work described in CNA e Tool addresses all accessibility deficiencies by describing the deficiency, prescribing and costing a remedy, identifying the applicable statute(s) and accessibility standard(s), and estimating the time in months for completion of the remedy (corrective action plan).
  - (5) Lender's 223(f) Repairs and Alterations Cost Worksheet, per Chapter 5.10.D.

2. Financial factors and 20-year RfR plan

- a. Inflation adjustments to capital costs, short-term interest rates on balances and percentage changes in ADRR are realistic and consistent, with no large, lump sum

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increases in ADRR from one year to the next.

b. Financial plan meets the requirements described in MAP Guide Appendix 5G.

3. Accessibility for persons with disabilities:

a. CNA identifies and documents accessibility deficiencies by describing the deficiency, prescribing and costing a remedy, identifying the applicable statute(s) and accessibility standard(s) and estimating the time in months for completion of the remedy, (corrective action plan.)

b. If time to complete exceeds 1 year or deficiencies cannot be corrected within the underwriting parameters of Section 223(f), submit corrective action plan to Director of Technical Support in Washington HQ.

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_

Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

## **5G. Capital Needs Assessments**

### **5G | I WHAT IS A CAPITAL NEEDS ASSESSMENT?**

#### **A. General**

A Capital Needs Assessment (CNA) is a due diligence report describing the physical inventory of multifamily property and characterizing the condition and expected durability of that inventory for the purpose of budgeting future capital repairs and replacements. A CNA includes a financial plan or annual schedule of anticipated capital costs and corresponding funding needed to meet expected capital expenses. The period of years covered by the financial plan is called the Estimate Period. The financial plan should be periodically updated and revised to recognize actual results during the life of an asset, and for this reason, a new CNA is required for insured properties at intervals not greater than 10 years. This “10-year update” requirement applies to all properties insured under Section 223(f) since the first publication of the MAP Guide in 2002 and to properties insured under Sections 220, 221, 223(a)(7), and 231 since the effective date of Mortgagee Letter 2010-21 (Risk Mitigation, September 6, 2010).

When prepared for a property to be built as new construction or substantially rehabilitated, a CNA is only an inventory of the proposed construction (buildings, units, components, quantities) and an estimate of the expected durability of the proposed (and existing for substantial rehabilitation) construction components with a corresponding plan to finance future capital needs as they are expected to occur.

When prepared for an existing property less than substantial rehabilitation, a CNA requires an on-site physical inspection. Accordingly, it is the primary means of identifying immediate physical needs or deficiencies and specifying the nature, location, and expected cost of the repairs, replacements and/or alterations required to address immediate needs.

CNAs of existing buildings prepared for HUD must at a minimum meet the requirements of ASTM E2018-15 for the preparation of needs assessments. Numerous additional requirements may apply to particular properties or programs as described herein.

#### **B. CNA eTool**

CNA eTool is HUD’s current automated process for preparation, submission, and review of CNAs. HUD requires that all CNAs prepared for HUD-FHA insured multifamily properties be prepared, submitted, and reviewed using the CNA e Tool. See Chapter 5.3 for the use of CNA eTool by construction activity and program.

Technical information, instructions on how to access and use the CNA e Tool, and related information are published and periodically updated at HUD's CNA e Tool home page:

[https://www.hud.gov/program\\_offices/housing/mfh/cna](https://www.hud.gov/program_offices/housing/mfh/cna)

## **5G | II WHO MUST PREPARE & SUBMIT CNAs AND FOR WHICH PROGRAMS?**

### **A. Applications for New Construction or Substantial Rehabilitation**

Applications for projects to be insured under Sections 220, 221, and 231 (and any Section 241(a) supplemental loan funding new construction or substantial rehabilitation) require a CNA, but except as noted below, these CNAs are to be prepared by the lender's construction analyst in collaboration with the borrower's project architect.

#### **1. New Construction**

The purposes of the CNA prepared for new construction are to provide a permanent, standardized description of the physical inventory of the proposed project and to plan for future repairs and replacements. Since the CNA is based on a physical inventory to be built, no on-site inspection of sampled units are required in the CNA eTool for new construction.

a. The lender's construction analyst completes the CNA (exclusive of the Financial Factors) based on the construction drawings and specifications submitted and approved for Firm Commitment.

b. In the case of streamlined processing, the construction documents should be complete enough to estimate future repairs and replacements.

c. The completion of the Financial Factors and the development of a balanced financial plan funding anticipated capital repairs and replacements during the Estimate Period are the responsibilities of the lender's underwriter. This task must be completed prior to submitting a CNA to HUD for review.

#### **2. Substantial Rehabilitation**

The purposes of the CNA prepared for substantial rehabilitation are similar to new construction except that in substantial rehabilitation significant portions of the existing property may be retained and the CNA must describe the existing components and their conditions. The CNA also must account for any new components and construction as described in the drawings and specifications.

### **B. Applications for Refinancing or Acquisition of Existing Properties**

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The purposes of the CNA prepared for refinancing or acquisition transactions (or for supplemental loans funding repairs and alterations) are not only to describe the physical inventory and to plan for future repairs and replacements but also to assess current conditions and identify, specify and estimate immediate repair needs. Immediate repairs must be classified as either Critical or Non-Critical.

### 1. Critical Repairs. Critical repairs are of two types.

a. Remedies that correct the following conditions that must be completed prior to initial endorsement:

1. Endanger the health and safety of residents, visitor or passer-by.
2. Endanger the physical security of the property.
3. Pose obstacles to ingress or egress from units, buildings or the site.
4. Prevent the project from reaching sustaining occupancy.
5. Any deficiencies that are in violation with applicable and relevant building code, standards and regulations.

b. Accessibility remedies for noncompliance with of one or more of the accessibility statutes that apply to the property or to any of the buildings. Such remedies must be completed as soon as possible. The time period must be specified as a number of months ranging from “0” (which indicates prior to endorsement) up to “12” (which means 12 months after endorsement). In rare instances where accessibility remedies cannot be completed within 12 months, additional time may be permitted only when explicitly approved by the Division of Technical Support in the Office of Multifamily Production at HUD Headquarters. See Appendix 5B for a description of accessibility requirements.

### 2. Non-critical Repairs

Non-critical repairs are repairs, replacements or alterations that address current and imminent physical needs, notwithstanding whether any such needs may be described as deferred maintenance.

a. Imminent in this context means work reasonably expected to be needed within the first two years of the mortgage, except that this shall not be construed as requiring as an immediate repair any work that would normally occur at unit turnover.

b. Non-critical repairs may include work likely to restore, improve, or enhance the quality, suitability, marketability and operating efficiency of the property.

c. Non-critical repairs must be completed within 12 months after endorsement unless otherwise specifically permitted by HUD.

C. 10-Year Updates or CNAs Required by Asset Management Functions for Properties with Insured Mortgages

CNAs prepared to meet the periodic update requirement at intervals not greater than 10 years or to support other asset management functions are subject to guidance, and supervision by the Office of Asset Management and Portfolio Oversight (OAMPO), a division of the Office of Multifamily Housing, and are subject to Handbook 4350.1 as amended. This includes the timing, funding, and management of any critical or non-critical repairs identified. Such CNAs must be prepared by an independent third-party needs assessor hired by the servicing lender<sup>3</sup> consistent with the qualifications for assessors described in Chapter 5.2. The servicing lender is responsible for reviewing, certifying and submitting the CNA for review by HUD-OAMPO account executives and/or HUD MF Production Technical Branch staff.

**5G | III GUIDANCE FOR KEY VALUES ON CNA eTool ENTRIES**

For detailed instructions on how to use the CNA eTool software, see the instruction manual provided on the CNA eTool home page. This Appendix 5G defines HUD policy requirements on specific values or responses that CNA preparers and submitters must provide.

A. CNA Summary and Scope Information

1. Approving Agency - HUD is the approving agency for all CNAs prepared for properties with insured mortgages. This includes RAD transactions with mortgage insurance.
2. Property ID, FHA numbers - For existing FHA insured properties, enter the Property ID (commonly referred to as “iREMS” number) in addition to FHA numbers. Lenders should verify that these numbers are accurate prior to submission.
3. Seismic S<sub>XS</sub>, S<sub>X1</sub> values - These values are required for all existing properties and should be obtained and entered in accordance with the instructions in Appendix 5C. For new construction, enter zero (0) for each value. For scattered sites, enter the values for the particular site with the highest values in the CNA eTool. A seismic hazard and building performance analysis report must be submitted for all the buildings on the sites that are not exempt per Appendix 5C Section I.B.
4. Federally Assisted - The needs assessor must answer this question “yes” or “no” and must know the correct answer for the subject property prior to conducting any on-site inspection. It is the responsibility of the lender to know the correct definition of “assisted housing” (See Appendix 5B) and to apply the definition to the subject property and advise the needs assessor accordingly. Failure to correctly identify a

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<sup>3</sup> The owner may hire and pay the third-party needs assessor when CNAs are required for Asset Management oversight of properties with no insured mortgage, such as budget-based rent increase events where no servicing lender is involved.



federally assisted property and to document compliance with Section 504 of the Rehabilitation Act of 1973 is not acceptable.

