



U. S. Department of Housing and Urban Development
Washington, D.C. 20410

OFFICE OF LEAD HAZARD CONTROL

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SUBJECT:	<u>HUD Project Management System: Baseline Planning and Progress Reporting Instruction Manual for Contractors and Federal Assistance Awardees</u> (letter to grantee organization)
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RELATED GUIDANCE:	Policy guidance 96-02.
COMMENTS:	

[letter to Paul Kowalski, Director, Environmental Health, City of New Haven, CT]

Dear Grantee:

Enclosed for your information and use is the HUD Project Management System: Baseline Planning and Progress Reporting Instruction Manual for Contractors and Federal Assistance Awardees.

Please ensure that this manual is reviewed by the Project Manager and/or others responsible for complying with the technical management reporting requirements for the HUD Lead-Based Paint Hazard Reduction Grant Program. This manual should be used in preparing your Baseline Plan Form (HUD-441.1) and the Progress Report Form (HUD-661.1). Detailed instructions for completing these forms are included as Appendix B and C.

If you have any questions regarding the manual or the reporting requirements, please direct them to your Government Technical Representative.

Sincerely,

Ellis G. Goldman
Director, Program Management Division

Enclosures

HUD PROJECT MANAGEMENT SYSTEM

Baseline Planning and Progress Reporting Instruction Manual

for Contractors and Federal Assistance Awardees



Washington, DC

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THE HUD PROJECT MANAGEMENT SYSTEM

The Baseline Planning and Progress Reporting Instruction Manual for Contractors and Federal Assistance Awardees

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The HUD Project Management System

I. FOREWORD

A. Purpose

The purpose of this manual is to assist awardees of HUD contracts and assistance agreements in responding to the reporting requirements of the HUD Project Management System. The HUD Project Management System is designed to support the planning and reporting of the technical management of projects conducted for the Department. The initial purpose was the management of research projects, but the system was later found useful for a broad range of HUD projects.

B. Scope

The Baseline Management Plan and the Management Progress Report described in this Manual apply to projects conducted for HUD by firms and organizations outside the Department under either contractual agreements or Federal assistance agreements. Throughout this manual any of these types of agreements will be referred to as an "Agreement." The term "Awardee" will be used to designate the contractor, grantee, or cooperating party conducting the project.

II. INTRODUCTION

A. Purpose of Project Management Systems

Why do we have project management systems? They are essential to provide adequate management information on the planning and conduct of a project assignment. The project management system provides the formal structure that is necessary to achieve two purposes:

1. To insure effective planning and organization of project tasks, staffing, and budget requirements necessary to undertake and complete the project.
2. To serve as a means of controlling the flow of activities in the conduct of the project, the use of staff personnel assigned, and the levels of expenditures incurred.

The project management plan, taken together with the project work plan (e.g., the research protocol, the demonstration design, the technical assistance plan, etc.), are the two major elements in a complete project plan. The one, the project work plan, tells what is to be done; the other, the project management plan, tells how the resources available will be used.

B. Baseline Planning

Baseline planning is the specification and organization of activities, staffing, and financial resources before the start of the project. A specific period of time, i.e., lead time, for baseline planning is usually agreed upon by HUD and the Awardee before the project substantive work begins.

C. Management Progress Monitoring

Management progress monitoring is the tracking and feedback of quantitative information on the progress of scheduled activities through time, and resources as they are used in conducting those activities.

D. Management Progress Analysis

Management progress analysis is the review and evaluation of periodic data on schedule progress, costs incurred, and staff time used. Each of these areas of quantitative information is compared with the baseline planning information to determine deviations from the plan. Corrective action may be taken by determining the causes of deviations from the baseline and taking action to bring the schedule and resources used in line with the baseline. The measured deviations of results from Baseline Plans are called variances.

This Manual covers baseline planning and the preparation of the Baseline Management Plan, then discusses management progress monitoring and the preparation of the Management Progress Report.

III. PREPARATION OF BASELINE PLANS

A. General Requirement

The Baseline Management Plan serves two purposes: first, it insures that HUD and the Awardee are in complete agreement at all times regarding planned costs and the schedule for accomplishing all Agreement tasks or activities; second, it provides the standard against which the actual progress of work is measured. For this purpose, too little detail would not provide an adequate measure; too much detail would be burdensome to prepare and monitor alike. As a result, the Baseline Plan should contain only that minimum level of detail necessary to permit HUD officials to monitor the major activities of the Agreement.

The Baseline Plan graphic summaries fit on a single page for projects of twelve months or less. Additional levels of planning detail may be provided by the Awardee on an ad hoc basis if requested by the Government Technical Representative (GTR) or the Grant or Contracting Officer (CO) to meet a specific HUD need for more explicit information.

The Baseline Plan is prepared in accordance with the terms of the Agreement, the instructions of this Manual, and any special guidance issued by the GTR. The Plan will be approved for HUD by the GTR and the CO with signed copies sent to the Awardee. Once HUD has approved a Baseline Plan, it becomes and remains the agreed upon plan for the work and must be followed by the Awardee until it is superseded by an approved Revised Baseline Plan.

B. Who Prepares the Baseline Plan?

The preparation of the Baseline Plan is the responsibility of the Awardee's Project Manager/Principal Investigator. The Plan may draw on information from the Awardee's accounting staff and be submitted through Awardee's contract or grant management staff, but it is primarily a technical and substantive work management tool. Only the technical staff have the experience and information

to prepare the Baseline Plan. Preparation of a sound Baseline is a measure of the Project Manager's competence. Consistently effective project managers in any field all work from a project plan, whether a formal detailed, written one or an informal, unwritten one. The good manager always plans in advance for the steps of the work to be accomplished and the resources to be used.

