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CHAPTER 3. CONSTRUCTION COST PROCESSING USING CUPS

Section 1. CONDITIONAL AND FIRM STAGES

- 3-1. CONSTRUCTION COST REVIEW OF FORM [HUD-92013](#) APPLICATION AND DATA ENTRY. When the Cost Branch receives a Form [HUD-92013](#) application for processing, it will be reviewed to be certain all information is complete and accurate for cost processing.
- a. The Analyst assigned to process the proposal will review the application to determine if the project is a single or multiple structure type. CUPS will process a maximum of three structure types for one project. If the Analyst determines that the project is a multiple structure type, he/she will insure that there is one entry for each type for the following items:
- (1) Section A.
    - (a) Item 7. Type of Project
    - (b) Item 8. Number of Stories
    - (c) Item 12. Number of Buildings
    - (d) Item 13. Accessory Buildings or Space and Area (including the gross square feet)
    - (e) Item 16a. Type of Construction
    - (f) Item 16b. Exterior Finish
    - (g) Item 17. Structural System
    - (h) Item 17a. Floor System
    - (i) Item 18. Heating and Air Conditioning Systems
  - (2) Section C.
    - (a) Item 27.
      - 1 Different Types of Family Units
      - 2 Number of Units and Living Area Per Unit (square feet)

- 3 Number of Baths and Half Baths
  - 4 Unit Composition
  - 5 Basements for Detached, Semi-detached or Townhouses; Full or Partial
  - 6 Crawl Space, Structural Slab, or Slab-on-Grade
  - (b) Item 29. Parking Spaces, Attended, Self-Parking, Open Spaces and Covered Spaces
  - (c) Item 30. Commercial Ground Level and Commercial Other Levels
  - (d) Item 33. Gross Floor Area (Do not include gross square feet of accessory buildings)
  - (e) Item 35. Net Rentable Commercial Area
  - (f) Item 36. Number of Types of Non-revenue Units
  - (3) Section D. Item 37. Equipment and Services Included in Rent.
- b. The Cost Analyst will also review the following items to insure accuracy.
- (1) Section A.
    - (a) Item 10. Proposed or Existing
    - (b) Item 14. Dimensions (Site Area)
    - (c) Item 16. Year Built and Information Concerning Land or Property
    - (d) Item 25. Public or Community Utilities
    - (e) Item 26. Unusual Site Conditions
  - c. In addition to reviewing the above item, the Cost Analyst will determine if the cumulative total residential area broken down by unit type in Item No. 27 is reasonable in its relationship to Item No. 33, Gross Floor Area.
  - d. The Cost Analyst will correct any discrepancies or errors on the application face sheet. He/she will also complete page 3 of the P2013M/C2013M Data Entry Worksheet (Appendix 1) as
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follows:

- (1) Print 2013 for this structure type? Check Yes.
  - (2) Do you want to compute comparable projects? Check No.
  - (3) Statistical Summary? Check No.
  - (4) Terminate? Check Yes.
- e. The Analyst will then forward the worksheet with the [HUD-92013](#) to the terminal operator.
- f. The terminal operator will execute the P2013M program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-15, and return the program printouts to the Cost Branch.
- g. If the Analyst determines that it is necessary to correct the Form [HUD-92013](#) printout, he/she will indicate the necessary changes on the worksheet or printout and return it to the terminal operator.
- h. If corrections are necessary, the terminal operator will execute the C2013M program according to instructions in Handbook 2361.13, Paragraph 3-8, and return all printouts to the Cost Branch.
- 3-2. PROCESSING PROJECT COST ESTIMATE USING P2325T PROGRAM. The Cost Analyst is required at the conditional and firm stages to process a project estimate of total for all improvements for the subject proposal.
- a. The Analyst will review the Form [HUD-92013](#) printout to determine if the comparables selected for each type are the best data for processing the subject proposal.
  - b. The Analyst will then complete a P2325T data entry worksheet (Appendix 3) as follows to retrieve an unadjusted cost estimate for the subject proposal. Page one of the worksheet should be completed for each type of a combination project.
    - (1) Item 1. Project I.D.: Enter the three-digit office code followed by the five-digit project number.
    - (2) Item 2. New Comparable? Check No if the number one comparable selected by the P2013M program will be used for processing. Otherwise, check Yes, and enter the new comparable project number.
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- (3) Item 3. Construction start date of subject: Enter the date in MM/DD/YY format.
- (4) Item 4. Change in time multiplier? Check Yes to change the time multiplier computed by the program. Check No to use the computed time multiplier.
- (5) Item 5. Enter new time multiplier: Enter the new time multiplier in N.NNNN format if the response to Item 4 was Yes.
- (6) Item 6. Lump sum adjustments? Check No, and enter elevators in this structure type. Enter zero if there are no elevators.
- (7) Item 7. Enter number of elevators: Enter the number of elevators in this structure type. Enter a zero if there are no elevators.
- (8) Item 8. 2325 Report? Check Yes.
- (9) Item 9. Costs not attributable: Do not made any entries for this item.
- (10) Item 10. Do you wish to enter dollar values for Site Work? Check No, and make no entries for this item.
- (11) Item 11. Onsite Special Exterior Land Improvements: Make no entries for this item.
- (12) Item 12. Commercial Costs Not Attributable: Make no entries for this item.
- (13) Item 13. Off-Site Costs: Make no entries for this item.
- (14) Item 14. Demolition? Make no entries for this item.
- (15) Item 15. Is this a BSPRA? Check Yes if the subject proposal is being processed with a Builder's or Sponsor's Profit and Risk Allowance (BSPRA). Otherwise, check No.
- (16) Item 16. Do you wish to enter page 2 fee items? Check No, and make no entries for fees.
- (17) Item 17. 2326 Report? Check Yes to retrieve a printout of an unadjusted estimate of cost.

