

General

6.1

Qualifications, Responsibilities, and Approval of the Lender's Cost Estimator

- A. Qualifications of Lender's Cost Estimator - The Lender shall hire a qualified construction cost estimator with experience in multifamily cost estimating. The estimator must be knowledgeable and experienced with local building standards and construction costs for the type of project proposed. A cost estimator may also serve as the architectural analyst if the qualifications are met.
- B. Responsibilities of Lender's Cost Estimator - The cost estimator shall provide an independent cost analysis for the proposed project. This estimate is not limited to any one specific method. However, the method chosen must be one recognized by the construction industry. This detailed cost estimate must conform to HUD's line item format as shown on Form HUD-2328, Contractor's and/or Mortgagor's Cost Breakdown.

HUD Approval of the Lender's Cost Estimator - The Department reserves the right to examine the credentials of all cost estimators hired by the Lender, and to reject any and all individuals that it considers unqualified.

SECTION 221(d) AND 220

6.2

Lender Responsibilities and Deliverables

- A. Responsibilities

A complete construction cost analysis must be submitted with the Firm Commitment application. The Cost Analyst's responsibilities are:

1. Preparation of detailed cost estimate.
2. Completing Cost portions of Form HUD-92264, Project Income Analysis and Appraisal.

3. Reviewing and approving or disapproving the Contractor's and/or Mortgagor's Cost Breakdown, Form HUD-2328.
4. Preparing the Property Insurance Schedule, Form HUD-92329. (See Forms Appendix.)
5. Reviewing and approving or disapproving requests for prior approval of identity of interest subcontractors.
6. Estimate costs of Replacement Reserve items (for substantial rehabilitation). Note that there is no initial Replacement Reserve for complete (gut) rehabilitation. See Chapter 7 for instructions.
7. Providing advice and assistance on cost matters to mortgagors, consultants, contractors, and others.

B. Deliverables

1. Firm Stage - Cost Estimate Package:
 - a. Detailed Cost Estimate. To be summarized on Form HUD-92326:
 - (1) Detailed structure(s) and land improvement cost estimates, for new construction and substantial rehabilitation, and costs of unusual site development.
 - (2) Contractor's General Requirements, General Overhead and Profit, and Architect's Design and Supervision fees.
 - (3) Bond Premium and Mortgagor's and Contractor's Other Fees.
 - (4) Onsite Demolition costs.
 - (5) Off-site improvement costs.
 - (6) Project's Cost Not Attributable (CNA) to dwelling use.
 - b. Preparation of Cost portions of Form HUD-92264, Project Income Analysis and Appraisal.
 - c. Preparation of Form HUD-92329, Property Insurance Schedule, including Form FHA-2447, Property Insurance Requirements.
 - d. Review the Contractor's and/or Mortgagor's Cost Breakdown:
 - (1) Submit Form HUD-2328, Contractor's and/or Mortgagor's Cost Breakdown.
 - (2) Review of Form HUD-2328, Contractor's and/or Mortgagor's Cost Breakdown, and recommendation for approval or disapproval. Review must include a trade line item comparison of Form HUD-2328 and the estimator's cost estimate (Form HUD-92326), which is to be provided on Form FHA-2331-B.
 - e. For substantial rehabilitation (in addition to the above):
 - (1) Joint work write-up;

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- (2) Replacement Reserve estimate (See Chapter 7);
 2. Identity of Interest and 50-75 Percent Rule Disclosure. (See Section 14.15.M.3 for 50-75 Percent Rule instructions.)
 - a. Identification of any identity of interest relationship(s) between or among:
 - (1) Mortgagor,
 - (2) Mortgagor's Architect,
 - (3) General contractor,
 - (4) Subcontractor(s),
 - (5) Material supplier(s),
 - (6) Equipment lessor(s),
 - (7) Manufacturer(s) of industrialized housing.
 - b. Identification of any subcontractor(s) that violate the 50/75 Percent Rule by analysis of Form HUD-2328.

6.3**The Lender's Cost Estimate**

PURPOSE. The replacement cost estimate is one of the criteria used to determine the mortgage amount to be insured. It consists of estimates of the new construction and/or substantial rehabilitation costs of all proposed improvements to the property.