5. Vacant Units - The actual number of vacant units at the time of the on-site visit should be entered. This means all units present at the property, and not occupied by a tenant or resident manager, or management employee or in use by management as an office or display unit. Units used for storage or “offline” units are “vacant units.” For new construction projects enter zero “0”.
6. Minimum Sample – For existing properties for Section 223(a)(7), 223(f) and 241(a) programs, the needs assessor must enter the minimum percentage of all units that must be inspected. HUD requires the following:
  - a. For properties built and occupied as new construction within 10 years of the CNA, not less than 10 percent of units must be inspected.
  - b. For all other properties, not less than 25 percent of units must be inspected.
  - c. In all cases, the selection of units must be proportionally distributed among unit types, buildings, and floor levels and otherwise random.
  - d. It is the lender’s responsibility to examine rent rolls, operating statements, and due diligence reports to determine whether excessive or disproportionate patterns of vacancy require that the needs assessor inspect a greater sample of units and to advise the needs assessor accordingly. Minimum percentage inspection requirements specified above do not relieve the needs assessor and lender from addressing circumstances where more units should be inspected, such as:
    - 1) A property with a history of vacancy exceeding 15 percent. For such property, not less than 50 percent of vacant units, including those already selected for an inspection per Paragraph 2, ‘a’ through ‘c,’ above should be inspected.
    - 2) A property with particular units, floors of buildings, or buildings vacant for 6 or more of the previous 12 months. Such vacancy may be due to adverse physical conditions or to remodeling and either circumstance requires inspection of the relevant units, floors or buildings.
7. ASHRAE Energy Audit - Indicate “yes” or “no” whether an ASHRAE Energy Audit has been completed and used to inform the utility usage characteristics of components and alternatives. If “yes” identify the name and relevant professional credential of the energy auditor. (For required credentials see Chapter 6.D.10). The lender must attach the energy auditor’s report to the CNA at submission. See MAP Guide Chapter 6 for instructions on energy and water utility conservation.
8. Additional Tests - Indicate “yes” or “no” whether the CNA relied upon or required any additional testing or special inquiry. Name or identify the test, inquiry or resulting report in the comment section. Examples of an additional test in this context include a seismic analysis, a radon test and report, an intrusive examination by a professional or contractor other than the needs assessor, a lead-based paint inspection or

risk assessment report, a mold assessment report, or similar tests or reports. The lender must attach such results or reports to the CNA at submission

9. Date of Site Visit - This is the date the needs assessor intends as the time when observations of physical conditions are represented as true and correct. This date is the commencement of any maximum shelf life for a CNA report. For new construction or substantial rehabilitation proposals where the CNA is prepared by the project architect or the lender's construction analyst, this date is the anticipated date of the final endorsement.

#### B. Buildings - Year Built

The year built must be reported for each building. Generally, exact dates are not required, and year built may be determined based on readily available, credible evidence. However, in some cases, exact dates are critical because of the effective dates of statutory or regulatory requirements. Among such requirements are those for design and construction of multifamily buildings in the Fair Housing Act (42 USC 3604(f)(3)(C), and 24 CFR 100.205). The design and construction requirements apply to any building first occupied after March 13, 1991, unless a building permit for that building was issued on or before June 15, 1990. Since these requirements apply to buildings and not properties, and properties often have multiple buildings with different building permit and or occupancy permit dates, the eTool obligates the preparer to identify a specific year built for each building. If the year built is outside the range of years 1990, 1991, and 1992 no specific dates for occupancy or building permits are required as entries on the Buildings Form. However, if the year built is 1990, 1991, or 1992 then the needs assessor must confirm, and enter the actual date of the first occupancy, usually with an occupancy permit, as well as the date of the building permit. The eTool uses this data together with other user responses to identify covered units among those inspected and requires the needs assessor to determine (yes or no) whether the covered units inspected conform to the design and construction requirements. (Note that these are not the only requirements for which specific dates are consequential. For example, lead based paint testing is required for buildings constructed before January 1, 1978. But accessibility requirements are the only rule based and date related elements built into the logic of the CNA e Tool).

#### C. Buildings - Building/Construction Types & Replacement Cost

The "Buildings" form requires the preparer to identify specific characteristics of each building. These include the same characteristics and definitions of characteristics that are used on HUD Forms 92013 and 92264.

1. Replacement Cost. The user must provide an estimate of replacement cost for each building. Replacement cost is expressed as dollars per square foot of building area, including all units and common areas. The eTool auto-calculates the building areas and apply the replacement cost per square foot estimate to determine the estimated replacement cost for each building.

2. Building Areas. The eTool auto-calculates the building area by aggregating the square footages of the unit types and common spaces assigned to the building.
3. The preparer is required to justify or support the estimated replacement cost in the comment box labeled “Source of Replacement Cost Data.” The replacement cost estimate for existing buildings should be based on the current cost of replacing the building with current construction practices and assemblies as nearly comparable to the existing building as possible, but not including any cost of replicating obsolete methods or materials or historic artifacts.
4. For new construction applications, the lender’s construction analyst should use the estimated per square foot cost of construction excluding site improvements.
5. The CNA e Tool will use this input to generate results for the form HUD-92329, Schedule of Insurable Values.

#### D. Standard Estimated Useful Life (EUL)

A key feature of CNA eTool is the Standard Estimated Useful Life Table of a typical site and building components. The term “Estimated Useful Life” (EUL) refers to a period of years in which a given component of standard quality under average conditions may be expected to remain serviceable for its intended purpose. “Remaining Useful Life” (RUL) is the result obtained by subtracting the actual age of a component from its EUL.

The Standard Estimated Useful Life Table is organized in accordance with the ASTM E2018-15 outline for needs assessments. Each site or building component is identified with the following three sub-categories in broad to narrower order: 1) Need Categories; 2) Need Items; 3) Component Types. Each Component Type is assigned a particular average standard EUL, depending on whether the property is designated as “family” or “elderly.” Every component present or to be installed at the property must be associated with a Component Type and given a specific name referred to as “Component ID” in the eTool.

#### E. Assessed Remaining Useful Life

When observing actual conditions at a property or specifying actual products or methods to be used in construction, needs assessors may recognize any expected variations from the Standard EUL. For any proposed or existing components with durability and/or quality yielding a useful life greater or lower than the Standard EUL, the needs assessor should enter an “Assessed” RUL representing the assessor’s best professional judgment concerning the number of years the component will be serviceable from the date of the CNA. This method allows the preparer to recognize superior or inferior performance, local conditions of use (e.g. climate, exposure, student occupancy, etc.), maintenance or product quality of the component. All Assessed RULs must be justified in the “Remaining Useful Life Comments” box with adequate explanations.

#### F. Components with EUL or RUL Longer than the Estimate Period

Many building components are quite durable and, based on the date installed, may be expected to remain in place without replacement in entirety well past the end of the Estimate Period. The CNA e Tool will schedule costs of repair or replacement of components only when the time for such capital expense falls within the Estimate Period. Therefore, it is up to the discretion of the needs assessors to list durable components in the eTool when it is beneficial to describe the construction and condition of the property.

G. Repair Replace Recommendation - “When, Duration and Action”

1. An “Action” in the Recommendations form for a component describes the action with which the alternative to that component will be carried out. The choices for “Action” are “repair,” “replacement,” “one-time repair,” or “add new.” CNA preparers must determine “When” an action will occur for each component and selected alternative in the eTool by choosing one of the two available options of “Now” or “End of cycle” (End of cycle refers to the end of the default RUL of the component, or the Assessed RUL if entered).
2. Adding new components. When installing a new component not currently existing at a property, the following steps are required:
  - a. The user first creates the item as a new Component ID and enters “0” as the assessed RUL in the Components form and adds an alternative for that component ID in the Alternatives form.
  - b. In the Repair Replace Recommendation for, select “Add New” for the alternative recommended for this component and enter the expected EUL for the added item.
  - c. The “When” response should be “End of cycle” for the new component/alternative, which permits a component (e.g., a dishwasher) to be added as an Immediate Repair and then located among future repairs and replacements as appropriate on the Estimate Period schedule.
3. Duration. A particular component (usually in quantities greater than 1) can be scheduled for replacement over a span of time rather than in a single year by entering a number for “Duration” in the eTool. The whole number entered for Duration indicates the number of years before and after the “End of cycle” year over which the component will be replaced. (e.g., a Duration entry of 1 spreads the cost of a repair/replace action equally over three years; 1 year before the end of a cycle; the indicated end of cycle year; and 1 year after the end of a cycle). Duration is intended to recognize that RUL and EUL periods are estimates of average durability and that actual results will vary.

H. Repair Replace Recommendation – Repairs to Existing Components

1. One-time repairs. Typically, “repairs” are actions applied to an existing component and therefore the Component Type identifies the object of the repair (e.g., wood

window) and the Component ID should describe the actual repair needed for that window (e.g., replace broken sash).

a. Needs assessors should identify all repairs or replacements that are immediate repairs even when these might normally be treated as operating expense. For example, the needs assessor may observe conditions that require a mere repair to restore a component to normal use (e.g., a broken windowpane, or a tree that requires trimming, or a wiring repair, drywall damage or a broken lock in particular units.)

b. When identifying the repair or replace recommendation, the needs assessor should identify “When?” as “Now” and the “Action” as “One-time repair.”

c. The “One-time repair” action restores the component to the EUL/RUL that would otherwise prevail. The repair will appear only once and only among immediate repairs. The Component Type name and the Alternative replacement for that component should already have been identified and a separate recommendation can be made to replace the component (e.g., windows, landscaping, wiring, wall finish, or doors) in the future.

2. Repeating or Periodic Repairs. Some repairs may be regular and periodic (e.g., water proofing or tuckpointing exterior masonry). When a repair is periodic in nature, the Component ID describes the repair, and an assessed RUL sets the time when the repair should first occur. The Alternative describes the actual repair work and the EUL entered for the Alternative indicates the frequency of the repair (e.g., “5” means every 5 years). The “When” is “now” or “end of cycle” depending on the assessed RUL entered. The Action is “Repair,” meaning a repeating repair.

I. Repair Replace Recommendation - Elements of Critical Repairs for Accessibility Deficiencies. Accessibility repairs may be prepared in the CNA eTool by using the Repair Replace Recommendation form as follows:

1. Accessibility Indicator - if a repair, replacement or alteration is recommended to correct an identified accessibility deficiency, then this indicator should be answered “yes,” in which event items 2, 3, 4 and paragraph J below must be completed. If the accessibility indicator is “no,” then these entries may be left blank. A “yes” answer places the item on the Critical Accessibility Repairs.
2. Time to Complete - If accessibility indicator is “yes” then the time to complete must be entered as a number of months which should be specific to the particular recommendation and not to all accessibility remedies in general. Each remedy is to be implemented or completed as soon as possible, notwithstanding any different schedule as may be necessary for other remedies.
3. Accessibility Statute - If the accessibility indicator is “yes” then the needs assessor must indicate which statute defines the deficiency, or if the recommendation

addresses a deficiency under multiple statutes, identify the statute with the most stringent requirement.