- (18) Item 18. Do you want Section G printed and the data carried forward for Valuation processing? Check No for this item.
- (19) Item 19. Enter estimated construction time in months: Make no entry for this item.
- c. The Cost Analyst will forward the P2325T data entry Worksheet to the terminal operator, who will execute the program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-17.
- d. The terminal operator will return the program printouts to the Cost Staff when completed.
- e. Using the unadjusted 2325 and 2326 reports, comparable listing, and plans and specifications, the Analyst will prepare a new worksheet for processing an adjusted estimate of cost. If the Analyst has made a judgmental decision to use a comparable project other than what was selected by CUPS, he/she will document in the case file the reason for this decision. If the Analyst decides to override the time multiplier calculated by the program, he/she will indicate on the worksheet the source of the new time multiplier used in processing. All items on the worksheet will be completed as follows.
  - (1) Item 1. Project I.D.: Enter the three-digit office code followed by the five-digit project number.
  - (2) Item 2. New Comparable? Check No if the number one comparable selected by the P2013M program will be used for processing. Otherwise, check Yes, and enter the new comparable project number.
  - (3) Item 3. Construction start date of subject: Enter the date in MM/DD/YY format.
  - (4) Item 4. Change in time multiplier? Check Yes to change the time multiplier computed by the program. Check No to use the computed time multiplier.
  - (5) Item 5. Enter new time multiplier: Enter the new time multiplier in N.NNNN format if the response to Item 4 was Yes.
  - (6) Item 6. Lump sum adjustments? Check Yes, and enter appropriate item numbers, plus or minus dollar changes,

and descriptions of benchmarks used.

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- (7) Item 7. Enter number of elevators: Enter the number of elevators in this structure type. Enter a zero if there are no elevators. Note: An accurate entry for this item is critical since it determines which mortgage limits will be used to process the proposal. A zero entry will cause the Valuation processing program to use non-elevator mortgage limits. For an entry greater than zero, the program will use elevator mortgage limits.
- (8) Item 8. 2325 Report? Check Yes.
- (9) Item 9. Costs not attributable: Enter the descriptions and dollar amounts for any costs not attributable to this structure type. Do not enter commercial costs, since they will be entered under Item number 12.
- (10) Item 10. Do you wish to enter dollar values for Site Work? Check Yes, and enter the appropriate dollar amounts for all site work.
- (11) Item 11. Onsite Special Exterior Land Improvements: Enter the description and dollar amounts, if any.
- (12) Item 12. Commercial Costs Not Attributable: Enter the description and dollar amounts, if any.
- (13) Item 13. Off-Site Costs: Enter the description and dollar amounts, if any.
- (14) Item 13. Demolition? Enter the description and dollar amounts, if any.
- (15) Item 15. Is this a BSPRA? Check Yes if the subject proposal is a BSPRA.
- (16) Item 16. Do you wish to enter page 2 fee item? Check Yes. Enter either a dollar amount or a percentage in XX.XX format for each fee, except for Other Fees, which will always be entered as a dollar amount.
- (17) Item 17. 2326 Report? Check Yes.
- (18) Item 18. Do you want Section G printed and the data carried forward for Valuation processing? Check Yes, so that Valuation staff will be able to process the

Form FHA-2264 on CUPS.