HUD's Baseline Plan is a very concise, written summary which assures that there is an explicit understanding between the Government and the Awardee, and describes what is to be accomplished, when, and with what resources.

C. The Planning Function

Why do we have plans? Plans are essential for any group of related activities before they are undertaken to insure the following:

- ° that the content of these activities is appropriate to the purpose of the project;
- ° that these activities are necessary in support of other activities in the project;
- ° that they contribute to the results desired at the end of a particular stage or at project completion;
- ° that they are started and finished within a reasonable period of time;
- ° that personnel assigned are competent to perform the activities; and
- ° that the dollars spent for these activities are in line with the total budget.

D. Awardee's Responsibilities

Within the time limit specified in the Agreement (usually 10 to 30 days after Agreement award), the Awardee will prepare and submit to HUD the stated number of copies of the Baseline Management Plan required by the Agreement.

The Baseline Plan must be prepared in strict compliance with the terms and conditions of the Agreement, using the detailed instructions contained in Appendix B of this Manual and any special instructions issued by the GTR.

When a Baseline Plan has been completed, all copies will be signed and dated in Box 16 by a senior official of the Awardee's organization. These copies will be forwarded to the HUD addressees specified in the Agreement.

In most cases, the Awardee will be authorized to proceed with the substantive work of the Agreement as soon as a satisfactory Baseline Plan has been submitted to HUD and formally approved.

If a Baseline Plan is prepared improperly or submitted with substantive errors, the GTR will return it to the Awardee for correction, and the corrected copies will be prepared and returned. Failure of the Awardee to produce

an acceptable Baseline Plan within a reasonable period of time may be considered as evidence of a lack of competence to perform the work and as possible grounds for Agreement termination.

E. Elements of the Baseline Management Plan

Planning for any project usually includes the following major elements:

- ° analyzing the scope of work to be accomplished by the project;
- ° organizing the activities to be performed into Tasks-- this is called the Work Breakdown Structure;
- ° establishing the detailed schedules for each Task and Activity, and defining the intermediate and end products;
- ° allocating the financial resources to each Task/Activity; and
- ° establishing the staffing assignments and staff hours to be allocated for each Task/Activity.

To incorporate these elements, the Plan has two parts: (1) a Baseline Plan Form HUD-441.1, which summarizes on one page, the schedule and financial elements of the project; and, (2) a narrative that gives the rationale for project organization, staff utilization, and other resources allocated to each Task/Activity.

The HUD-441.1, Baseline Plan, provides the following data:

1. A graph of cumulative planned or budgeted costs of work scheduled for each reporting period over the life of the project. This graph traces by month, quarter, or other regular period, the total budgeted costs for up to a full year. The original approved cost plan is traced with a dash (— — —) line. A revised cost plan is traced with a dot-dash (- — - —) line. (Projects longer than a year require a supplemental HUD-441.1, showing a graph of project costs by quarter, for the life of the project.)
2. Two rows at the bottom of the graph, corresponding to the time periods of the graph, that show:
 - a) the individual dollar budget for each period; and
 - b) the cumulative dollar budget for each successive period.

It is from these cumulative figures that the graph is plotted.

3. A bar chart of the planned project schedule that shows, by reporting period, the Task start dates, periods of work in progress, and completion dates for up to a full year. Milestone dates for significant events within Tasks are indicated by the symbol (O), together with a one or two word description on the chart. (Projects longer than a year require a supplemental HUD-441.1, as above.)

4. A variety of useful Agreement information such as the original and current Agreement value, and the original, current, and proposed completion dates.

IV. REVIEW AND APPROVAL OF THE BASELINE MANAGEMENT PLAN

A. General Requirement

When a Baseline Management Plan is received by HUD, it will immediately be checked for:

- ° completeness;
- ° accuracy of calculated data;
- ° compliance with the reporting requirements of the Agreement, including required submission data; and
- ° other preparation errors.

The Baseline Plan will then be reviewed by the GTR to insure that:

- ° the proposed plan is realistic and feasible;
- ° the Task/Activity List includes all elements of the Agreement statement of work; and
- ° the Task/Activity List is prepared with the desired level of detail (i.e., no more detail than is necessary to trace Awardee progress and achievements).

B. Awardee Responsibilities

If a Baseline Management Plan is determined to be unacceptable to HUD, the GTR will notify the Awardee. The Awardee will correct the Plan and resubmit it within seven calendar days to HUD for re-review and approval. Once a Baseline Plan has been approved for HUD by the GTR and the CO, a signed copy will be sent to the Awardee. An approved Baseline Plan cannot be changed except by processing a Revised Baseline Plan and obtaining formal HUD approval for it.

The submission and HUD approval of a Baseline Plan in no way relieves the Awardee of any requirements of the Agreement. For example, the Awardee must insure that actual expenditures or incurred costs do not at any time exceed the amount obligated by HUD in the Agreement. In the event an approved Baseline Plan and the Agreement are found to be in conflict, the terms of the Agreement will take precedence over the approved Baseline Plan. The Awardee has a responsibility to call the attention of the GTR and the CO to such real or apparent conflicts as soon as discovered.

V. REVISIONS OF THE BASELINE MANAGEMENT PLAN

A. General Requirement

The HUD-approved Baseline Management Plan be kept accurate and up-to-date, so that it fully reflects HUD's expectations and is a valid standard against which to measure the Awardee's actual schedule status and actual cost status.

While work is in progress on an Agreement, situations can occur which render a Baseline Plan obsolete, incomplete, or inaccurate. If an approved Baseline Plan ceases to be a valid standard for measuring project status, the Awardee must take action to propose appropriate revisions to the Plan as soon as practicable.