4. Scope of Accessibility Compliance - If the accessibility indicator is “yes” then the needs assessor must provide a short text description of the particular accessibility requirement that is missing or violated (e.g. usable kitchen). This description should include any relevant dimensions or physical measurements. Sketches or drawings with appropriate photographs may be provided by the needs assessor and attached to the CNA for submission.

J. Scope of Repair or Alteration. All Critical and Non-critical repairs and alterations must be described in detail sufficient to bid costs accurately and to inspect work in progress or when completed. This scope should be described succinctly in the text entry for Scope of Repairs. In addition, the scope should indicate the Class of Work for the item, that is, a “repair,” “Level 1 Alteration,” etc.

K. Repair Replace Recommendation – Time to Complete as a Scheduling Method

For refinancing applications proposing immediate repairs, repairs and alterations must be scheduled. Accordingly, the planned sequence and timing of immediate repairs should be described in the CNA e Tool by using the “Time to Complete” entry, which should be a number of months (immediate repairs and alterations are those for which the answer to the question “when?” equals “now.”) The entered number of months to complete each task is reported on the List of Non-Critical Repairs (as well as the list of accessibility repairs). Critical repairs that must be completed prior to closing should show “0” for the number of months entered as “Months to Complete.”

L. Needs Assessor’s Narrative and Attachments Provided to the Lender

The Narrative Form of the eTool allows the user to provide a written narrative for each of the outline topics as listed in ASTM E 2018-15. Brevity is encouraged, but other supporting documents, photography or exhibits may be provided as attachments associated with specific outlined topics in the CNA when submitted. See instructions to lenders concerning attachments in this appendix at IV.D.2.

## **5G | IV LENDER REVIEW OF CAPITAL NEEDS ASSESSMENTS**

A. Capital Costs vs. Operating Expense

A key principle of both financial accounting and planning for future capital costs is a clear, and consistently applied distinction between items that are operating expense, and those that are capital costs. While most work on building or site components is clearly one or the other, many work items may be classified as either expense or capital depending on the borrower’s policy. This policy should be in writing and remain constant until amended in writing. Thus,

for example, replacement of roofs, windows, siding, and similar items on a building is always a capital cost and should be included in planning for future capital needs. Meanwhile cleaning windows, changing air filters, cleaning or repairing carpets, and similar tasks are always operating and maintenance costs. By contrast, repainting, re-carpeting, and similar renovation of unit interiors at turnover or at standard time intervals may be treated as either operating expense or capitalized at the borrower's discretion.

The lender must determine that the Borrower's written policy defining capital costs and operating expense is consistent with HUD's Asset Management Handbook 4350.1, Chapter 4, Section 4-3 and that all repair or replacement of components defined as capital costs are included in the CNA by identifying them as components and recommending an alternative. The lender must ensure that any items (e.g., carpet, interior painting) not identified as components (i.e., not listed among components on the components tab) in the CNA eTool are accounted for in operating expenses (i.e. if carpets exist and are not listed among components, then carpet repair and replacement must be budgeted as an operating expense.) The lender must compare the maintenance costs reported in the prior three years of project operating history to the repairs and replacements described as future costs in the reserve for replacement schedule. Costs omitted from the schedule should appear in the maintenance history.

#### B. Lender's General Review and Underwriting Duty

Prior to submission of a CNA, it is the duty of the lender to review, address, or correct each of the following:

##### 1. Complete CNA

Assure that the preparer (needs assessor or lender's construction analyst) has completed the CNA eTool in accordance with the MAP Guide and that all the required information is correct and complete.

##### 2. Repair/Replace Recommendations and Decisions

Review and accept the CNA preparer's Repair Replace Recommendation, or if the recommendation is not accepted and requires modification, specify a revised decision on the Repair Replace Decision form.

##### 3. Immediate Repairs

Assure that any immediate repair is described specifically with a quantity, cost, and location as well as any applicable and necessary qualitative or product specific information such as size, model, product performance standard, level or nature of the finish, and/or brand name if applicable. When useful to understanding and comprehension, annotated photography may be attached to the CNA at the submission to pinpoint the nature, extent or location of a repair/replacement action.

##### 4. Accessibility Critical Repairs

Review the Accessibility Critical Repairs and ensure that statutes and regulations are correctly applied, deficiencies identified, appropriate remedies specified, and that implementation of each remedy is scheduled for completion as soon as possible.

5. Utility Conservation Metrics

When proposing Green MIP (mortgage insurance premium) rates or reductions in historic operating expense resulting from proposed utility conservation measures, the needs assessor and lender must complete the utility rates, utility type and component consumption fields of the CNA eTool. See MAP Guide Chapter 6 for instructions on energy and water conservation.

6. Financial Factors

Enter financial factors and variables and prepare a balanced financial plan for funding anticipated capital costs. “Balanced” in this context means that the combination of any existing Reserve for Replacement sums carried forward plus any initial and annual deposits plus periodic interest earned on balances equals or exceeds the projected capital costs plus any minimum balance requirement for years 3 through 10 in the Estimate Period. Also, in the second ten years, any deficit below the required minimum balance does not exceed (in dollar amount) 50% of the cumulative amortization of the insured loan balance for the year in which the deficit occurs. (See “Lender’s Financial Plan” paragraph C below.)

7. Lender Validation and Submission

The lender validates and submits CNAs by accessing the CNA eTool for submission. The submission portal is a secured web address that may be accessed only by authorized submitters using appropriate credentials (login IDs) and passwords. The website link to the portal is provided on the CNA eTool Home Page.

For applications for mortgage insurance, a submitter should submit a CNA only at the time that a full application for mortgage insurance has been filed and requisite fees paid.

8. Flags, Addressing Flags

Needs assessors may deliver CNAs to lenders even when there are flags upon validation. Typically, the needs assessor will have already corrected any flags that do not involve underwriting judgment. Flags that remain (other than severe flags that must be corrected) may not require a change in the CNA if the lender provides an appropriate explanation of why the matter flagged is not a circumstance or result inconsistent with the MAP Guide or sound underwriting. Such explanations are entered as the “lender response” under flag notes (a text box) that appears with each flag listed in the validation results. If after submission HUD disagrees with the CNA as submitted, the objection will be expressed in a flag note. The CNA will be returned to the lender, and the submitter will be notified by an automatic e-mail that the submitted CNA has been returned by HUD. The lender may then address the flag notes and/or modify the CNA and submit the revised CNA. The use of flags and flag notes enables HUD and lenders to exchange comments and resolve issues using successive versions of the same CNA.



9. Version Control for CNAs

a. From application to Firm Commitment.

Each CNA eTool submission is assigned with a system-generated unique identification number called “Assessment ID” as a way of version control. The Assessment ID is a six-digit number composed of the calendar year followed by a six-digit number (yyyy-#####). At any point in time, only one CNA for a particular property (as identified by FHA # and/or REMS #) may have the status of “Submitted,” “Under Review” and “Saved as a Draft.” An unlimited number of versions may have the status of “Returned,” but only one version will advance from the “Under Review” status to “Approved.” The approved CNA is the version that will be used at Firm Commitment to produce a list of required repairs, relevant construction documents/schedules, amounts required for repair escrows and assurances of completion and required initial and annual deposits to the Reserve for Replacement escrow.

b. Amendments after Firm Commitment

Sometimes unforeseen circumstances or uncorrected errors require amendment of a firm commitment. If required changes concern aspects of the CNA (e.g. the list of immediate repairs, the amount of the initial or annual deposit to the reserve for replacements, etc.), HUD may authorize an amended CNA by choosing to “Undo Approval,” changing the status to “Under Review,” whereupon HUD will return the CNA to the submitter. The submitter will receive an e-mail message indicating the returned CNA. Then a revised CNA may be resubmitted to be reviewed and approved by HUD. When again “Approved” the resulting version is the “Amended” CNA current as of the date of its amendment. It is the intent of the CNA eTool to capture for a permanent record the CNA approved for firm commitment and any amended CNA to reflect the actual requirements for Endorsement.

10. Intrusive Examination

The lender must assure that the needs assessor has used a level of inquiry appropriate to the age, and condition of the property in order to report with confidence the nature of existing components, their condition, and their assessed RUL even when the level of inquiry required by observed circumstances exceeds the minimum “Non-Intrusive” standard of inspection defined by ASTM E2018-15. If such intrusive examination is conducted by a third party other than the needs assessor, the needs assessor must provide, and the lender must submit any resulting reports or observations as an attachment to the CNA.

C. Lender’s Financial Plan - the Financial Factors Form

The lender’s financial plan is developed by using the Financial Factors Form of the Assessment Tool. The first entry on this form identifies the Estimate Period as a number of years. The financial factors enable an auto-calculation of the financial plan for each year in the Estimate Period. Years are identified as relative years (RY) beginning with “1” and ending with the number of years in the Estimate Period, typically “20”. Calendar years are

associated with the years following the date of inspection (for Section 223 applications) or the estimated date of final endorsement (for Sections 220, 221, 231 and 241(a)). Other entries define two sets of parameters, which are external variables and property-specific variables.

1. Estimate Period

The Estimate Period for all HUD mortgage insurance programs is the lesser of 20 years or 2 years plus the remaining term of any insured mortgage.