(19) Item 19. Enter Estimated Construction Time in Months:

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Enter the appropriate number of months.

- f. The Cost Analyst will forward the P2325T worksheet to the terminal operator, who will execute the program according to instructions contained in the Handbook 2361.13, Chapter 3, Paragraph 3-17.
  - g. The terminal operator will return the worksheet with the program printouts to the cost branch when completed.
  - h. If the Analyst has made new benchmark adjustments for the subject project or is using a new comparable to process, he/she will complete a new P2325T data entry worksheet in the same manner as described above.
  - i. If the same comparable is being used for processing and no new benchmark adjustments are necessary, the Cost Analyst may use the change option of the C2326 program to change the construction start date, stage or any other items on the firm estimate. A detailed discussion of the C2326 program is contained in Chapter 8, Paragraph 8-1 of this Handbook.
  - j. Upon completion of the appropriate worksheet, the analyst will forward it to the terminal operator for execution of the indicated program.
  - k. If the terminal operator has received a P2325T data entry worksheet, he/she will execute the program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-17.
  - l. If the terminal operator has received a C2326 program worksheet, he/she will execute the program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-19.
  - m. The terminal operator will return the worksheet with the program printouts when completed to the Cost Branch.
- 3-3. PROCESSING CONTRACTOR'S PROJECT COST ESTIMATE USING X2328 PROGRAM. If, after final review of the completed firm project cost estimate, no further corrections are required, the Cost Analyst will process the Contractor's and/or Mortgagor's

Cost Breakdown Form FHA-2328.

- a. The Cost Analyst will complete an initial X2328 Data Entry Worksheet, Appendix 5, for the subject project as follows:

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- (1) Indicate the appropriate structure type.
- (2) Item 1. Project Number and Name. Enter the three-digit office code followed by the five-digit project number and project name.
- (3) Item 2. Modify or Remove? Make no entry for this item, since it is not applicable to the initial program run.
- (4) Item 3. Details? Check Yes if you wish to print instructions. Otherwise, check No.
- (5) Item 4. Have the final plans, specifications and updated 2326 been reviewed? Check Yes.
- (6) Item 5. Has the Gross Area Block been completed and verified? Check Yes.
- (7) Item 6. Enter the trade item dollar amounts from the 2328(s) attached. Attach a Form FHA-2328 for the indicated structure type. Enter a zero for any items on the Form FHA-2328 that were left blank by the sponsor. If a carriage return is depressed for any trade item, the dollar amount for that item will be carried over from the existing Commissioner's estimate.
- (8) Item 7. Architect's Fees. Enter the appropriate dollar amounts for the Architect's fees.
- (9) Item 8. Cost Not Attributable. Enter a maximum of eight descriptions and dollar amounts for costs not attributable to the subject project.
- (10) Item 9. Onsite Special Exterior Land Improvements. Enter a maximum of three descriptions and dollar amounts for this item.
- (11) Item 10. Off-Site Costs. Enter a maximum of five descriptions and dollar amounts for this item.
- (12) Item 11. Demolition. Enter a maximum of two



descriptions and dollar amounts for this item.

- (13) Item 12. Do you accept this project for data purposes?  
Check No.