Changes in the Baseline Plan may be initiated by HUD or proposed by the Awardee. Any proposed revisions or changes to a HUD-approved Baseline Plan must be incorporated in a Revised Baseline Plan and approved by HUD to become effective. Some Agreements may contain a provision that gives the Awardee flexibility for small changes within stated limits. Those changes would be excepted; however, in the absence of any specific provision of this type, no changes in the Plan are permitted.

Once a Revised Plan is approved by HUD, the Revised Plan replaces the prior Plan and must now be followed by the Awardee.

B. Awardee Responsibilities

1. Responsibilities During Preparation and Review

If an Awardee desires to change an approved Baseline Plan, the change should be discussed with the GTR and mutual agreement should be reached on whether a Revised Plan should be prepared and submitted. If HUD requires a change in an approved Baseline Plan, the Awardee will prepare and submit the proposed Revised Plan as requested.

Revised Baseline Plans must be prepared in strict compliance with the terms of the Agreement, the provisions of this Manual, and any special instructions issued by the GTR.

If a Revised Baseline Plan involves a proposed change in the Current Agreement Cost at Completion, the Awardee shall enter the proposed new Agreement cost in Box 11c (Proposed Cost at Completion).

When a Revised Baseline Plan has been completed and signed, the revised plans will be forwarded to HUD with a letter of transmittal, which must clearly describe all major changes between the previously approved Baseline Plan and the new proposed Revised Plan.

If an Awardee desires, a "mark-up" (i.e., a copy of the typed, previously approved plan with handwritten changes neatly inked in where appropriate) may be submitted in lieu of an entirely new plan. In either case, the documents forwarded to the GTR must clearly show the proposed changes.

If a Revised Plan or transmittal letter is prepared improperly, is submitted with substantive errors, or does not clearly show the proposed changes, the GTR will notify the Awardee. The Awardee will make the necessary corrections and resubmit the documents within seven calendar days after receipt of the GTR notification.

Even though an Awardee formally submits a Revised Baseline Plan, the Awardee must continue to submit Progress Reports using the current HUD-approved Plan until such time as the Revised Plan has been approved.

2. Responsibilities After Revised Plan Approval

Once a Revised Baseline Plan has been approved, a signed copy will be sent to the Awardee. This approved Plan replaces the previous Plan and becomes the standard against which the Awardee's future performance information will be measured.

As with the initial Baseline Plan, the submission and HUD approval of a Revised Plan in no way relieves the Awardee of complying with the terms of the Agreement. The Awardee must ensure that actual expenditures or incurred costs do not at any time exceed the amount contractually obligated by HUD in the Agreement.

VI. PROGRESS REPORTING

A. The Progress Reporting Function

The progress reporting function is a formal means of providing information on the effectiveness with which the Tasks and Activities are initiated, conducted, and completed during the life of the project.

The Baseline Plan sets forth the quantitative targets for managing the resources committed to the project for each Task/Activity by periodic intervals during the life of the project. The Progress Report tracks actual performance against the Baseline Plan.

B. Who Prepares the Progress Report?

Progress reporting is a part of the technical management of a project. The Report keeps the Project Manager as well as HUD informed of how well the work is progressing. The Report tells what technical work has been accomplished and what resources have been used to accomplish it. Only the technical manager will know the technical value of what has been accomplished, and the effective technical manager will be on top of the resources used to accomplish it. Only the Project Manager/Principal Investigator, or a person reporting directly to him or her, is fully equipped to perform this job. The Progress Report should not be delegated to the accounting or contract management staff of the organization (although they may supply corroborating detail). Progress Reporting is the Project Manager's responsibility.

The Management Progress Report provides the regular feedback of results of project operations using the same time intervals specified in the Baseline

Plan. It consists of a narrative report and a quantitative report. The Narrative Progress Report is described in Section VIII. The quantitative information is reported on Form HUD-661.1. Management Progress Reports reproduce the Baseline Plans, and in addition show:

1. schedule status or the degree of completion of Tasks/Activities by time intervals; and
2. cost status or the actual costs of work performed in accomplishing Tasks/Activities.

The two sets of information (planning and actual performance) of project schedule and costs will enable the GTR to evaluate and measure the performance of the Awardee in the conduct of the project.

The Progress Report includes the following specific information to be submitted by the Awardee.

First, schedules of major activities with start up and completion dates against which actual schedule performance is measured and appraised. The periodic Progress Report is the formal reporting document for measuring and appraising performance. Careful use should enable the Awardee to avoid late starts and time lags in activity progress. Milestones indicating dates on which significant events are to occur within individual Tasks provide additional benchmarks to keep each activity on target.

Second, budget data by Task/Activity to provide financial planning information that will be compared with the actual monthly or quarterly costs incurred. A comparison of the two sets of data, i.e., budget or cost plan and status of actual costs incurred, will yield variance information that is most important to achieve effective control of project expenditures and to avoid overruns, i.e., expenditures in excess of budget. Thus, the Management Progress Report will provide both the Project Manager and the HUD GTR with periodic performance information to keep the project within schedule and resources.

In the case of grants and cooperative agreements, the Management Progress Report will supplement the Financial Status (Standard Form 269) and the Federal Cash Transactions Report (Standard Form 272) required by the Office of Management and Budget. Those are separate financial reports, usually prepared by the Awardee's accounting or financial officers.

For academic and other nonprofit organizations, the Standard Forms 269 and 272 remain the formal, contractual, financial reports of the organization; the HUD-661.1 and Narrative Management Progress Reports may draw on information from the Forms 269 and 272 prepared by the organization's financial and accounting staff, but their preparation is the duty and responsibility of the Project Manager/Principal Investigator, to assure proper management of the technical progress of the project.