2. External Variables

External variables are economic variables in the financial plan reflecting the actual economic conditions. These are the annual rate of inflation of the costs of repairs and replacements during the Estimate Period, and annual interest earnings on the balances held in reserve for replacement escrow accounts. Because current economic conditions often depart from historical norms or averages, the financial factors form displays the current rate of inflation for capital needs and a current interest rate on short-term deposits or certificates of deposit. These are called the “initial” rates and will reflect current business conditions and indices. The Financial Factors form also provides for a second, or “additional” rate that reflects long-term averages for the particular rate (inflation or short-term interest). As a practical matter, long-term rates are static since they reflect the average value for each rate over 40 or more years. Because these external variables are the same for all CNAs at any given time, HUD’s Office of Multifamily Production will publish the values for these variables from time to time based on the following sources for inflation rates. HUD will rely on price indices published by the Department of Labor. HUD will determine short-term rates based on rates for 90-day maturities as published by the Federal Reserve Board, the Wall Street Journal, or comparable entities. The intent of this method of describing rates is to allow more realistic modeling of economic projections. Note that any characterization of inflation used in the Financial Factors Form should also be reflected in the lender’s projections of operating expense.

3. Property-Specific Variables

Property-specific variables are values that are unique to the property. Except for the required minimum balance calculation, it is expected that lenders will make repeated adjustments to these variables based on Validation Engine results as a means of perfecting an optimum combination of factors needed to balance the financing plan consistent with other underwriting considerations such as anticipated rents and operating expenses.

- a. Initial Deposit. The initial deposit is the amount that may be carried forward from an existing reserve for replacement escrow (e.g., in a 10-year update CNA or refinancing of an existing insured asset) and/or the amount of any lump sum deposit that may be required at the endorsement.
- b. Year 1 Annual Deposit Per Unit. The sum estimated as the first annual contribution to the reserve for replacement escrow divided by the number of units in the property. Expressing this figure as an annual per unit number of dollars supports

the common industry practice of estimating operating expenses on a per unit per annum (PUPA) basis. In no event may this figure be less than \$250 for any property.

c. Per Annum Rate of Change in the Annual Deposit.<sup>4</sup>

1. The lender will set the value of this rate of change in the annual deposits. The lender may propose an initial rate of change followed by an additional rate of change to be applied in a specified relative year, which need not be the same relative year as indicated for either of the external variables.
2. When proposing a rate of change for the annual deposit, the lender must demonstrate by means of a stress test that the expected rents and expenses (including the annual deposit) do not reduce the debt service coverage ratio below underwriting requirements.
3. In no event may the proposed rate of change exceed the rate of inflation applied to capital needs in any relative year of the Estimate Period.

d. Minimum Balance. When balancing the financial plan, the reserve account must maintain an estimated minimum balance. The CNA e-Tool provides two methods for estimating the minimum balance. The two methods are: 1) a minimum balance as a number of dollars per unit; and 2) a minimum balance expressed as a percentage of total uninflated needs for the Estimate Period. Only the second is used for HUD purposes. In the latter case, the CNA e Tool auto-calculates the percentage as the inverse of the number of years in the Estimate Period (e.g., Estimate Period equals “20” then the minimum balance equals “1/20” or 5%). The effect of this calculation is a minimum balance equal to the average cost of needs for one year. It is important that all users understand that the minimum balance is established only as a means of planning for an adequate reserve. It is not intended as a limit on disbursements as and when repair and replacements actually occur. The intent of the minimum balance is to provide a contingency for unanticipated costs and to trigger an asset management review when actual needs result in a remaining balance that falls below the planned minimum.

When applying the minimum balance, the lender should follow the following procedure:

- 1) Define a combination of Initial and/or Annual Deposits resulting in year-end balances that equal or exceed the required minimum balance for each of the first 10 years in the Estimate Period. When considering applications for mortgage insurance, a positive balance, but not the minimum balance is required in the first 2 years of the Estimate Period.
- 2) In any year after Year 10 of the Estimate Period, a remaining balance less than the minimum balance, even a negative balance, may be allowed provided that the difference (a deficit) between the required minimum balance and the

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<sup>4</sup> Historically, HUD has required or encouraged annual deposits in amounts fixed for long periods or even for the term of a mortgage. While very safe and consistent with HUD’s long-term fixed rate mortgage programs, fixed annual deposits do not support realistic assessments of physical conditions nor realistic financial planning to address these conditions over time. Accordingly, graduated changes in annual deposits are encouraged and should be expressed as annual percentage rates of change. Mathematically, the rate of change in the annual deposit is similar to the external variables for inflation and short-term interest, but the lender will set the value of this rate of change in the annual deposits.

projected remaining balance does not exceed 50% of the cumulative amortization of the proposed loan for the relevant year.

- 3) If the dollar amount of the projected deficit in any year after Year 10 exceeds 50% of the cumulative amortization of the mortgage, then the deficit is excessive and must be mitigated by increasing the funding proposed for the reserve for replacement escrow.
- 4) The lender submits a CNA based on a 20-year Estimate Period using the proposed funding (initial and annual deposits) determined in steps “2” and “3” above. The result is that negative balances, if any, may not exceed 50% of the accumulated amortization of the mortgage loan balance.
- 5) The lender should prepare and attach to the CNA at submission a spreadsheet comparing the results of the reserve for replacement schedule and the amount of amortization on the insured mortgage indicating the scale of any negative balance as a percentage of the cumulative amortization for each year, 11 through 20.

When considering applications for mortgage insurance, the minimum balance is not required in the first 2 years of the Estimate Period.

- 6) It is the lender’s responsibility to perform the reserve analysis and set the funding schedule that meets the requirements. The needs assessors prepare the components schedule of replacements and the anticipated costs in the CNA eTool but not the funding schedule (i.e. deposit amounts, etc.).

#### D. Lender Submission of CNAs using CNA eTool

##### 1. Final Validation

After completing its review and financial planning tasks, the lender must validate the CNA a final time as a requisite to submission, recognizing that any severe flags appearing on the final validation will prohibit submission.

##### 2. Attachments

After correcting remaining severe flags and/or addressing any other flags, the lender should attach documents that are either required or useful to communicate or document CNA information. Each exhibit should be a separate file with a descriptive file name to make each attachment readily recognizable to the reviewer. (See Chapter 5.10.F for detailed descriptions of the attachments.)

3. After validation and selection of attachments, the submitter must enter his/her name and e-mail address. Submitters should exercise care when submitting inasmuch as the CNA e Tool will permit only a single CNA submitted for review for any property (i.e., for any FHA # or Property ID #). The CNA cannot be amended or updated after submission unless it is first returned to the lender by HUD. The submitter will see an immediate message indicating whether the submission is successful and will see the CNA “assessment ID” number. The submitter should make a note of the assessment ID number as a means of locating the CNA among those submitted by the same lender and

also as a means of locating the CNA in the event that troubleshooting assistance is required. The submitter will also receive an automatic e-mail response confirming that the CNA is successfully submitted and again providing the assessment ID number. By submitting, the user certifies as follows:

*By submitting this Capital Needs Assessment, I certify as follows:*

*I am authorized to bind my firm and to submit Capital Needs Assessments via the web portal for the CNA e-Tool. We have reviewed the Capital Needs Assessment and all relevant attachments submitted with it. Neither my firm nor its employees have a financial interest, or family relationship with the principals, officers, directors, stockholders, partners or affiliates of the borrower/owner of the multifamily property which is the subject of this Capital Needs Assessment or with any construction contractors or property managers employed by the borrower/owner or its principals. Our review included an evaluation of the qualifications and experience of the needs assessor and the needs assessor firm (or architect or engineer or other professional evaluator or related firm as appropriate here and elsewhere in this Certification) retained to complete the needs assessment or portions thereof and we conclude that these qualifications and experience are appropriate for the size and location of the multifamily property and the construction technologies used at the site. The needs assessment, together with all relevant forms, tables, and exhibits, has been prepared in the manner required by the MAP Guide and is complete and accurate. The needs assessor and/or the needs assessor firm are independent third parties whose compensation is not contingent upon any result except the competent completion of the needs assessment in accordance with the MAP Guide. Except as disclosed, there are no other side deals, agreements, or financial considerations between ourselves and the needs assessor or needs assessor firm. We have no identity of interest with the needs assessor or the needs assessor firm, and we have no business or personal relationships that might present a conflict of interest. The needs assessor and/or the needs assessor firm have evidenced to us that they possess qualifications and experience appropriate to the size, location and construction technology of the subject multifamily property and have no identity of interest, financial or family relationship with the principals, officers, directors, stockholders, partners or affiliates of the borrower/owner or any construction contractors or property managers employed by them.*

## **5G | V DOCUMENTS FOR FIRM COMMITMENT**

After a CNA is approved by HUD, the following documents will be produced by the CNA eTool as attachments to Firm Commitments and /or Regulatory Agreements:

1. Critical Repairs for Existing Properties

A schedule of Critical Repairs composed of two detailed lists of repair/replacement items, described in quantities, location, cost, and relevant thumbnail specifications.

- a. One list will describe Critical Repairs classified as “life safety.”
- b. The second will describe all remedies for accessibility deficiencies.
- c. The accessibility deficiencies listed with “Months to Complete” greater than “0” may be considered as the “Corrective Action Plan.”

2. Non-Critical Repairs for Existing Properties

A schedule of Non-Critical Repairs, Repairs, and Alterations described in quantities, location, cost, and relevant thumbnail specifications, together with such sketches or drawings as may have been determined necessary for clear communication and adequate inspection

3. Simple Construction Schedules

For transactions where a construction schedule is useful, but the critical path and/or task dependencies are not required, the lists of immediate repairs can be sorted by “time to complete” resulting in a list of repairs grouped by the number of months required to complete them. This simple construction schedule applies to Section 223(a)(7) and Section 223(f) transactions where project architect or a general contractor are not employed.

4. Form HUD-92329 Property Insurance Schedule

For existing, proposed, and substantial rehabilitation properties a schedule of insurable values by building, i.e., replacement cost as new.

5. Schedule of Initial and Annual Deposits

For existing, proposed, and substantial rehabilitation properties, a schedule of deposits to the reserve for replacement escrow account including both an initial deposit, if any, and annual deposits.