- A. **Method of Estimation.** The method should be similar to that used by general contractors. Data should be organized by trade division using the Construction Specification Index (CSI) Format, and adjusted to reflect cost differences due to time, location and price fluctuations. The cost estimate may be prepared using a quantity survey takeoff or a square-foot and per-unit cost approach using established data and making adjustments.
- B. **Data.** The data source used to prepare the cost estimate must be documented. Acceptable cost data may come from completed comparable projects, benchmark amounts taken from actual project costs, and published data from construction cost data publishers.
- C. **Detailed Cost Estimates.** Use detailed plans and specifications supplied by Lender's architectural analyst as indicated in Chapter 5.5 as a basis for the cost estimate. Estimates must reflect the general level of construction costs in the locality where construction takes place. Costs must be projected to the estimated construction start date. Davis-Bacon labor wage rates must be used. (Current Davis-Bacon

wage rates will be supplied by HUD. See Paragraph 5.4.A.7.a.) The cost estimate is tabulated on Form HUD-92326, and totals are reported in Sections G, M, and O of Form HUD-92264. (See Forms Appendix for all HUD forms.) The cost estimate consists of the following items:

1. Structures and Land Improvements include:

- a. Dwelling structures. Costs of all residential buildings including footings and foundations. Costs must be organized in the Construction Specification Index (CSI) trade item format. Report trade costs in Divisions 3 through 16 on Form HUD-92326.
- b. Garages include all covered parking, from individual carports to complete parking structures. Include free-standing garage structures with other accessory buildings on the Accessory Structures line on Form HUD-92326. On Form HUD-92264, garages are reported separately on Line G.39.

Exception: Where a garage structure serves as a base for the dwelling structure (common practice in high-rise reinforced-concrete apartment buildings), include the garage trades with the Dwelling Structure trade items; do not report separately on either Form HUD-92326 or HUD-92264.

- c. Accessory buildings. Include costs on the Accessory Structures line on Form HUD-92326 and on Line G.38 of Form HUD-92264.

Exception: Where accessory uses are not placed in a separate building but rather occupy space within the residential structure(s), include the spaces within the Dwelling Structure trade items; do not report separately on either Form HUD-92326 or HUD-92264.

- (1) Community structures include non-residential uses intended for all project residents but not open to nonresidents. These include clubhouses, meeting halls, exercise rooms, etc.
 - (2) Commercial structures include non-residential, commercial uses that derive their income from both project residents and the general public.
- d. Onsite land improvements make up the following trade line items on Form HUD-92326: Earthwork, Site Utilities, Roads and Walks, Site Improvements, Lawns and Planting, and Unusual Site Conditions.
 - (1) Unusual land improvements are items not typical to most construction in the locality, such as excessive excavation, rock excavation, cuts and fills, special foundations, high water table, problem soils, etc. These items are taken from the Unusual Site Conditions trade line item on Form HUD-92326. Reported separately on Line G.36a of Form HUD-92264. A cost analyst works with the appraiser to determine existence of condition.
 - (2) Other land improvements are typical sitework items. They are taken from the other 5 Land Improvement trade line items on Form HUD-92326. Reported on Line G.36b of Form HUD-92264.

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- e. Offsite extensions of roads, walks, and utilities immediately adjacent to project boundaries. See Section 6.3 C.2.b.(2) for more details.
2. Supplemental Cost Estimates include:
 - a. Demolition. This is onsite work to remove existing structure, footings, foundations, and utilities to prepare the site for new construction.
 - (1) Include the removal and disposal of debris and fill and compaction of excavations. Include general contractor's and subcontractor's overhead and profit in the estimate.
 - (2) Report on Form HUD-92326, under "demolition," and Form HUD-92264, Section O. Appraiser will report Demolition costs in Section J of Form HUD-92264.
 - (3) Demolition should not be included in the construction contract.
 - (4) Outside demolition does not include interior demolition within existing structures undergoing substantial rehabilitation. See Section 6.6.B.1.b.(1)(a).
 - b. Offsite work that is not immediately adjacent to project boundaries.
 - (1) Include utilities, walks, curbs, gutters, streets, drainage structures, landscaping, etc., that extend away from the project site. These improvements are not included in the construction contract. Report on Form HUD-92326 and Section M of Form HUD-92264.
 - (2) Do not include short offsite extensions of onsite utilities, walks, curbs and drainage structures that connect with those immediately adjacent to the project site. These short extensions, and improvements such as sidewalks and curbs adjacent to the property lines, should be considered onsite improvements and included in the construction contract.
 3. Cost Not Attributable to Dwelling Use (CNA) consists of certain project amenities and uses other than dwelling uses. CNA is calculated by the cost analyst and used by the appraiser to increase the maximum mortgage amount under Criterion 4 of Form HUD-92264-A. Include these costs within the estimate of total structures and land improvements; also itemize the costs and report separately in Form HUD-92326 and Section M of Form HUD-92264.
 - a. How CNA is calculated.
 - (1) CNA is calculated as a percentage. The CNA 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.
 - (2) B over A Ratio. Costs are generally based on gross floor area of the building, area of exterior site improvements, and/or lump sums.
 - (a) To calculate "B" costs:

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- (i) Prepare a worksheet describing by category each item considered in CNA, showing the calculation of the cost of each item.
 - (ii) Show the basis of measurement and the unit price.
 - (iii) Summarize the categories and total in Form HUD-92326 and Section M of Form HUD-92264.
- (b) To calculate “A” costs:
- (i) “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.
- (c) To calculate B over A:
- (i) Divide the “B” costs by the “A” costs. Express as a percentage and enter in Section M of Form HUD-92264.
- (d) For a complete example of calculating CNA, see Appendix 6D.
- b. CNA Categories. There are two main CNA categories, Residential and Commercial. Each is calculated independently of the other and each has a maximum limit of 15 percent, resulting in a total CNA of up to 30 percent. (See the Example in Paragraph 6.3.C.3.c below.) Note that any request to waive these limitations must be documented and justified in accordance with the provisions of Chapter 11.2.I.
- (1) Residential CNA. This consists of nonattributable 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:
 - (i) Community space, such as: multipurpose rooms, game rooms, lounges, libraries, and hobby or craft rooms, with related equipment such as television sets.
 - (ii) Project administrative and maintenance spaces, such as: offices (with related equipment such as computers), repair shops, employees’ toilets, and janitor or cleaning closets.

- (iii) Storage facilities not for occupant use.
 - (iv) Recreational facilities, such as: swimming pools, tennis courts, basketball courts, and tot lots, with related and necessary equipment.
 - (v) Interior works of art.
- (d) Special Exterior Land Improvements are features unusual or in excess of those typical in projects for similar occupancy.
- (i) 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.
 - (ii) 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 CNA

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.

c. Limitation on CNA

- (1) Residential CNA: The B over A ratio for residential CNA should not exceed 15 percent. This is exclusive of any commercial space in the project, which will have a separate commercial CNA.
- (2) Commercial CNA. Commercial CNA 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 CNA. The B over A ratio for commercial CNA 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 CNA of 12 percent, and commercial CNA of 7 percent. Each CNA category is within the 15 percent guidelines. Total CNA for the project is 12 percent residential plus 7 percent commercial, equaling 19 percent.

- d. Items not to be included in CNA:
- (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 CNA.
 - (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) Proration of circulation elements. A proration of circulation elements between dwelling use and any category in CNA is not permitted.
 - (5) For commercial CNA, do not include equipment, fixtures, movable partitions, special finishes, etc., for a specific business.
- e. CNA for substantial rehabilitation. See Forms Appendix for instructions.
- f. CNA Areas Used to Calculate Site Not Attributable

Site Not Attributable (SNA) is an extension of CNA. The value of the land containing a non-attributable use will be added to the CNA amount to increase Criterion 4 of Form HUD-92264-A. The SNA value equals the non-attributable site area multiplied by the Warranted Price of Land (Line G.73 of Form HUD-92264). The non-attributable site area is calculated by the cost analyst and provided to the appraiser who determines the SNA (See Chapter 7 and instructions for Form HUD-92264 in the Forms Appendix). Instructions:

- (1) Calculate the area of each CNA element.
 - (a) Itemize interior and exterior uses, such as community rooms and parking lots, in the area calculations.
 - (b) Items such as fences, benches, tables, and ornamental planting should not be included in area calculations.
 - (2) Itemize the areas in Section O of Form HUD-92264.
4. Allowances and Fees are reported on Forms HUD-92326 and HUD-92264 as lump sum dollar amounts. Depending upon data, they may be calculated either as lump sums, or as percentages of subtotals which are converted to dollar amounts.

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- a. General Requirements (Job Overhead). Covers project-specific overhead expenses. Calculate as a percentage of the sum of Total Land Improvements and Total Structures. Percentage amount is determined by the nature, difficulty and size of the project, and the characteristics of the neighborhood.
- (1) Include:
- (a) Supervision and job-site engineering;
 - (b) On-site job office expenses directly related to the project including clerical wages;
 - (c) Temporary buildings, tool sheds, shops, and toilets,
 - (d) Temporary heat, water, light and power for construction;
 - (e) Temporary walkways, fences, roads, siding and docking facilities, sidewalk and street rental;
 - (f) Construction equipment rental not included in trade item costs;
 - (g) Cleanup and disposal of construction debris;
 - (h) Medical and first aid supplies and temporary facilities;
 - (i) Security guard wages and related costs, and theft and vandalism insurance.
- (2) Do not include salaries of owners, partners, or officers of the general contracting firm when they visit the site. This is included in General Overhead. The only exception would be actual work done on the job by these individuals in a trade capacity, as laborers or supervisors.
- b. General Overhead. Covers contractor's head office and general business expenses. Amount is fixed at 2 percent of the sum of Total Land Improvements, Total Structures, and General Requirements.
- c. Builder's Profit. Calculate as a percentage of the sum of Total Land Improvements, Total Structures, and General Requirements. Percentage amount is determined by the nature and location of the project.
- (1) BSPRA. Builder's and Sponsor's Profit and Risk Allowance (BSPRA) applies to projects where there is an identity of interest between the mortgagor and the general contractor. BSPRA is limited to Section 220 and Section 221(d)(4) projects with such an identity of interest. The appraiser calculates the BSPRA amount and enters it on line G.68 of Form HUD-92264. Where BSPRA applies, do the following:

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- (a) Calculate an equivalent builder's profit and an equivalent subtotal (See Section 6.3 C.4.d below).
- (b) On the Builder's Profit line of Form HUD-92326 and on Line G.44 of Form HUD-92264, enter the word "BSPRA". The equivalent builder's profit calculated above is not included in the Total for All Improvements (bottom of Form HUD-92326 and Line G.50 of Form HUD-92264).
- d. Architect's Fees. Source is Owner-Architect Agreement, AIA Form B-181, to be provided to Lender's estimator. In the event of multiple prime contracts (e.g. engineers), total in line G.45 of HUD-92264 and itemize in Section O, Remarks. Estimator should copy the fee amounts, unaltered, to the cost estimate. Estimator should document architect's fees and compare with existing fee data to determine reasonableness. Estimator should inform the Lender if fees are significantly different from the data range, but the fees should not be altered on the cost estimate without a prior meeting between the Lender, Lender's estimator, mortgagor, and project Architect. Fees should be documented as a percentage of the sum of Total Land Improvements, Total Structures, General Requirements, General Overhead, and Builder's Profit (equivalent Profit in BSPRA cases).
- (1) Design Fee covers preparation of all construction documents (working drawings and specifications) up to start of construction. Usually 75 to 80 percent of total.
 - (2) Supervision Fee covers Architect's construction inspections, reports, and preparation of change order requests. Usually 20 to 25 percent of total.
- e. Bond Premium covers Performance Bond. Used to ensure completion of construction in event of a default by the general contractor. Bonding company determines applicable rate by the nature and location of the project and the contractor's history.
- f. Other Fees are costs of various required items and services. They can vary greatly from community to community. They can be paid either by the mortgagor or the general contractor. The mortgagor may submit an itemized list with costs as an aid to the cost estimator.
- (1) Site and topographic surveys,
 - (2) Subsurface exploration (test borings),
 - (3) Soil tests, concrete tests, and other construction testing.
 - (4) Fees for utility taps and connections.
 - (5) Building permits and licenses.
 - (6) General Contractor's cost certification audit fee (if required).

NOTE: The mortgagor's cost certification audit fee is not to be included in Other Fees since it is recorded separately on Line G. 66 of Form HUD-92264.

5. Construction Time. Measured in months. Varies depending upon size, complexity, location, and type of construction. Estimate construction time through examination of data. When documenting, it is recommended to establish graphs for each project type and structural system. Graphs should indicate the number of dwelling units and number of months to construct. Report construction time on Line G.52 of Form HUD-92264.

6.4**Project Processing – Pre-Application Stage**

Performed by HUD. See Section 6.7.

6.5**Lender's Project Processing – Firm Stage**

At this stage, the Lender's cost estimator will prepare a detailed cost estimate and all required reports and recommendations indicated below:

A. Forms to Use

1. Form HUD-92326. Used for preparation of detailed construction cost estimate.
2. Form HUD-92331-B. Used to make detailed comparison of trade line items between Estimator's cost estimate (HUD-92326) and Contractor's trade payment breakdown (HUD-2328).
3. Form HUD-92329, Property Insurance Schedule. Used to determine the Maximum Insurable Value for all project structures.
4. Form HUD-92264, Project Income Analysis and Appraisal.
 - a. Section G, Estimated Replacement Cost, Lines 36a through 52. Used to summarize Total Structures, Land Improvements, General Requirements, and Fees from Form HUD-92326. Also records Estimated Construction Time.
 - b. Section M. Used to summarize Cost Not Attributable to Dwelling Use (lines 10 through 15), and Offsite Requirements (lines 16 and 17).
 - c. Section O, Remarks. Used to explain Unusual Land Improvements, Other Fees, itemization of professional fees (e.g. engineers), overall difference between Lender's and mortgagor's cost estimates, and other cost items.

- B. Prepare detailed cost estimate on Form HUD-92326 using instructions in Paragraph 6.3. Sign form on the "Estimate Prepared by" line and certify. See standard certification in Section 11.2.J. The Lender's architectural analyst will supply detailed plans and specifications as indicated in Chapter 5.5.

- C. Resolve differences in Lender's and contractor's construction cost estimates.

Before the Firm application can be submitted for HUD review, there must be a general agreement between the construction cost estimates prepared by the general contractor and the Lender's cost estimator. The Lender's cost estimator is responsible for resolving major differences between the two estimates. When the two estimates generally agree, the Lender may use the contractor's cost figures as shown on Form HUD-2328 as its cost estimate. The Lender's cost estimator will use the following review procedure:

1. Prepare trade line item comparison of Lender's and contractor's cost estimates using Form HUD-92331-B.
 - a. Enter costs from Form HUD-92326 and HUD-2328. For multiple-structure type projects, a separate HUD-2328 must be submitted for each structure type, and a master HUD-2328 for the entire project.
 - b. Calculate and list line item percentage differences.
2. Review trade line item differences and note all variations beyond normal ranges. The range of trade line item differences varies from trade to trade. Major trades (e.g. engineers, carpentry) should have a smaller range difference than minor trades (e.g. sheet metal). The estimator should judge the variations based on established data.