C. Reporting Objectives

Responsible HUD personnel must be kept fully informed on the status of each project. Problems which may have an adverse effect on research products, schedules, budgets, and staff commitments must be identified as early as possible and quickly resolved. The HUD Management Progress Report is designed to assist HUD by:

- ° providing the HUD Awardee with simple, straight-forward procedures for preparing and submitting status reports on schedule and costs incurred for the work being performed;
- ° comparing status information on schedule and costs incurred with Baseline Plan information;
- ° providing a basis for analyzing variances between planned and actual performance; and
- ° identifying potential overruns and specifying corrective action to be taken to bring performance back in line with the approved Management Plan.

D. Preliminary Progress Reports

In the case of HUD-661.1 Progress Reports, the accounting systems of some organizations do not generate data until late in the month that would support the Project Manager's knowledge of the resources used during the reporting period. To enable such Awardees to meet the required submission date, the GTR may permit the submittal of a Preliminary Progress Report using estimated data. Then later, when the Awardee's accounting system produces the actual data, the Awardee must submit a Final report if the actual data differ in any significant way from estimated data in the preliminary report. If the actual data is generally in substantial agreement with the preliminary report, the Awardee may so notify the GTR and request that a Final HUD-661.1 not be required.

Although the Baseline Plan cannot be changed without GTR approval, the Progress Reports have specific places on the forms (Boxes 36 and 40) for the Awardee to indicate where its latest estimates deviate from the current approved Baseline Plan. These are important signal points. They give early notice of impending or potential deviations, often well before actuals-to-date begin to differ from planned.

E. Urgent Problems Report

Some problems or situations arise in projects that are so urgent they should not await the periodic Progress Report. Common sense dictates that they should be reported as soon as they arise, both by telephone and by written follow-up. Most HUD agreements provide for Urgent Problems Reports--ad hoc reports that are in addition to and outside of this Project Management System.

VII. PREPARATION OF MANAGEMENT PROGRESS REPORTS

A. General Requirement

The Awardee prepares and submits Progress Reports to the GTR in accordance with the terms of the Agreement and the instructions in this Manual. Each Progress Report received by HUD will be reviewed for completeness and accuracy and to ensure that the baseline data contained is consistent with the latest HUD approved Baseline Plan.

These periodic status reports reveal where the Awardee's schedule and cost status may have the potential or actually may be deviating from the HUD approved Baseline Plan. Disclosure of these deviations or variances is an indication of possible problems which require prompt investigation and corrective action by the Awardee and responsible HUD officials.

B. Awardee Responsibilities

Within the time limit specified in the Agreement, usually ten days after the end of each reporting period, the Awardee will prepare and submit to HUD copies of the HUD-661.1 Progress Report and the Narrative Progress Report required by the Agreement.

Progress reports must be prepared in strict compliance with the terms and conditions of the Agreement, the provisions of this Manual, and any special instructions issued by the GTR. Detailed instructions for preparing Progress reports are contained in Appendix C.

When a Progress Report has been completed, all copies will be signed and dated in Box 16 by a senior official of the Awardee's organization. These are forwarded to the HUD addressees specified in the Agreement.

If a Progress Report is prepared improperly or submitted with substantive errors, the GTR will notify the Awardee. The Awardee will make the necessary corrections and the corrected copies will be prepared and forwarded as described above within five (5) days after receipt of the GTR notification.

C. The Management Progress Reporting System

1. Management Progress Measurement and Monitoring

For any reporting period, the status of a Task or Activity can be compared with the planned schedule in the Baseline Plan. These comparisons yield variances reported on the Management Progress Report Form HUD-661.1. The variances show whether performance or achievement levels are in line with the Baseline Plan, are ahead, or reflect delays or overruns. Overruns are costs incurred that are in excess of those planned for a given amount of work.

Note that incurred costs are reported and not expenditures. Incurred costs are the costs associated with a given activity in a given period, whether yet paid or even yet billed by the performer. (These are called accrued costs, under accrual accounting systems.) They should be estimated for organizations using cash or other accounting systems. For example, an

organization that does not include the salaries and wages of the reporting period, because they are not actually paid until several days after the reporting period, would be substantially underreporting the costs of a given degree of technical progress by failing to include an estimate for the payroll costs used to achieve that progress. Actual expenditures are recorded disbursements of funds as shown on payment vouchers submitted to HUD. Expenditures or vouchered costs may lag incurred costs by up to 60 days.

Remember, these are management reports, not accounting or financial reports. Awardee accounting systems vary, and HUD has no intent to change them. But for management purposes, it needs reasonably close approximations of the actual resources used to achieve a particular level of technical performance, even if some of those resources must be estimated by the Project Manager. There is no need for a report to be accurate to the penny to be effective for management purposes. HUD expects a good faith effort to be as accurate as is reasonable with the data available, and once estimates are made, the reports should be internally consistent, arithmetically, and the estimates should be superseded in later reports by actual data.

Accounting and financial reports for reimbursement or audit purposes are separate from this management system, and they remain subject to other requirements under the Awardee's Agreement. Nevertheless, any substantial discrepancy between those reports and the management reports that could not be readily reconciled would become a matter for inquiry by the Government.

An indication of a cost overrun is a signal that the budget commitment made at the start of the project has not been met and there are operating difficulties or inefficiencies. The cost overrun may be indicated by a variance between the actual and planned cost, or by a schedule slippage without a corresponding cost decrease.

An estimated or forecast cost for the remaining work must be made by the Awardee at any time during the project when the following is indicated:

1. When the Awardee anticipates that incurred costs in excess of the current Baseline Plan reflect an uncontrollable trend that is expected to exist for the remaining life of the project. Such differences may, for example, result from changes in salary levels for professional staff or labor rates of non-professional personnel assigned to the project.
2. When the Awardee discovers that uncontrollable increases have already caused a difference between the current total project budget approved by HUD and the estimated costs at completion.
3. The happy but less likely occurrence of decreases in cost should also be promptly reported.