**5H. Design Professional Certifications**

**5H.1 Project Architect’s Certification for New Construction and Substantial Rehabilitation**

HUD Project Name

HUD Project Number

Borrower

I, the undersigned Project Architect, to the best of my knowledge, belief and professional judgment, hereby certify that the proposed construction in accordance with the drawings and specifications prepared for the subject Project:

- (a) is permissible under the applicable zoning, building, housing, and other codes, ordinances and/or regulations, as modified by any waivers obtained from appropriate officials;
- (b) complies with the HUD Minimum Property Standards and meets or exceeds the HUD minimum energy codes which are the International Energy Conservation Code (IEEC 2009), or for any buildings greater than 3 stories above grade, the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard 90.1 (ASHRAE 90.1, 2007);
- (c) allows for site soils limitations and incorporates design recommendations included in the foundation soils report and any other geotechnical reports;
- (d) for any structures first occupied or to be first occupied after March 13, 1991, the structures and site improvements conform to the design and construction requirements of the Fair Housing Act (42 USC 3604(f)(3)(C), and 24 CFR 100.205);
- (e) for any portion of the construction that is a public accommodation, conforms with the requirements of Title III of the Americans with Disabilities Act;
- (f) conforms with any state or local government requirements for accessibility for persons with disabilities including state or local measures to implement Title II of the Americans with Disabilities Act concerning state and local programs.

(g) You have informed me that the project (check one):

\_\_\_\_\_ has never been and will not be federally assisted or

\_\_\_\_\_ has been/will be federally assisted.

If the project has been or is proposed to be federally assisted the proposed construction meets the requirements of Section 504 of the Rehabilitation Act of 1973 as implemented by 24 CFR Part 8.

(h) You have informed me that the project must be designed to achieve a green building certification consistent with Chapter 6 of the MAP Guide: Yes \_\_\_ or, No \_\_\_ (check one).

If no, enter "not applicable" in the next line and proceed to item (i) below, if yes enter the following:

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Name of Certification: \_\_\_\_\_

Standard-keeper's name: \_\_\_\_\_

Address of Standard-keeper: \_\_\_\_\_

Name of Standard-keeper's Verifier: \_\_\_\_\_

Address of Verifier: \_\_\_\_\_

Proposed Level of Achievement<sup>5</sup>: \_\_\_\_\_

Point Score for Energy<sup>6</sup>: \_\_\_\_\_ out of a possible: \_\_\_\_\_

Is this certification a HUD recognized green building certification (see MAP Guide 6.3.A or 6.3.B)? Yes \_\_\_\_\_, or No \_\_\_\_\_. (check one)

If no, the following description of the certification must be true (see MAP Guide 6.3.C):

The certification requires the project design to achieve a 25% reduction in energy use when compared to the same project designed to meet the applicable HUD minimum energy code or for an existing property with benchmarked energy consumption history a 15% reduction in energy use compared to the benchmarked use; and

The certification requires independent verification of energy conservation measures and sustainable products and methods by the verifier's review of plans and specifications at the conclusion of design, by the verifier's onsite inspection of all construction completed prior to closing cavity walls and by the verifier's onsite inspection of construction after completion; and

The standard keeper provides or requires the verifier to provide to me and to the Borrower timely written documentation of results or conclusions resulting from the verifier's review of plans and specifications and each on-site inspection leading to and including the final award (or denial) of the certification.

The selected certification and level of achievement is applicable to the design and construction methods proposed for the project. The project design is consistent with all the requirements of the selected certification at the specified level of achievement and the project is designed to achieve an ENERGY STAR® Score not less than 75.

(i) Waivers of codes etc., were obtained as listed in attachment (identify):

Signed by \_\_\_\_\_

<sup>5</sup> e.g., bronze, silver, gold, or similar grades of achievement.

<sup>6</sup> If applicable, most standard keepers assign a level of achievement based on numbers of points assigned to design or siting features as part of a scoring system. Typically, categories of features have a total number of points possible for the category. This question asks for the number of points scored for the category of energy use or efficiency and the total number of points possible for that category.



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Date \_\_\_\_\_

Architect's Name \_\_\_\_\_

Business Address \_\_\_\_\_

License Number \_\_\_\_\_

Warning: Title 18 U.S.C. 1001, provides in part that whoever knowingly and willfully makes or uses a document containing any false, fictitious, or fraudulent statement or entry, in any manner in the jurisdiction of any department or agency of the United States, shall be fined not more than \$10,000 or imprisoned not more than five years or both

## **5H.2 Project Architect's Certification for Refinancing**

**(when a project architect is engaged)**

HUD Project Name

HUD Project Number

Borrower

I, the undersigned Project Architect, to the best of my knowledge, belief and professional judgment, hereby certify that the proposed construction in accordance with the drawings and specifications prepared for the subject Project:

(a) is permissible under the applicable zoning, building, housing, and other codes, ordinances and/or regulations, as modified by any waivers obtained from appropriate officials;

(b) complies with the HUD Minimum Property Standards as applicable to existing buildings;

(c) for any structures first occupied or to be first occupied after March 13, 1991, the reconfigured spaces and/or alterations to site improvements (excluding spaces not reconfigured and unaltered improvements) conform to the design and construction requirements of the Fair Housing Act (42 USC 3604(f)(3)(C), and 24 CFR 100.205) and if not, then any nonconforming elements have been identified and described in the drawings and

OMB REVIEW READY

specifications;

(d) for any reconfigured portion of the construction, which is a public accommodation, conforms with the requirements of Title III of the Americans with Disabilities Act, and if not, then any nonconforming elements have been identified and described in the drawings and specifications;

(e) any reconfigured spaces or alterations of site improvements conform with any state or local government requirements for accessibility for persons with disabilities including state or local measures to implement Title II of the Americans with Disabilities Act concerning state and local programs, and if not, then any nonconforming elements have been identified and described in the drawings and specifications .

(f) You have informed me that the project (check one):

\_\_\_\_\_ has never been and will not be federally assisted or

\_\_\_\_\_ has been/will be federally assisted.

If the project has been or is proposed to be federally assisted the proposed reconfigured spaces or alterations of site improvements meet the requirements of Section 504 of the Rehabilitation Act of 1973 as implemented by 24 CFR Part 8, and if not, then any nonconforming elements have been identified and described in the drawings and specifications.

(g) You have informed me that the repairs and alterations at the project must be designed to achieve a green building certification consistent with Chapter 6 of the MAP Guide:

Yes \_\_\_\_\_, or No \_\_\_\_\_. (check one).

If no, enter “not applicable” in the next line and proceed to item (h) below, if yes enter the following:

Name of Certification: \_\_\_\_\_

Standard-keeper’s name: \_\_\_\_\_

Address of Standard-keeper: \_\_\_\_\_

Name of Standard-keeper’s Verifier: \_\_\_\_\_

Address of Verifier: \_\_\_\_\_

Proposed Level of Achievement<sup>7</sup>: \_\_\_\_\_

Point Score for Energy<sup>8</sup>: \_\_\_\_\_ out of a possible: \_\_\_\_\_

<sup>7</sup> e.g., bronze, silver, gold, or similar grades of achievement.

<sup>8</sup> If applicable, most standard keepers assign a level of achievement based on numbers of points assigned to design or siting features as part of a scoring system. Typically, categories of features have a total number of points possible for the category. This question asks for the number of points scored for the category of energy use or efficiency and the total number of points possible for that category.

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Is this certification a HUD recognized green building certification applicable to existing buildings (see MAP Guide 6.3.B)? \_\_\_\_\_ Yes, or \_\_\_\_\_ No (check one).

If no, the following description of the certification must be true (see MAP Guide 6.3.C):

The certification requires the project design to achieve a 15% or greater reduction in energy use compared to the benchmarked use; and

The certification requires independent verification of energy conservation measures and sustainable products and methods by the verifier's review of plans and specifications at the conclusion of design, by the verifier's onsite inspection of all construction completed prior to closing any opened cavity walls and by the verifier's onsite inspection of construction after completion; and

The standard-keeper provides or requires the verifier to provide to me and to the Borrower timely written documentation of results or conclusions resulting from the verifier's review of plans and specifications and each on-site inspection leading to and including the final award (or denial) of the certification.

The selected certification and level of achievement is applicable to the design and construction methods proposed for the project. The project design is consistent with all the requirements of the selected certification at the specified level of achievement and the project repairs and alterations will earn the specified certification and are designed to achieve an ENERGY STAR® Score not less than 75.

(h) Waivers of codes etc., were obtained as listed in attachment (identify):

Signed by \_\_\_\_\_

Date \_\_\_\_\_

Architect's Name \_\_\_\_\_

Business Address \_\_\_\_\_

License Number \_\_\_\_\_

Warning: Title 18 U.S.C. 1001, provides in part that whoever knowingly and willfully makes or uses a document containing any false, fictitious, or fraudulent statement or entry, in any

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manner in the jurisdiction of any department or agency of the United States, shall be fined not more than \$10,000 or imprisoned not more than five years or both.

**5H.3 Certificate of Professional Liability Insurance**

HUD Project Name

HUD Project Number

Borrower

To: Lender and Secretary of Housing and Urban Development

I certify that \_\_\_\_\_ (Name of Architect/  
Engineer/ Design Professional) is insured in the amount of  
\$ \_\_\_\_\_ under \_\_\_\_\_ (Name  
of Insurer) Policy No. \_\_\_\_\_ of Architect and/or Engineers Professional  
Liability Insurance.

This Policy shall be maintained up through acceptance of the 12-month warranty inspection for  
the subject HUD Project.

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Insurer's Name \_\_\_\_\_

Business Address \_\_\_\_\_

\_\_\_\_\_

Warning: Title 18 U.S.C. 1001, provides in part that whoever knowingly and willfully makes or  
uses a document containing any false, fictitious, or fraudulent statement or entry, in any manner  
in the jurisdiction of any department or agency of the United States, shall be fined not more than  
\$10,000 or imprisoned not more than five years or both.