Front-end Loading: The estimator should be alert for a pattern of front-end loading in trade items, where the contractor inflates the first few trade item costs in order to secure more mortgage proceeds early on in construction. Such a pattern may indicate inadequate working capital or risky business practices on the contractor's part. Front-end loading can jeopardize the construction of the project, especially since the contractor must under-estimate later trades in order to balance out the bottom line of the estimate, making these later trades especially vulnerable to shoddy work practices and even outright default.

3. Meet with contractor to discuss and resolve all questionable trade line item differences. Resolution process may result in either the estimator or the contractor, or both, recalculating costs of various trade line items based on discussions.
 - a. If differences are resolved, accept costs in Form HUD-2328 and use as Lender's Cost Estimate in Form HUD-92264.
 - b. When dealing with suspected front-end loading, require rigorous documentation of early trade items that are higher than normal.
 - c. If differences cannot be resolved, do not accept costs in Form HUD-2328.
 - (1) Use estimator's cost estimate as Lender's cost estimate.
 - (2) Inform the Lender's underwriter that the contractor's HUD-2328 is unacceptable.
 - (3) Advise the Lender's underwriter to meet with the mortgagor and the contractor for further attempts at resolution.

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- D. Prepare cost portions of Form HUD-92264, using instructions in Paragraph 6.3. Sign form in the “Cost Processor” box and certify. See standard certification in Section 11.2.J.
- E. Property insurance schedule, Form HUD-92329, provides a guide for the amount of insurance coverage. See Forms Appendix for preparation instructions.
1. Prepare form at submission of Firm Commitment package.
 2. Estimate 100 percent insurable value for each building.
 - a. Include cost of structures, foundations and basement, underground utilities within the building walls, and a proportionate share of allowances and fees, except for Other Fees.
 - b. Do not include the cost of land improvements, onsite demolition, or offsite work.
 - c. Include the cost of major mechanical equipment, such as boilers serving the entire project, in the cost of the building where the mechanical equipment is located.
- F. Prior approval of identity of interest subcontractors’ amount including overhead and profit.
1. Identity of Interest is a relationship that exists giving the mortgagor or general contractor apparent control or influence over a subcontractor, equipment lessor, material supplier, or manufacturer of industrialized housing. (See General Contractor’s cost certification instructions in Chapter 14 - Cost Certification, for definition of relationships.)
 2. Requirements. When subcontractors, material suppliers, or equipment lessors have an identity of interest with a mortgagor or general contractor, the lender must approve the subcontract amounts, including specific amounts for subcontractor general overhead and profit.
 3. Timing. Approval is required before work begins under the subcontract. Failure to secure prior approval will result in the disallowance of the total general overhead and profit of the subcontractor at cost certification.
 4. Request for approval (with the subcontracts, agreements, or leases) goes to the Lender’s cost estimator, whose recommendations must cover:
 - a. Acceptability of the documents;
 - b. Reasonableness of guaranteed maximum prices for the subcontract work;
 - c. Appropriateness of general overhead and profit dollar amounts.
 5. Mandatory Conditions for Approval. Note that the burden of proof is on the subcontractor.
 - a. Subcontracts:
 - (1) There must be a separate one for each trade;
 - (2) Subcontract must clearly identify scope of work;
 - (3) Be on a cost plus fixed fee basis:

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- (a) Guaranteed maximum dollar amount for work;
 - (b) Specific dollar amount for general overhead and profit.
- (4) Disapprove “paper conduit” arrangements where work is to be done by general contractor personnel or other subcontractors, suppliers or lessors.
- b. Subcontract prices: For this criterion, recent reliable data is a better test than whether higher bids were submitted.
- (1) The total price must not exceed the amount shown for the trade item on the accepted Form HUD-2328.
 - (2) Total price must not exceed reasonable prices taken from available data.
- NOTE: The Lender’s cost analyst must resolve disagreements in trade prices with the subcontractor.
- c. Overhead and Profit. The amounts for general overhead and profit shall be no higher than the typical prices for the specific trade.
- d. Subcontractor entity.
- (1) The firm must operate and have documented experience as a subcontractor for the specific field covered in the subcontract.
 - (2) Must control labor, materials, and equipment typical for the trade.
 - (3) Must do significant business in its specific field with mortgagors and general contractors having no identity of interest.
6. If total of all identity of interest subcontracts, purchases and leases is less than 1/2 of 1 percent of the mortgage amount, the requirements for each identity of interest subcontractor to cost certify may be waived by the Hub Director upon notification by the Lender.
7. Prepare letter of approval or disapproval to the mortgagor or general contractor. Letter must address all mandatory conditions.
- a. Approval will indicate any conditions, including whether or not subcontractor must cost certify.
 - b. Disapproval will state the reason for disapproval and indicate any cost certification requirements.