Any report of such occurrences must be accompanied by the Awardee's plan to offset or mitigate the circumstances.

An estimate or forecast by Awardee of costs at completion that is different from the approved budget is not to be considered a revision of the current cost plan until an Agreement cost modification has been approved by the HUD Contracting Officer. The HUD-661.1 provides opportunities for the Awardee to call HUD's attention to such anticipated or existing problems. Reporting the problem does not relieve the awardee of any other duty under its Agreement. It is the signal for corrective action, not corrective action in itself.

For any periodic progress report, the latest estimate of total project costs at completion will reflect both a carry-forward of overruns or underruns from prior periods plus any anticipated increase in costs or schedule delays for future periods.

Note that the "Latest Estimate of Total Costs at Completion" for the whole project and "Balance of Funds Not Yet Received By Performer" are not the same. The latest estimate of total project costs includes all actual past costs and expected future costs. The Balance of Funds amount is what is available to the Awardee through the end of the Agreement, including any current billings to the Government not yet received. The Balance of Funds amount is based on the currently approved total Agreement value, not on the latest estimate of project cost, which may be higher or lower.

An estimated cost at completion that exceeds total planned costs, i.e., contracted costs, may be the result of:

1. overrun carryover from prior periods of project operation;
2. changes in future project schedule or staffing requirements even though there were no deviations from baseline plans in prior periods; or
3. a combination of the two.

The HUD-661.1 graphic summary form has been designed specifically so that HUD managers can evaluate project performance easily and rapidly. All of the basic information that is necessary for monitoring and appraising performance is recorded on a single form for a full year of project operation. There are a number of more detailed planning and reporting forms that may be required should a project deviate seriously in technical achievement, schedule, or expenditure targets. These are described in a separate guideline: Management of Very Large or Troubled Projects. The circumstances triggering these special reporting requirements are provided for in the Awardee's Agreement.

2. Management Progress Analysis and Control

Progress Reporting provides the means for evaluating schedule status and cost incurrence, and for taking action to bring performance in line with the Baseline Plan whenever necessary. Analysis and control must be performed by both the Awardee and the GTR, but separately. Corrective action is the joint responsibility of the HUD GTR and the Awardee.

VIII. NARRATIVE PROGRESS REPORTS

A. General Requirement

The Narrative Progress Reports will:

- (1) provide a brief, factual summary description of the progress made on each Task (or group of Tasks) during the reporting period; and
- (2) identify significant problems and their impacts, causes of the problems, corrective actions, and the effect that the corrective actions will (or might) have on the accomplishment of the Agreement objectives.

The reports will include sufficient pertinent data and illustrations necessary to explain significant accomplishments.

The Awardee prepares and submits the Narrative Progress Report to the GTR at the same time that the HUD-661.1 Progress Report is submitted. The Narrative Progress Report will be reviewed by the GTR for completeness, and analyzed in conjunction with the HUD-661.1.

There is no required format for the narrative report, but the Awardee's Agreement will usually contain a more explicit list of what is to be addressed in the report.

B. Awardee Responsibilities

Within the time limit specified in the Agreement, usually ten days after the end of each reporting period, the Awardee will prepare and submit to HUD copies of the Narrative Progress Report required by the Agreement.

Narrative Progress Reports must be prepared in strict compliance with the terms and conditions of the Agreement, the provisions of this Manual, and any special instructions issued by the GTR. Improperly prepared Narrative Progress Reports will be returned to the Awardee.

Appendix A

Glossary of Terms

Actual Cost of Work Performed (ACWP)

The total costs actually incurred in performing work over a given time period. Used on the HUD-661.1 to report actual costs. (See Incurred Costs definition)

Agreement

The formal written document or instrument approved by HUD containing objectives and specifications of project work to be accomplished for HUD by an outside firm, organization or agency. The Agreement may be a contract, grant, or cooperative agreement. Unless specifically required in the terms of a Small Grant Agreement (under \$25,000) or a Purchase Order (under \$10,000), reporting under this system will not be required for those Agreement forms.

Awardee

The term "Awardee" is used to designate a private person or organization conducting a project for the Department under contract, grant, or cooperative agreement. The term applies equally to contractors, grantees, and cooperating parties. In special circumstances, the term may also apply to a Federal Agency or Department that is the recipient of funds from HUD under an Interagency Agreement to provide services or products to HUD.

Baseline Plan

That part of the HUD Project Management System that represents the specification by the Awardee at the start of the project of the staff, financial, and physical resources required to accomplish the work. The complete Baseline Plan consists of the HUD form 441.1 and the accompanying narrative portion that discusses project organization and staff utilization.

Agreement Modification

An Agreement modification is any written alteration in the Agreement specifications, statement of work, completion dates, delivery, period of performance, price, quantity, or other provisions of an existing agreement.

Budgeted Cost of Work Performed (BCWP)

The term used on the HUD-661.1 to report Earned Value, consisting of the planned or budgeted costs associated with the work actually accomplished.

Budgeted Cost of Work Scheduled (BCWS)

Approved planned costs as indicated on the HUD-441.1 Baseline Plan.

Contracting Officer (CO)

The HUD official formally designated to enter into and administer contracts for the purposes of this manual. The term Contracting Officer will also be used as a generic to designate the administrative grant officer or administrative cooperative agreement officer, who have parallel authority for those agreements.

Cost Variance

Cost Variance is related to the amount of work accomplished, and indicates the difference between the actual incurred costs of the work performed (ACWP) and the planned or budgeted costs of performing that work (BCWP). An unfavorable cost variance or overrun is shown in parentheses. Cost Variance must not be confused with Simple Variance, which compares planned versus actual costs at a given time regardless of the amount of work accomplished.