## 5I. HUD Cost Reviewer Reports Format

The following review reports formats are to be used to document Technical Reviews. The Technical Support Division Branch Chiefs and Production Division Directors have discretion to approve modifications or alternative formats.

### 5I.1. Cost Review Report for Pre-Application

HUD Office Name \_\_\_\_\_

Pre-Application Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

#### Summary of HUD Cost Review

##### A. Cost exhibits:

1. Mortgagor's Architect's sketch plans
2. Form HUD-92013

*If not acceptable, indicate reasons:*

##### B. For Substantial Rehabilitation projects, include the following:

1. Mortgagor's Architect's Scope of Work Summary
2. Mortgagor's summary cost estimate for substantial rehabilitation (based on Scope of Work Summary)

*If not acceptable, indicate reasons:*

##### C. HUD Cost Estimate determination of:

1. Structure type (from sketch plans):
2. Gross floor area (from sketch plans):
3. Estimated Total Structures cost (from cost data):
4. For Substantial Rehabilitation, indicate major trade item groups (if required), and subtotals:

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5. Estimated Total Land Improvements cost (from cost data):
6. Estimated General Requirements (from cost data):
7. Estimated fee items (from cost data):
  - a. General Overhead
  - b. Builder's Profit
  - c. Architectural Fees
  - d. Bond Premium
  - e. Other Fees

*If not acceptable, indicate reasons:*

D. Review of mortgagor's Form HUD-92013:

1. Percentage difference between mortgagor's Total Structures cost (Section G, Line 8) and HUD Cost Estimator's Total Structures cost:
2. Percentage difference between mortgagor's Total Land Improvements cost (Section G, Line 3) and HUD Cost Estimator's Total Land Improvements cost:
3. Percentage difference between mortgagor's General Requirements and fees (Section G, Lines 10 through 19) and HUD Cost Estimator's General Requirements and fees:

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_

Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**5I.2 HUD Cost Review of Lender's Construction Analyst Cost Review Report for Firm Exhibits – New Construction and Substantial Rehabilitation**

HUD Office Name \_\_\_\_\_

Firm Commitment Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

**Summary of HUD Cost Review**

A. Firm Commitment deliverables (Review for completeness only):

1. Lender's Cost Analyst Cost Review Report:
  - a. Lender's detailed cost estimate
  - b. Comparison of Lender's and general contractor's cost estimates
  - c. Prior approval of Identity of Interest subcontracts
  - d. Property Insurance schedule
  - e. For substantial rehabilitation projects, include the Lender's estimate for Annual Deposit to the Replacement Reserve.
2. Completed Forms with signatures:
  - a. HUD-92264
  - b. HUD-92326
  - c. HUD-92331-B
  - d. HUD-92329
  - e. HUD-2328
3. Subcontracts for Identity of Interest subcontractors  
*If not acceptable, indicate reasons:*



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B. HUD Cost Review:

1. Comparison of Lender's cost estimate and contractor's HUD-2328 with HUD cost data:
  - a. Total Structures
  - b. Total Land Improvements
  - c. General Requirements
  - d. Fee items
  - e. Cost Not Attributable items
2. Examination of Lender-contractor variance report (Form HUD-2331-B)
3. Examination of:
  - a. Identity of Interest relationships
  - b. Applications for prior approval of Identity of Interest subcontractor overhead and profit
  - c. 50%-75% Rule compliance
4. Examination of Property Insurance Schedule

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

**Reviewer:**

Name of Reviewer \_\_\_\_\_

Signature and Date of Review \_\_\_\_\_ Date \_\_\_\_\_

**Concurrence:**

Name of Team Leader \_\_\_\_\_

Signature and Date of Concurrence \_\_\_\_\_ Date \_\_\_\_\_

**5I.3. HUD Cost Review of Lender's Construction Analyst Cost Review Report for Firm Exhibits - Section 223(f) & 223(a)(7)**

HUD Office Name \_\_\_\_\_

Firm Commitment Submission Date \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

**Summary of HUD Cost Review**

**A. Firm Commitment deliverables:**

1. Lender's Capital Needs Assessment and Replacement Reserve Escrow (CNA) Report
2. Completed Form HUD-92264 with signatures

*If not acceptable, indicate reasons:*

**B. HUD Cost Review:**

1. Examination of Lender's CNA Report:
  - a. Critical repairs to be completed before endorsement
  - b. Non-critical repairs to be completed after endorsement and estimated repair costs
  - c. Expected repair replacement and major maintenance items over a specified period of time
  - d. Initial Deposit to Replacement Reserve, if any
  - e. Monthly Deposit to Replacement Reserve
  - f. Lender's 223(f) Repairs & Alterations Cost Worksheet (Appendix 5L), per Chapter 5.10.D.
2. Lender's Property Insurance Schedule (HUD-92329 from CNA eTool)

*If not acceptable, indicate reasons:*

I have reviewed the subject project and hereby make the following recommendation(s):

HUD Office Name \_\_\_\_\_

Project Name \_\_\_\_\_

Project Location (City, State) \_\_\_\_\_

MAP Lender Name \_\_\_\_\_

## **5J. Costs Not Attributable for New Construction**

### **1. Cost Not Attributable for New Construction**

A. For new construction projects, costs not attributable is calculated as a percentage. The percentage consists of the ratio of the cost of the non-attributable spaces and facilities (abbreviated “B”) to the total cost of land improvements and structures (abbreviated “A”), known as the B over A ratio, or simply B over A.

B. B over A Ratio. Costs are generally based on gross floor area of the building, area of exterior site improvements, and/or lump sums.

1. To calculate “B” costs:

a. Prepare a worksheet describing by category each item considered in Cost Not Attributable, showing the calculation of the cost of each item. Do not include General Requirements or fees in the calculation.

b. Show the basis of measurement and the unit price.

c. Summarize the categories and total in Form HUD-92326 and Section M of Form HUD-92264.

2. To calculate “A” costs:

“A” is the sum of Total Structures and Total Land Improvements, before General Requirements or fees are added. To calculate “A”, add the amounts in lines 36c and 41 in Section G of Form HUD-92264.

3. To calculate B over A:

Divide the “B” costs by the “A” costs. Express as a percentage and enter in Section M of Form HUD-92264.

C. Costs Not Attributable Categories. There are two main categories, Residential and Commercial. Each is calculated independently of the other and each has a maximum limit of 15%, resulting in a total cost not attributable of up to 30% (see the example in this Appendix, Section 2 below). Every use must be categorized either as Residential or Commercial, but not both.

1. Residential Costs Not Attributable. This consists of non-attributable items solely for the use of residents of the project. Items to consider as not attributable to dwelling use are:

a. Parking areas and the walks and driveways specifically leading to them and serving them. Do not include public roads and streets or walks and driveways that lead to and serve the building entrance.

b. Garages, garage spaces, and covered parking, and the walks and driveways leading to them, excluding public roads and streets.

c. Other improvements include:

1. Community space, such as: multipurpose rooms, game rooms, lounges, libraries, and hobby or craft rooms, including furniture or movable equipment.

2. Project administrative and maintenance spaces, such as: offices, repair shops, employee toilets, and janitor or cleaning closets, including furniture or movable equipment.

3. Storage facilities that are not for tenant use.

4. Recreational facilities, such as: swimming pools, tennis courts, basketball courts, and tot lots, including furniture or movable equipment.

5. Works of art that are fixed in place, such as wall murals or permanent ornamental fountains.

d. Special Exterior Land Improvements are features unusual or in excess of those typical in projects for similar occupancy.

1. Include such items as patios, sitting areas, and gazebos for the use of all project occupants. Include fountains and pools, exterior works of art, unusual trees and shrubs, and ornamental lighting and fencing.

2. Do not include typical earthwork, roads and walks leading to and serving the dwellings, typical lawns and plantings, private balconies and patios, utility lines, retaining walls, or security lighting and fencing.

2. Commercial Costs Not Attributable. This consists of areas or buildings and improvements intended for the use of the public as well as project residents. The most common commercial uses in residential developments are:

- a. Shops,
- b. Offices, and
- c. Public parking.

Include only the basic and permanent structural improvements typical in vacant commercial space. Do not include equipment, fixtures, movable partitions, special finishes, etc., for a specific business.

D. Limitation on Cost Not Attributable

1. Residential: The B over A ratio for residential costs not attributable should not exceed 15%. This is exclusive of any commercial space in the project, which will have a separate commercial cost not attributable.
2. Commercial: Commercial costs not attributable applies to commercial space such as shops that are in a residential structure but serve the general public as well as the residents. This is calculated separately from residential costs. The B over A ratio for commercial costs not attributable should not exceed 15 percent. The Lender's underwriter should be aware of the higher risk inherent in commercial space and take special care to evaluate the commercial market in order to determine the maximum commercial space that can be included in the project without imposing undue risk.

Example: A project has residential Cost Not Attributable of 12% and commercial Cost Not Attributable of 7%. Each Cost Not Attributable category is within the 15% guidelines. Total Cost Not Attributable for the project is 12% residential plus 7% commercial, equaling 19%.

E. Items not to be included in Costs Not Attributable:

1. Dwelling units. No portion of any dwelling unit, or any balcony or patio solely for the private use of the resident of the individual dwelling unit, is to be included in costs not attributable.
2. Utility rooms. Do not include utility rooms or portions of basements devoted to utilities such as boilers or furnaces, hot water heaters, water and sewer mains, gas mains, or electrical panels or closets.
3. Circulation elements. Do not include entrances, lobbies, halls, corridors, stairs, and elevators used by the occupants to enter and leave dwelling units. Do not include roads and walks that lead to and serve the dwellings.
4. Prorating of circulation elements. A prorating of circulation elements between dwelling use and any category in costs not attributable is not permitted.