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- (14) Item 13. Print Contractor's Estimate? Check No, since this prompt will not apply to the initial program run.
- (15) The Cost Analyst will forward the X2328 worksheet to the terminal operator, who will execute the program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-20.
- (16) The terminal operator will return the worksheet with the program printouts when completed to the Cost Branch.
- b. After the Cost Analyst has completed review and analysis of the variance report provided by the initial run of the X2328 program, he/she will prepare a new X2328 Data Entry program worksheet as follows for acceptance of the X2328 data.
- (1) Indicate the appropriate structure type.
- (2) Item 1. Project Number and Name. Enter the three-digit office code followed by the five-digit project number and project name.
- (3) Item 2. Modify or Remove Data? The MOD option allows the user to make changes to previously entered dollar amounts and/or accept the X2328 data. The REM option removes all the X2328 data and allows for its reentry. If the MOD option is indicated, enter the item number and the new dollar values on the worksheet. If the REM option is indicated, attach the new Form FHA-2328 to the worksheet.
- (4) Item 3. Details? Check No.
- (5) Item 4. Have the final plans, specifications and updated 2326 (Commissioner's Estimate) been reviewed? Check Yes.
- (6) Item 5. Has the Gross Area Block been completed and verified? Check Yes.
- (7) Item 6. Enter the trade item dollar amounts from the 2328(s) attached. If the REM option was indicated

for Item 2, attach the new Form FHA-2328. This item will not apply to the MOD option.

- (8) Item 7. Architect's Fees (Prior) and Architect's Fees (During). If the REM option was indicated for Item 2, enter the appropriate dollar amounts for this

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item. This item will not apply to the MOD option.

- (9) Item 8. Cost Not Attributable. If the REM option was indicated, enter a maximum of eight descriptions and dollar amounts for costs not attributable to the subject project. This item will not apply to the MOD option.
- (10) Item 9. Onsite Special Exterior Land Improvements. If the REM option was indicated, enter a maximum of three descriptions and dollar amounts for this item. This item will not apply to the MOD option.
- (11) Item 10. Off-Site Costs. If the REM option was indicated, enter a maximum of five descriptions and dollar amounts for this item. This item will not apply to the MOD option.
- (12) Item 11. Demolition. If the REM option was indicated, enter a maximum of two descriptions and dollar amounts for this item. This item will not apply to the MOD option.
- (13) Item 12. Do you accept this project for data purposes? Check Yes. The subject project will be eligible for use as a comparable following acceptance of the X2328 data.
- (14) Item 13. Print Contractor's Estimate? Check Yes to obtain a printout of the estimate.
- (15) The Cost Analyst will forward the X2328 Data Entry Worksheet to the terminal operator, who will execute the program according to instructions in Handbook 2361.13, Chapter 3, Paragraph 3-20.
- (16) The terminal operator will return the Worksheet with the program printouts when completed to the Cost Branch.

Section 2. CONSTRUCTION AND CERTIFICATION STAGES.

3-4. PROCESSING CONSTRUCTION CHANGE ORDERS USING P2437M PROGRAM.

- a. The only CUPS program that will be run during the construction stage is the P2437M program, which is used by the Cost Analyst to enter approved change orders from the Request for Construction Changes Project Mortgage, Form FHA-2437.

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- b. The P2437M program may be run during the construction stage as needed, and the change order costs will be retained on an accumulative basis until the subject project is certified.
  - c. The change order costs are added to the firm project cost estimate dollar amounts only for the purpose of a variance report provided by the program.
  - d. The Cost Analyst will complete a P2437M Data Entry Worksheet (Appendix 6), for any approved construction change orders by entering the net plus or minus effect of cost, exclusive of fees, for the changed trade item in the appropriate structure type column. The net plus or minus effect of cost for a fee item must be entered on the appropriate line for that item.
  - e. The Cost Analyst will forward the completed worksheet to the terminal operator, who will execute the P2437M program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-18. The P2437M Program printouts will be returned to the Cost Branch.
- 3-5. CERTIFICATION USING CERT PROGRAM. The only CUPS program that will be run during the certification stage is the CERT program, which is used by the Cost Analyst to enter the certified costs from the Contractor's Certificate of Actual Cost, Form HUD-92330-A, and the applicable items from the Form HUD-92330-A, Mortgagor's Certificate of Actual Cost. If the subject case is a multiple-type project, the CERT program will break up the total dollar amount for each trade item from the Form HUD-92330-A based on the percentage allocated to each trade item dollar amount on the HUD Project Cost Estimate. A multiple-type Form FHA-2326 printout is then provided by the program. Miscellaneous Labor and Materials Cost on the Form HUD-92330-A should be reviewed to insure that it is not greater than \$1,000. If a dollar amount greater than \$1,000 is entered for this item during the CERT run, the program will print the following message: "Amounts greater than \$1,000 must be redistributed into appropriate trade items by the contractor or accountant, this program will now terminate." The program cannot be rerun until the amount

has been redistributed into appropriate trade items.

a. The Cost Analyst will complete all items on the CERT Data Entry Worksheet (Appendix 7) as follows.