Earned Value

A measurement of the dollar value of work actually accomplished, calculated by multiplying the total value of each Task by the Awardee's estimate of the percent of the work of each Task that is completed, and then adding up the total from all Tasks. Obviously, this could be either more or less than the actual costs that have been incurred or that were planned to be incurred. Earned Value is another term for Budgeted Cost of Work Performed (BCWP).

Event

An occurrence of particular importance or significance in a project.
(See Milestone)

Government Technical Monitor (GTM)

The HUD representative appointed by HUD for monitoring specific Tasks or performance. The GTM role is normally a passive one of observance, and may be entirely internal to HUD. If the GTM is to have any interactive role with the Awardee, the GTR will issue a specific, written delegation of that role and its responsibilities, and a copy will be furnished to the Awardee. In the absence of such delegated authority, only the GTR and the CO have any authority to interact with or to direct the Awardee's activities.

Government Technical Representative (GTR)

The HUD representative specified in the Agreement who is responsible for monitoring the technical conduct of the work, and giving approval for the acceptance of all work products.

Incurred Costs

Costs associated with a given activity in a given period, whether yet paid or even yet billed by or to the Awardee. For reporting purposes incurred costs are referred to as actual costs, and are the same as accrued costs under accrual accounting systems. Incurred costs may lead expenditures or overhead costs by a substantial time period, and in some cases should be

estimated, to properly assign costs to actual performance. (These calculations do not imply or require any necessary change in the way the Awardee keeps its formal books and records.)

Measurement

Measurement refers to the quantitative statement of the Baseline Plan or Progress report in terms of length of time in months or quarters for completion of a Task/Activity, cost plan or status in dollars, and staff plan or utilization in staff hours for a Task/Activity. (Staff hours are not reported directly on the HUD-441.1 and 661.1, but are an important element of estimating baseline costs and reporting actual costs.)

Milestone

The identification and schedule location of an important event specified on a Baseline Plan, HUD Form 441.1. Milestones are occurrences which do not consume measurable periods of time on the schedule and do not include any discrete or definable elements of the work. Milestones include events such as the planned delivery dates on agreement products, decision points, events of significance, and Task and Subtask start, interim, and completion dates.

Obligations

The amount of funds formally committed in an Agreement for the conduct of the work. The Awardee should not incur costs in excess of, nor is HUD committed to reimburse any costs incurred in excess of the amounts actually obligated to the Agreements. Most HUD agreements in excess of one year are funded in annual increments, subject to the availability of appropriated funds and other factors.

Performer

Another term for Awardee.

Plans

Plans are the formalized statements of specific work to be accomplished during the project (i.e., Tasks/Activities), cost levels or budgets by Tasks/Activities, and staff-person assignments that are required to meet the objectives of the project. Staff-person assignments do not appear on the HUD-441.1 or 661.1, but may be part of the Narrative Baseline Plan or the Narrative Progress Report.

Project Code

A seven character code assigned by HUD for use in its internal accounting and filing system.

Project Management System

The Project Management System refers to the formal presentation of the Baseline Management Plan and the Management Progress Reports for a project using a series of HUD forms and associated narratives.

Schedule Variance

The comparison of Earned Value of Work Performed (Budgeted Cost of Work Performed) with Baseline Planned Costs (Budgeted Cost of Work Scheduled) to show the dollar value of work behind or ahead of schedule. Unfavorable Schedule Variances are shown in parentheses.

Simple Variance

The difference between planned costs and actual costs at any point in time. On the HUD-661.1, Simple Variance is determined by subtracting the Budgeted Cost of Work Scheduled (BCWS) from the Actual Cost of Work Performed (ACWP). A negative or unfavorable value is shown in parentheses.

Subtasks

If a Task is broken down into two or more sub-elements, these sub-elements are identified as Subtasks. A set of Subtasks under a Task must collectively include all work to be accomplished on that Task. See definition of Task.

Task

A Task is a discrete and definable element of the Agreement statement of work. Usually a Task is separately priceable and produces a product or accomplishes a specific activity. The total cost of all Tasks on an Agreement must equal the Agreement value. On a Baseline Management Plan, the title of each Task is listed on Column 21a, "Task/Activity List." Tasks represent the first and broadest level of detail in structuring a Baseline Management Plan. A Task has a start date, a completion date, and a duration.

Except for the most complex or lengthy projects, there are usually fewer than a dozen major Tasks in a project, and often a half-dozen or fewer. Projects that cannot be summarized for a year's activities on a single HUD-441.1 and 661.1 are almost always reporting at too great a level of detail. Projects of greater than a year's length are unlikely to be forecastable with any reasonable accuracy at greater than quarterly detail, thus the whole of a three year project will fit on one supplemental HUD-441.1 and 661.1, and revised annual plans can be prepared before the start of the second and third years.

Appendix B
Instructions for Preparing the Baseline Plan

A. General

The HUD Project Management System utilizes two basic forms to plan and control the use of project resources. The Baseline Plan Form HUD-441.1 details the work to be performed. The Progress Report Form HUD-661.1 compares actual progress with the approved Baseline Plan.

Should a project deviate seriously from technical achievement, schedule, or expenditure targets, more detailed planning and reporting forms may be required. These will be separately described in a guideline titled: Management of Very Large or Troubled Projects.

Detailed instructions for completing the HUD-441.1 follow. Instructions for completing the Progress Report, HUD-661.1, are contained in Appendix C. Brief instructions are also printed on the backs of the forms. HUD Awardees are required to follow the instructions when preparing these forms. Forms prepared improperly or submitted with errors will be returned to the Awardee for correction and resubmission.

The Baseline Plan and the Progress Report are divided into numbered boxes. Boxes containing data common to both reports will have the same number. If a report does not require certain data, the numbered box does not appear on the form.