5. Minor movable items that are not part of the real estate.
6. For commercial costs not attributable, do not include equipment, fixtures, movable partitions, special finishes, etc., for a specific business.

## 2. Example of Calculating Cost Not Attributable for New Construction

A 50-unit apartment building has a gross floor area of 30,000 sf and a footprint of 7,200 sf. It has a Total Structures cost of \$1,665,000, and a Total Land Improvements cost of \$250,000. It has a community room on the ground floor, a parking lot, an exterior patio with benches, tables, and ornamental shrubs, and a playground with swings and slides. Using the architectural drawings, determine the area of the community room, parking lot, patio, and playground, and the number of benches, tables, ornamental shrubs, swings and slides. Calculate the cost of each item.

### Unit quantities:

Community room:	650 sf
Asphalt parking lot for 50 cars:	15,000 sf
Concrete Patio:	400 sf
Playground:	900 sf
5 ft concrete patio benches:	6 count
3 ft x 3 ft concrete patio tables:	6 count
Ornamental shrubs:	12 count
Playground swing sets:	2 count
Playground slides:	2 count

### Unit costs:

- A. The community room is part of the structure, while the rest of the non-attributable features are exterior. The unit cost for the community room will be the Total Structures cost per gross square foot of building area. In Form HUD-92264, divide \$1,665,000 (Line 41 of Section G) by 30,000 sf (Line 33 of Section C), giving a cost per gross square foot of \$55.50.
- B. Determine unit costs for exterior features from the Office benchmark data bank or a published data source. The exterior unit costs used in this example are typical.

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**Parking lot:**

Asphaltic concrete parking lot paving:	\$1.25 per sf
Concrete perimeter curbing (500 lin. ft.):	\$10.50 per lin. ft.
Concrete parking bumpers:	\$30 ea.
Stormwater catch basins (4):	\$1,500 ea.
Storm drain line (350 lin. ft):	\$27 per lin. ft.
Parking lot striping:	\$4 per car

**Patio:**

Concrete patio paving:	\$4 per sf
Concrete patio benches:	\$500 ea.
Concrete patio tables:	\$1,000 ea.
Ornamental shrubs:	\$100 ea.

**Playground:**

Asphalt paving:	\$2 per sf
Rubber safety surface:	\$3 per sf
Swing sets:	\$500 ea.
Slides:	\$1000 ea.

C. Cost Calculations:

1. "B" Costs:

These are summarized according to category in Section M of Form HUD-92264.

**M.10 - Parking**

Parking lot paving:	15,000 sf x 1.25	18,750
Parking lot curbing:	500 lin. ft. x 10.50	+ 5,250
Parking bumpers:	50 x 30.00	+ 1,500

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Catch basins:	4 x 1500.00	+	6,000
Storm drain:	350 lin. ft. x 27.00	+	9,450
Striping:	50 x 4.00	+	200
			Summary Cost = \$41,150

**M.13 - Special Exterior Land Improvements**

Patio paving:	400 sf x 4.00		1,600
Patio benches:	6 x 500.00	+	3,000
Patio tables:	6 x 1000.00	+	6,000
Ornamental shrubs:	12 x 100.00	+	1,200
Playground paving:	900 sf x 2.00	+	1,800
Safety surface:	900 sf x 3.00	+	2,700
Swing sets:	2 x 500.00	+	1,000
Slides:	2 x 1000.00	+	2,000
			Summary Cost = \$19,300

**M.14 - Other**

Community room:	650 sf x \$55.50	=	\$36,075
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Total Summary Costs = M.10 + M.13 + M.14 = **TOTAL "B" COSTS = \$96,525**

Enter summary costs and breakdown in Section M.

2. "A" Costs

Total Structures (HUD-92264, line G.41)		\$1,665,000
Total Land Improvements (line G.3 5c)	+	250,000
<b>TOTAL "A" COSTS</b>		<b>= \$1,915,000</b>

3. Cost Not Attributable (B over A):

"B" costs @ \$96,525 divided by "A" costs @ \$1,915,000 = 0.0504 = **5.04 percent**

Enter the percentage in Section M of Form HUD-92264.



**5K. Costs Not Attributable for Substantial Rehabilitation and Existing Property with Repairs.**

**1. Instructions for Cost Not Attributable Calculation for Substantial Rehabilitation and Existing Property with Repairs**

- A. Steps 1 through 8 of the Worksheet below are intended for determining Rehabilitation Cost Not Attributable, and “As-Is” Cost Not Attributable, for existing building structures. If the building structure contains a parking garage within its footprint, the cost and floor area of the garage should be included in Steps 1 through 8. In addition, if the property contains a Cost Not Attributable use within an enclosed building that is separate from the residential structure(s), e.g. a small community building, the cost and floor area of such a Cost Not Attributable use should be included in Steps 1 through 8 of the Worksheet.
- B. However, if there is no parking garage, but rather an open-air parking lot (and/or other open-air non-attributable use, such as a tennis court) separate from the building, the following procedure should be used:
1. The cost to rehabilitate the parking lot (and/or other open-air use) should be included in Total Rehab Cost (Step 1) and Rehab Cost Not Attributable (Step 2).
  2. However, the area of the parking lot (and/or other open-air use) should **not** be included in the Project Structures Not Attributable Square Feet nor the Total Project Structures Gross Square Feet (Step 3).
  3. The area(s) of the parking lot (and/or other open-air use) will be entered in Step 9 and multiplied by the Estimated Value of Land without Improvements and divided by the area of the project site.
  4. Step 10 adds the amount in Step 9 to the subtotal in Step 8, to arrive at a total Rehabilitation Cost Not Attributable to Residential Use.

C. Rehabilitation Cost Not Attributable to Residential Use Worksheet

**1. Total Rehab or Repairs Cost**

(Without fees - Lines G 36c + G41 from HUD-92264); or  
 (Critical Repairs + Non-Critical Repairs Costs without fees) = \$ \_\_\_\_\_

**2. Rehab/Repairs Cost Not Attributable\***

(Dollar amounts without fees for Structures and Land Improvements) = \$ \_\_\_\_\_

\* From Cost Analyst

**3. Ratio of Not Attributable\***

a. Project Structures Not Attributable Square Feet (Structure(s) only) \_\_\_\_\_ sf \*

b. Total Project Structures Gross Square Feet (Structure(s) only) ÷ \_\_\_\_\_ sf \*

c. "3.a" divided by "3.b" = Ratio of Not Attributable = \_\_\_\_\_ %

\* From Cost Analyst

**4. "As-Is" Not Attributable**

a. Total "As-Is" Value (from Line G.73b of Form HUD-92264) \$ \_\_\_\_\_

b. Ratio of Not Attributable ("3.c" above) x \_\_\_\_\_ %

c. "4.a" multiplied by "4.b" = "As-Is" Not Attributable = \$ \_\_\_\_\_

**5. Total Cost Not Attributable**

a. "As-Is" Not Attributable ("4.c" above) \$ \_\_\_\_\_

b. Rehab Cost Not Attributable ("2" above) + \$ \_\_\_\_\_

c. "5.a" plus "5.b" = Total Cost Not Attributable = \$ \_\_\_\_\_

**6. Total Cost Without Fees**

a. Total Rehab Cost Without Fees ("1" above) \$ \_\_\_\_\_

b. Total "As-Is" Value (from Line G.73b of Form HUD-92264) + \$ \_\_\_\_\_

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c. "6.a" plus "6.b" = Total Cost Without Fees = \$ \_\_\_\_\_

**7. The Percentage Not Attributable**

a. Total Cost Not Attributable ("5.c" above) \$ \_\_\_\_\_

b. Total Cost Without Fees ("6.c" above) ÷ \$ \_\_\_\_\_

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c. "7.a" divided by "7.b" = The Percentage Not Attributable = \_\_\_\_\_%

**8. Rehab Cost Not Attributable for Project Structures**

a. Total Estimated Replacement Cost of Project (Line G.74) \$ \_\_\_\_\_

b. The Percentage Not Attributable ("7.c" above) x \_\_\_\_\_%

---

c. "8.a" multiplied by "8.b" = Rehab Cost Not Attributable for Project Structures = \$ \_\_\_\_\_

**9. "As-Is" Not Attributable for Open-Air Parking Lots and Other Open-Air Uses**

a. Total Open-Air Non-Attributable Area \_\_\_\_\_ sf \*

b. Estimated Value of Land Without Improvements x \$ \_\_\_\_\_

c. Site Area ÷ \_\_\_\_\_ sf \*

---

d. "9.a" multiplied by "9.b" divided by "9.c" = "As-Is" Not Attributable for Open-Air Parking Lots and Other Open-Air Uses = \$ \_\_\_\_\_

\* From Cost Analyst

**10. Total Rehabilitation & Repairs Cost Not Attributable to Residential Use**

a. Rehab Cost Not Attributable for Project Structures ("8.c" above) \$ \_\_\_\_\_

b. "As-Is" Not Attributable for Open-Air Parking Lots and Other Open-Air Uses ("9.d" above) + \$ \_\_\_\_\_

---

c. "10.a" plus "10.b" = Total Rehab/Repairs Cost Not Attributable to Residential Use = \$ \_\_\_\_\_

**2. Example of Calculating Cost Not Attributable for Substantial Rehabilitation and Repairs**

Apartment building containing community space and commercial space, a separate athletic club building, and an open-air parking lot.