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- A. General. In developing the cost estimate for substantial rehabilitation, follow the instructions of other sections of this chapter, except as modified by the following.
- B. Firm Stage:
1. Rehabilitation cost estimate:
 - a. Mortgagor's Cost Exhibits. Detailed plans, specifications, and scope of rehabilitation work supplied by Lender's architectural analyst as indicated in Paragraphs 5.5 and 5.14, and general contractor's Form HUD-2328.
 - b. Lender's cost estimator will do the following:
 - (1) Using the construction drawings and specifications, the scope of work indicated in the joint work write-up and applicable data (all supplied by the Lender's architectural analyst), the Lender's cost estimator will prepare a detailed cost estimate. Estimate must include quantities and unit costs for all items described in the joint work write-up. Include the following items that are specific to substantial rehabilitation:
 - (a) Interior demolition and removal of floors, walls, roofs, doors and windows, finishes, cabinets, appliances, plumbing, HVAC, and electrical, including boilers and central air conditioning. Also includes abatement of asbestos and lead based paint. Enter amount in Special Construction trade line in Form HUD-92326. If individual trades include removal (e.g. remove and replace cabinets), removal costs may be included in the trade line item.
 - (b) Onsite demolition is not part of the Construction Contract and should be estimated and recorded in the same way as for new construction. See paragraph 6.3.
 - (c) Allowances and Fees for substantial rehabilitation, especially General Requirements and Architect's Fees, are calculated the same way as for new construction, but they should reflect the risk and responsibility inherent in rehabilitation and consider the location of the project. Recommend that the cost estimator keep separate data for this item.
 - (d) Rehabilitation time is determined the same way as construction time for new construction, but the data used must take into account the time required for interior demolition, as repair and rehabilitation cannot begin until such demolition is complete.
 - (e) Rehabilitation cost not attributable to dwelling use includes an "as-is" value for nonattributable items in addition to a value for actual work performed. Calculate by using the format in the Appendix 6C. The cost analyst completes steps 1,2 and 3. Steps 4 through 8 are completed by the appraiser.

- (f) Contingency reserve amount is based on available data for the type and condition of structure. Calculate as percentage of the sum of structures, land improvements, and general requirements. Percentage ranges from 1 to 10 percent, depending on the condition of the project, extent of rehabilitation, and experience and financial capacity of the mortgagor and contractor. Enter amount on line G.71 and in Section O of form HUD-92264.
2. Annual Deposit to Replacement Reserve. Because the rehabilitation work will result in a structure which will require no complete replacement of doors, windows, roofs, cabinets, or mechanical/conveyance systems for at least five years (see Paragraph 5.17), there is no initial deposit to the Reserve for Replacements for substantial rehabilitation. The cost analyst will work with the appraiser to determine the Annual Deposit to the Reserve for Replacement (ADRR). Monthly deposits to the Reserve for Replacement commence in accordance with the FHA Commitment. Calculations for the ADRR must be reviewed and appropriately revised every 10 years.

6.7

HUD Procedures for Pre-Application Stage

- A. New Construction. No detailed cost estimate is done at this stage. Cost estimation is limited to a review of the bottom line amount for Main Buildings on the mortgagor's application, Form HUD-92013. HUD cost estimator will perform the review as follows:
 1. The Lender will submit the Architect's sketch plans for the project at this stage.
 2. Using the sketches, the cost analyst will determine the structure type and calculate the project's gross floor area.
 3. Using construction cost data, the cost analyst will calculate an estimated Total Structures cost for the project's structure type and gross floor area.
 4. The cost analyst:
 - a. Will compare the estimated Total Structures cost with the mortgagor's amount for Main Buildings on Line 4 of Section G of Form HUD-92013, and will calculate a percentage difference between the two amounts;
 - b. Will examine Total Land Improvements, General Requirements, Builder's Profit, Architectural Fees, Bond Premium, and Other Fees for reasonableness in comparison with established data.
 - c. If the percentage difference is acceptable, accept the mortgagor's cost.
 - d. If the percentage difference is in a questionable range, attempt to reconcile the percentage difference with the mortgagor to bring the mortgagor's figure into an acceptable range, or

- e. If the percentage difference is unreconcilable, indicate in the review report that the project is unfeasible.
- f. Prepare a review report (Appendix 6-A) containing cost findings and submit to Team Leader.