B. Detailed Instructions (HUD-441.1 Baseline Plan)

Box 1. Enter project title.

Box 2. Enter the name and address of the Awardee as shown in the Agreement. Should the address of the performing organization (Awardee) change, enter the new address and phone number of the performing organization. On rare occasions, a successor organization takes over the work under a formal process called "novation." In such cases, show the name and address of the successor organization.

Box 3a. Enter the name of the Government Technical Representative (GTR).

Box 3b. Leave blank for GTR signature.

Box 4a. Enter the name of the Contracting (or Assistance Agreement) Officer (CO).

Box 4b. Leave blank for CO signature.

Box 5. Enter the name of the Government Technical Monitor (GTM), if any. If there is more than one GTM, enter the additional name(s).

Box 6a. The original approved Plan is number 1. Revisions are numbered sequentially.

- Box 6b. Enter the date the Plan or revised Plan was signed by the performer's certifying official.
- Box 6c. (Appears only on Progress Report).
- Box 7. (Boxes 7a, 7b, and 7c appear only on Progress Report).
- Box 8a. Enter the project completion date as defined in the original Agreement. If a time period is specified, convert it to a completion date.
- Box 8b. Enter the project completion date as defined in the latest Agreement modification. Otherwise enter the same date as shown in Box 8a.
- Box 8c. Enter the proposed new completion date per this revised Plan, even if it is unchanged from the prior approved completion date.
- Box 9. Enter the Agreement number as shown in the signed Agreement.
- Box 10. Enter the Project Code (obtained from the GTR).
- Box 11a. Enter the original total Agreement value. Do not confuse Agreement value with funds obligated to perform the work, which may be for a period less than the full length of the Agreement. (A nine-month project that begins at the end of one Federal fiscal year and carries over into the next might have each year's share obligated separately).
- Box 11b. Enter the Agreement value as it may have been revised by written Agreement modification. Otherwise enter the same as Box 11a.
- Box 11c. If this Baseline Plan is a proposed revision to the approved Plan, and proposes a revised Agreement value, enter the amount of the proposed new total value. Approval of the revised plan cannot be complete until a formal Agreement modification changing the total has been signed by HUD and the Awardee.
- Box 12-14. (Not applicable to the Baseline Plan).
- Box 15a-c. Enter the name and date; initial by the preparer.
- Box 16a-d. Enter name and title, sign and date. The Performer's Official Certifying the Plan is usually the Project Manager.
- Box 17. Leave blank for HUD use.
- Box 18. The Planned Cost Incurrence Section is a graphic summary of the planned cumulative costs of the project. On the HUD-661.1, the planned costs are reported as Budgeted Cost of Work Scheduled (BCWS).
- a) Select a calendar arrangement for the top of the chart that displays months or quarters corresponding to the reporting periods stated in the Agreement. On Agreements longer than 12 months, a supplemental HUD-441.1 may be required, showing the

total life of the project by quarters, including the annual part reported on the base HUD-441.1.

- b) Enter a dollar scale down the left column that will accommodate the total Agreement cost at completion.
- c) Draw a cumulative cost curve using a dashed line that indicates the planned cumulative incurred cost. This is the original or Plan One cost curve and is shown on all revisions for the life of the project.
- d) If the original approved Plan has been revised or if a revision is proposed, use a dot-dash line to represent the current planned cost.
- e) If actual costs are recorded from prior periods, indicate them with a solid line.

Box 19. Enter the planned dollars for each reporting period corresponding to the current Plan, or to the original Plan if no revision exists.

Box 20. Enter the cumulative planned dollars for each reporting period. The total should agree with the amount in Box 11b, or in Box 11c if a proposed revision is being submitted.

Box 21. The Planned Technical Progress Section is a graphic summary of scheduled Tasks and Activities. Enter a calendar across the top identical with that in Box 18. Projects of greater than one year may require a supplemental HUD-441.1, as in Box 18 instructions above.

Box 21a. Preparation of the Original Schedule
Enter a list of Tasks/Activities that constitute the Agreement work. Normally this list should be the same as the Tasks in the Agreement Statement of Work. Tasks should be selected so that planned costs can be estimated and actual costs collected for each of these Tasks. Listed Tasks or Activities that differ from those in the Agreement should be approved by the GTR.

Subtasks should be listed only if they are separately priced and have a specific deliverable or major, discrete activity. Milestones should be added to the list of Tasks/Activities to highlight or emphasize important events within or among Tasks/Activities of the project.

Start each of the listed Tasks or events with an action verb, e.g., start, prepare, conduct, deliver, receive, complete, etc..

For each Task/Activity listed, draw a schedule bar in the calendar section so that the left end of the bar is under the planned start date and the right end of the bar is under the planned completion date.

Insert a triangle over each end of the bar. Future revisions may cause the schedule bar to move. The original start and stop

triangles do not move. They are shown on all revisions for the life of the project.

Enter Milestone symbols (Ø) under the proper date and label them as shown on the sample report.

Be sure the Task/Activity list is arranged chronologically so that the schedule bars and Milestones present a clear, logical sequence of the planned work, and so that interdependencies among the Tasks may be discerned.

Preparation of the Revised Baseline Schedule

If a modification or proposed modification to the Agreement results in changes to the scheduled Tasks/Activity, the changes should be indicated in this section.

The original Tasks/Activities and their planned start/stop dates (triangles) must remain.

New Tasks/Activities and Milestones should be listed with their appropriate symbols.

Changes to existing Task/Activity schedules are indicated by moving the schedule bars to show revised actual or planned start/stop dates. Indicate completed work on the schedule bars by shading in the completed portion. The legend on the form and the example in this Appendix illustrate the method used to show a schedule change.