Units: 50

Gross Floor Area: 50,000 sf (residential structure)

1,000 sf (athletic club building)

Total Site Area: 25,000 sf

Form HUD-92264 Section G

Rehab/Repair cost for Structures:		\$1,020,000
Rehab/Repair cost for Land Improvements:	+	\$125,000
Rehab/Repair Gen. Requirements:	+	\$225,000
Soft Costs:		
Carrying Charges, Financing, Legal, Organizational, Audit.	+	\$400,000
Contingency Reserve:	+	\$100,000
“As-Is” Value:		
Residential Structure:	+	\$3,000,000
Athletic Club Building:	+	\$50,000
Land (25,000 sf @ \$20/sf):	+	\$500,000
<hr/>		
Total = Line G.74	=	\$5,420,000

Non-attributable Areas

Residential Structure:

    Community Room = 1,000 sf

    Commercial Space = 2,000 sf

Athletic Club Building = 1,000 sf

Open-air Lot:

    Parking Lot for 50 cars = 15,000 sf

Rehabilitation/Repairs Cost Not Attributable (without Fees)

Residential Structure Rehab/Repair Costs:

Community Room: 1,000 sf @ \$20/sf	=	\$20,000
Commercial Space: 2,000 sf @ \$30/sf	=	\$60,000
Athletic Club Building Rehab/Repair Cost: 1,000 sf @ \$20/sf	=	\$20,000
Open-air Lot Rehab/Repair Costs:		
Patch and re-stripe parking lot: 15,000 sf @ \$1/sf	=	\$15,000

**STEP A: “B” over “A” Test:**

“A” (Rehab/Repair Costs for Structures and Land Improvements):

Rehab/Repair cost for Structures:		\$1,020,000
Rehab/Repair cost for Land Improvements:	+	\$125,000
		<hr/>
Total	=	\$1,145,000

“B” for Non-commercial Uses:

Community Room Rehab/Repair Cost:		\$20,000
Athletic Club Building Rehab/Repair Cost:	+	\$20,000
Open-air Lot Rehab/Repair Costs:	+	\$15,000
		<hr/>
Total	=	\$55,000

“B” for Commercial Uses:

Commercial Space Rehab/Repair Cost:	=	\$60,000
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“B” over “A” for Non-commercial Percentage

B divided by A (\$55,000 / \$1,145,000 = 0.048) = 4.80 Percent **Acceptable**

“B” over “A” for Commercial Percentage

B divided by A (\$60,000 / \$1,145,000 = 0.0524) = 5.24 Percent **Acceptable**

**STEP B: Rehab/Repairs Cost Not Attributable Worksheet:**

Step 1. **Total Rehab/Repairs Cost**

Land and Structures = **\$1,145,000**

Step 2. **Rehab/Repairs Cost Not Attributable**

= \$20,000 + 60,000 + 20,000 + 15,000 = **\$115,000**

Step 3. **Ratio of Not Attributable.**

USE ONLY THE AREAS WITHIN THE RESIDENTIAL STRUCTURE AND ENCLOSED NON-ATTRIBUTABLE BUILDINGS FOR PROJECT NOT ATTRIBUTABLE AND PROJECT GROSS SQUARE FEET.

Project Structures Not Attributable Square Feet

Community Room		1,000 sf
Commercial Space	+	2,000 sf
Athletic Club Building	+	1,000 sf
		<hr/>
Total	=	4,000 sf

Project Structures Gross Square Feet

Gross Floor Area of Residential Structure		50,000 sf
Athletic Club Building	+	1,000 sf
		<hr/>
Total	=	51,000 sf

**Ratio:** [4,000 sf] divided by [51,000 sf] = 0.0784 = **7.84 %**

Step 4. **“As-Is” Not Attributable.**

Total “As-Is” Value:

Residential Structure:		\$3,000,000
Athletic Club Building:	+	\$50,000
Land (25,000 sf @ \$20/sf):	+	\$500,000
Total		= \$3,550,000

**“As-Is” Not Attributable:**

Total “As-Is” Value:		\$3,550,000
Ratio of Not Attributable (Step 3):	x	7.84 %
[Total “As-Is” value] multiplied by [Ratio of Not Attributable]:	=	<b><u>\$278,320</u></b>

Step 5. **Total Cost Not Attributable.**

**Total Cost Not Attributable:**

“As-Is” Not Attributable (Step #4):		\$278,320
Rehab/Repairs Cost Not Attributable (Step #2):	+	\$115,000
[“As-Is” Not Attributable] plus [Rehab/Repairs Cost Not Attributable]:	=	<b><u>\$393,320</u></b>

Step 6. **Cost Without Fees.**

**Cost Without Fees:**

Total Rehab/Repairs Cost (without Fees) (Step #1):		\$1,145,000
Total “As-Is” Value:	+	\$3,550,000
[Total Rehab/Repairs Cost] plus [Total “As-Is” Value]:	=	<b><u>\$4,695,000</u></b>

Step 7. **The Percentage Not Attributable.**

**The Percentage Not Attributable:**

Total Cost Not Attributable (Step #5):		\$393,320
Cost without Fees (Step #6):	÷	\$4,695,000
[Total Cost Not Attributable] divided by [Cost without Fees]:	=	<b><u>8.38 %</u></b>

Step 8. **Rehab/Repairs Cost Not Attributable for Project Structures.**

**Rehab/Repairs Cost Not Attributable for Project Structures:**

Total Estimated Replacement Cost of Project (Line G.74):		\$5,420,000
Percentage Not Attributable (Step #7)	x	8.38 %
<hr/>		
[Total Estimated Replacement Cost] multiplied by [Percentage Not Attributable]:	=	<b><u>\$454,196</u></b>

Step 9. **“As-Is” Not Attributable for Open-Air Parking Lots and Other Open-Air Uses**

**“As-Is” Not Attributable for Open Air Parking Lots and Other Open-Air Uses**

Total Open-Air Non-Attributable Area (parking lot):		15,000 sf
Estimated Value of Land Without Improvements:	x	\$500,000
Site Area:	÷	25,000 sf
<hr/>		
[Total Open-Air Non-Attributable Area] multiplied by [Estimated Value of Land divided by Site Area]:	=	<b><u>\$300,000</u></b>

Step 10. **Total Rehabilitation Cost Not Attributable to Residential Use**

**Total Rehabilitation Cost Not Attributable to Residential Use**

Rehab/Repairs Cost Not Attributable for Project Structures (Step #8):		\$454,196
“As-Is” Not Attrib. for Open-Air Parking Lots and Other Open-Air Uses (Step #9):	+	\$300,000
<hr/>		
[Rehab/Repairs Cost Not Attributable] plus [“As-Is” Not Attrib. Open-Air Parking Lot / Other Uses]:	=	<b><u>\$754,196</u></b>



**5L. Lender’s 223(f) Repairs and Alterations Cost Worksheet**

<b>WORKSHEET FOR SUM OF COSTS OF REPAIRS &amp; ALTERATIONS IN 223(f) APPLICATIONS</b>				
(When hard costs exceed \$15,000/per unit or include Level 2 or Level 3 Alterations)				
<b>Project Name: Honest Acres</b>		<b>Address/City/State/Zip:</b>		
<b># All Units: 164</b>		<b>FHA #:</b>		
<u>Category or Description of Cost</u>	<u>When Incurred</u>		<b>C</b> \$ Total Cost	<b>D</b> % of Total Cost
	<b>A</b> \$ Before Endorsement (Note 1)	<b>B</b> \$ After Endorsement (Note 2)		
<b>A. Repairs Hard Costs</b>				
1. <u>Critical Repairs</u>				
a. Life Safety (see CNA e-Tool list of repairs)	7,600		\$ 7,600	
b. Accessibility (see CNA e-Tool list of repairs)	4,200	\$ 117,000	\$ 121,200	
c. <i>Subtotal All Critical</i>	11,800	\$ 117,000	\$ 128,800	
2. <u>Non-Critical Repairs (see CNA e-Tool list of repairs)</u>	\$ -	2,587,000	\$ 2,587,000	
3. <b>Total Hard Costs</b>	<b>\$ 11,800</b>	<b>\$ 2,704,000</b>	<b>\$ 2,715,800</b>	
<b>B. Repairs Soft Costs</b>				
4. <u>General Contractor</u>				
a. Overhead		\$ 27,000	\$ 27,000	0.99%
b. Profit		\$ 270,000	\$ 270,000	9.94%
c. <i>Subtotal GC Fees (4a + 4b)</i>		\$ 297,000	\$ 297,000	10.94%
5. <u>GC's General Requirements (itemize, Note 3)</u>		\$ 20,600	\$ 20,600	
6. <u>Architect's Fees (Note 4)</u>				
a. Design	\$ 30,000		\$ 30,000	1.10%
b. Supervision		\$ 15,000	\$ 15,000	0.55%
c. <i>Subtotal Architect's Fees (6a + 6b)</i>	\$ 30,000	\$ 15,000	\$ 45,000	1.66%
7. <u>Other Fees (itemize, Note 3)</u>	\$ 60,800	\$ 325,000	\$ 385,800	
8. <b>Total Soft Costs</b>	<b>\$ 90,800</b>	<b>\$ 657,600</b>	<b>\$ 748,400</b>	
<b>C. Calculations Total</b>				
9. <b>TOTAL COSTS</b>	<b>\$ 102,600</b>	<b>\$ 3,361,600</b>	<b>\$ 3,464,200</b>	
10. <b>Total Cost per Unit (Line 9/# units; Note 4)</b>			<b>\$ 21,123</b>	

OMB REVIEW READY

**C. Misc. Calculations**

11.	Assurance of Completion % (10%)	\$	<b>346,420</b>
12.	Total Amount of Repair Escrow (line 9 + line 11, col. C)	\$	<b>3,810,620</b>
13.	Section 223(f) Cost Ceiling: Sub Rehab+ Threshold		
a.	Enter Base \$ Per Unit Limit: 15,933 Enter Local High Cost		
b.	Multiplier: 262%		
c.	Adjusted Per Unit Limit:	\$	<b><u>41,744</u></b>

Total cost/unit at completion, no matter how funded, may not exceed sum on line 13c, Col A.

Note 1: Mortgageable costs, reimbursable at Endorsement subject to available proceeds

Note 2: Mortgageable costs, reimbursable only from Repair Escrow

Note 3: Attach additional sheets as required.

Note 4: % calculated is fee/(hard costs + GC fees + General Requirements)

Note 5: May not exceed base cost per unit x area high cost factor