B. Substantial rehabilitation.

1. Mortgagor's Cost Exhibits: Sketch plans and basic work write-up for rehabilitation work supplied by mortgagor's Architect as indicated in Paragraph 5.14.A, and mortgagor's summary cost estimate for proposed rehabilitation. Note that a bottom line estimate is only acceptable for complete (gut) rehabilitation at this stage. For projects involving partial rehabilitation, the mortgagor's Architect must provide enough detail in the basic work write-up to establish a clear scope of work. The extent of rehabilitation work should be expressed in percentages. (Example: Remove and replace 20 percent of subfloor, 50 percent of kitchen cabinets, 25 percent of sinks and bathtubs, etc.). An itemized trade line item cost estimate is not required at this stage, but major trade groups, such as trowel trades (concrete, masonry), hammer trades (carpentry, drywall, insulation), and mechanical trades (plumbing, heating, electrical) should be separated.
2. HUD summary cost estimate of rehabilitation work: The cost estimator will do the following:
 - a. Review the Lender's exhibits.
 - b. Using available cost data, develop a summary cost estimate of rehabilitation work. The estimate will summarize rehabilitation costs for all main buildings, land improvement costs, and allowances and fees.
 - c. Compare the HUD and mortgagor's cost estimates and report significant differences.
 - d. Discuss differences with Lender in order to resolve.
 - e. Prepare report (Appendix 6-A) with recommendations:
 - (1) If significant differences are resolved, accept the Lender's cost.
 - (2) If the differences are unreconcilable, advise the Team Leader that the project is unfeasible.

6.8**HUD Procedures for Firm Stage**

A. Lender will submit:

1. Lender's completed cost package including the detailed cost estimate and the property insurance schedule.

2. Mortgagor's cost document package consisting of completed contractor's cost breakdown on form HUD-2328, detailed plans and book specifications. For substantial rehabilitation, include useful life estimate of replacement reserve components (if applicable).
- B. The HUD cost analyst will examine the Lender's cost estimate, the underwriting summary and the cost exhibits. The HUD analyst will review the quality of the Lender's estimate and the transaction itself. The HUD analyst will not reprocess the case. However, if the HUD analyst determines that certain underwriting conclusions are not supportable and affect HUD's risk, the analyst may recommend that the Lender modify the application or recommend a rejection. The Team Leader will approve, reject or modify the recommendation of the HUD cost analyst.
- C. HUD cost analyst will review the lender and mortgagor packages and will recommend either acceptance or rejection of the cost portion of the firm submission. Architectural exhibits, including construction documents, will be used as backup. HUD cost recommendations will be based on:
1. Comparison of Lender's estimate and contractor's HUD-2328 cost breakdown with HUD cost data. Comparison will include:
 - a. Bottom line figures for total structures and land improvements and figures for allowances and fees;
 - b. Cost Not Attributable;
 - c. Evidence of front end loading;
 - d. Examination of lender-contractor variance report prepared by Lender's cost estimator, indicating resolution of cost differences.
 2. Examination of identity of interest relationships and applications for identity of interest subcontractor overhead and profit.
 3. Property insurance schedule.
- D. HUD cost analyst will issue a written report (Format in Appendix 6-A) containing recommendations and forward a copy to the HUD team leader.

SECTION 223(f)

6.9

Lender Responsibilities and Deliverables

A. Responsibilities

1. The Lender prepares the Project Capital Needs Assessment (PCNA) and Replacement Reserve Escrow in accordance with Appendix 5M. The Lender's responsibilities are:

- a. Preparing a Physical Inspection Report (PIR) containing an estimated cost, adjusted for inflation, to complete the project's:
 - (1) Immediate repair needs; and
 - (2) Expected repair, replacement, and major maintenance needs over a specified time period such as ten years.
 - b. Preparing a Statement of Resources and Needs which:
 - (1) Identifies:
 - (a) All critical repairs which must be completed before initial/final endorsement and the associated cost of doing the work.
 - (b) Non-critical repairs to be completed after final endorsement and the associated cost to be escrowed.
 - (2) Recommends:
 - (a) The amount of:
 - (i) The initial deposit to the replacement reserve, if any;
 - (ii) The monthly deposit to the replacement reserve
2. The Lender's cost analyst's responsibilities are:
- a. Completing cost portions of Form HUD-92264, Project Income Analysis and Appraisal, regarding repair costs.

NOTE: The Lender's appraiser works with the cost analyst to determine the "as new" replacement cost estimate and will enter the figures in Section G, lines G.36 through G.50 of Form HUD-92264.
 - b. Preparing the Property Insurance Schedule, Form HUD-92329 (See MAP Forms Book).

B. Deliverables at Firm Stage

1. Project Capital Needs Assessment containing estimates of critical and non-critical repair costs and the initial and monthly deposits to the replacement reserve.

NOTE: The Lender's appraiser works with the cost analyst to determine the "as new" replacement cost estimate and will enter the figures in Section G, lines G.36 through G.50 of Form HUD-92264.