- (1) Item 1. Do you want instructions? Check Yes if you wish to obtain a printout of instructions. Otherwise, check No.

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- (2) Item 2. Project Number and Name. Enter the three-digit code followed by the five-digit project number and the project name.
  - (3) Item 3. Is this a BSPRA? Check Yes or No, as applicable to the subject case.
  - (4) Item 4. Change orders for this project have not been entered, do you wish to do so now? The program checks at this point to see if change orders have been entered for the subject project. If they have not been entered, the program will respond with this prompt. If the response is Yes, the program will terminate and instruct the user to run the P2437M program. To continue processing, check No.
  - (5) Item 5. Unaccepted HUD-92330-A costs already exist for this project. Do you want to remove or modify the existing costs? This item will not apply to the initial run of the CERT program.
  - (6) Item 6. Do you wish to modify (MOD) or Remove (REM)? This item will not apply to the initial run of the CERT program.
  - (7) Item 7. Do you have any HUD-92330-A data to be entered? Check Yes and attach the Form HUD-92330-A to the worksheet. Also, enter the dollar amounts for Architect's Fee (Prior) and Architect's Fee (During).
  - (8) Item 8. Do you want a Recap Report? Check Yes.
  - (9) Item 9. For Data Purposes, Do you want to revise any of the actual cost data from the HUD-92330-A? Check No.
  - (10) Item 10. Do you want a 2326 report reflecting this data? Check Yes.

- (11) Item 11. Do you accept these figures as final for data purposes. Check No.
- b. The Cost Analyst will forward the CERT Data Entry worksheet to the terminal operator, who will execute the program according to instructions contained in Handbook 2361.13, Chapter 3, Paragraph 3-4.
- c. The terminal operator will return the worksheet with the

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- program printouts when completed to the Cost Branch.
- d. The initial run of the CERT program will provide a recapitulation report indicating the variance in dollars and percent between the firm project costs and the certified costs. Any item cost changed as a result of a construction change order (Form FHA-2437) will also be reflected on this report. After the Cost Analyst has completed review and analysis of this report, he/she will prepare a new CERT worksheet as follows for acceptance of the certified data.
- (1) Item 1. Do you want instructions. Check No.
- (2) Item 2. Project Name and Number. Enter the three-digit code followed by the five-digit project number and the project name.
- (3) Item 3. Is this a BSPRA? Check Yes or No, as applicable to the subject case.
- (4) Item 4. Change orders for this project have not been entered, do you wish to do so now? Check No.
- (5) Item 5. Unaccepted Form HUD-92330-A costs already exist for this project. Do you want to remove or modify the existing costs? Check Yes.
- (6) Item 6. Do you wish to modify (MOD) or Remove (REM)? If it is necessary to correct a majority of data entered under the initial CERT run, check REM. Attach the new Form HUD-92330-A, so that it can be reentered in its entirety. If it is necessary to only correct a few items or none at all, check MOD. Enter modified values for items in the appropriate blocks on the worksheet. Make no entries if modifications are not necessary.

- (7) Item 7. Do you have any Form HUD-92330-A data to be entered? This item does not apply to the second run of the CERT program.
- (8) Do you want a Recap Report? If data modifications have been made, check Yes to print a new recapitulation report. If no data modifications have been made, check No.
- (9) Item 9. For Data Purposes, do you want to revise any of the actual cost data from the HUD-92330-A? If

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it is necessary to revise any unusual dollar amounts for items on the Form HUD-92330-A for comparable data purposes, check Yes. Enter the revised values in the appropriate blocks on the worksheet. If no revisions are necessary, check No and make no entries.

- (10) Item 10. Do you want a Form FHA-2326 report reflecting this data? If data modifications or revisions have been made, check Yes to print a new Form FHA-2326 report. If no data modifications or revisions have been made, check No.
  - (11) Item 11. Do you accept these figures as final for data purposes. Check Yes.
- e. The Cost Analyst will forward the CERT Data Entry worksheet to the terminal operator who will execute the program according to instructions contained in Handbook 2361.13, Chapter 13, Paragraph 3-4.
  - f. The terminal operator will return the worksheet with the program printouts when completed to the Cost Branch.

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