2. Preparation of Form HUD-92329, Property Insurance Schedule, (See MAP Forms Book).

6.10**Lender Project Processing – Firm Stage**

The Lender's cost estimator will prepare all required reports and recommendations indicated below:

A. Forms to Use

1. Form HUD-92264

- a. Section G, Estimated Replacement Cost, Lines 36 through 50. Replacement cost figures are determined by the Lender's cost analyst and appraiser and entered by the Lender's appraiser.
- b. Section O, Remarks. The Lender's cost analyst will record totals for Project Repair costs and Initial Deposit to Replacement Reserve taken from PCNA.

2. Form HUD-92329, Property Insurance Schedule. Used to determine the Maximum Insurable Value for all project structures. Based on Lender's appraiser's estimate of value after repairs.

B. Property Insurance Schedule, Form HUD-92329, provides a guide for the amount of insurance coverage. See Forms Appendix for preparation instructions.

1. Prepare form at submission of Firm Commitment package.

2. Using replacement cost figures supplied by the Lender's appraiser, estimate 100 percent insurable value for each building.

- a. Value is of structures only. It does not include land value.
- b. Do not include the cost of land improvements, onsite demolition, or offsite work.
- c. Include the cost of major mechanical equipment, such as boilers serving the entire project, in the cost of the building where the mechanical equipment is located.

6.11**HUD Procedures for Firm Stage**

A. Lender will submit a completed cost package including:

1. Cost estimates for repairs and Replacement Reserve deposits contained in the PCNA (supplied by HUD architectural analyst);
2. Summary Replacement Cost Estimate;
3. Property Insurance Schedule.

B. HUD cost analyst will review Lender exhibits and will recommend either acceptance or rejection of the Cost portion of the Firm submission. HUD cost recommendations will be based on review of:

1. Repair estimate based on the PCNA and compared with HUD data.
 2. Lender's estimate for Initial Deposit to Replacement Reserve contained in the PCNA and compared with HUD data.
 3. Property Insurance Schedule.
 4. Any information produced by the Lender's architectural analyst which may affect cost.
- C. HUD Cost Analyst will issue a written report (Format in Appendix 6-A) containing recommendations and forward a copy to the HUD Team Leader.

SECTION 232

6.12

General Lender Procedures

- A. For new construction and substantial rehabilitation, follow instructions for Section 221(d) and 220, with additions and modifications as indicated below.
- B. For Section 232 projects pursuant to Section 223(f), follow instructions for Section 223(f), with additions and modifications as indicated below.

6.13

Lender Project Processing – Firm Stage

- A. Forms to Use

Use Form HUD-92264-HCF, Health Care Facility Summary Appraisal Report, dated 6/1995. Do not use Form HUD-92264. Cost sections are Section H for Estimated Replacement Cost, Section O for Offsite, and Section P for Remarks.

- B. There is no Cost Not Attributable for section 232 projects.

- C. Major Movable Equipment and Minor Equipment:

1. Definitions

- a. Major Movable Equipment:

- (1) Include large furniture and equipment with relatively fixed location, but capable of being moved. Examples: wheeled equipment, office machines (computers, copiers, fax machines), hospital beds and mattresses, tables, etc.

- (2) Do not include any motorized vehicles, such as trucks, vans, automobiles, or golf carts. These are not mortgagable items.

Note: See Appendix 5K for typical equipment and classification.

- b. Minor Equipment and Supplies. Expendable nonrealty items of small individual cost. Examples: china and flatware, utensils and instruments, linens, etc.
2. Processing instructions.
- a. The mortgagor submits a schedule of Major Movable Equipment and estimated cost of each item. For rehabilitation projects, the list must include existing equipment with each item's remaining useful life and cost to replace.
- (1) Check items for acceptability as Major Movable Equipment.
- (2) Estimate costs, including delivery and placement, but no fees of any kind.
- (3) Compare costs with mortgagor's. Accept mortgagor's estimate if reasonable.
- (4) Provide bottom line estimate to appraiser to enter on line H.36 of Form HUD-92264-HCF. Attach copy of accepted or modified schedule.
- b. Estimate cost of Minor Equipment and Supplies, and enter in Section P of Form HUD-92264-HCF.
3. Property Insurance Schedule
- a. Enter Major Movable Equipment as separate category on Form HUD-92329.
- b. Include in total 100 Percent Insurable Value.

6.14

General HUD Procedures

- A. For new construction and substantial rehabilitation, HUD review procedures will follow those for Section 221(d) and 220, with additions and modifications as indicated below.
- B. For Section 232 projects pursuant to Section 223(f), HUD review procedures will follow those for Section 223(f), with additions and modifications as indicated below.

6.15

HUD Procedures for Pre-Application Stage

In addition to procedure indicated in Paragraph 6.7:

- A. Estimate bottom-line costs of Major Movable Equipment and Minor Equipment from available data, per room or per bed.

- B. Compare to mortgagor's amounts on Form HUD-92013-HCF and determine if differences are reasonable. Inform mortgagor and Lender of findings.

6.16**HUD Procedures for Firm Stage**

- A. Follow procedures indicated in Paragraph 6.11.
- B. Include list of Major Movable Equipment in the review.