- Box 21b. Enter the estimated or planned dollar value of each Task/Activity. If a revised Baseline Plan is being prepared, enter the actual approved cost of any completed Task/Activity.
- Box 21c. Indicate the existence of comments and submit on a separate sheet.
- Box 22. The total dollar value of the listed Tasks/Activities must equal the amount shown in either Box 11b or in Box 11c as appropriate.
- Box 23. If a Revised Baseline Plan is being prepared, enter the proposed new completion date even if it does not differ from the approved Plan.
- Box 24. Enter the number of weeks difference between the original Agreement completion date and the date shown in Box 23.
- Box 25. Enter the number of weeks difference between the current Agreement completion date and the date shown in Box 23.

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
PROJECT MANAGEMENT SYSTEM BASELINE PLAN
 GRAPHIC SUMMARY: TECHNICAL PROGRESS VS COSTS INCURRED

1. PROJECT TITLE
 Heating Multifamily Buildings Via Solar Energy

2. NAME AND ADDRESS OF PERFORMING ORGANIZATION
 International Energy Sources, LTD.
 650 Perry Street Boston, Massachusetts 20001 (617)
 Name of Project Manager: George L. Kahn Phone 123-4567

3. NAME OF GTA
 Joe Smith

4. NAME OF CONTRACTING OFFICER
 Frank Jones

5. NAME OF GTM
 William Anderson

6. BASELINE PLAN NO.
 2

7. BASELINE PLAN DATE
 Jan. 15, 1982

8. GTR APPROVAL (Signature) [Signature] Date 1/19/82

9. AGREEMENT NUMBER
 H-0123

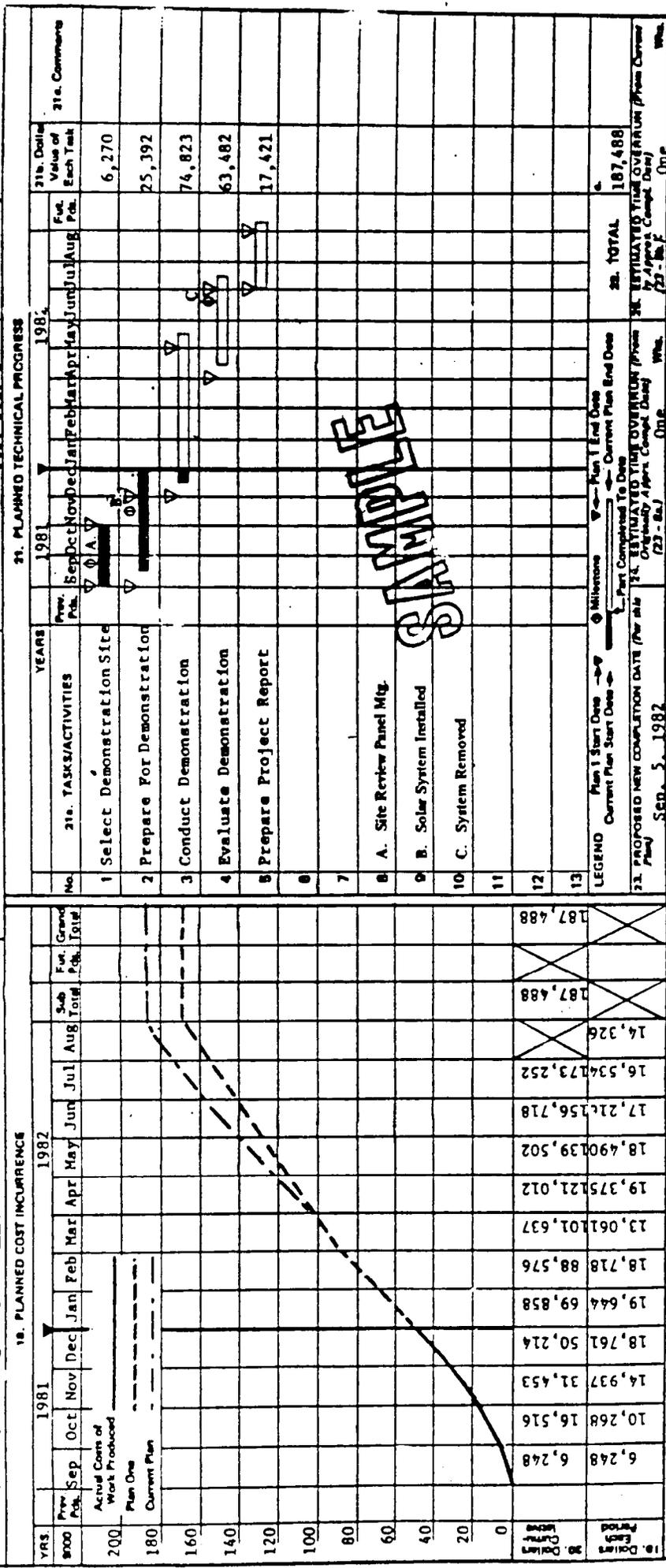
10. PROJECT CODE
 7.2.11.000

11. ORIGINALLY APPROVED AGREEMENT VALUE \$ 169,230

12. CURRENTLY APPROVED AGREEMENT VALUE \$ 187,488

13. PROPOSED NEW COMPLETION DATE (Per Job Plan) SEP. 5, 1982

14. PROPOSED NEW TOTAL VALUE (Per Job Plan) \$ 187,488



16. PERSON PREPARING PLAN
 NAME: Fred Teem DATE PLAN PREPARED: Jan. 6, 1982

17. PERFORMER'S OFFICIAL CERTIFYING PLAN
 NAME: George L. Kahn SIGNATURE: [Signature] PROJECT MANAGER: George L. Kahn DATE SIGNED: 1/19/82

18. ESTIMATED TIME OVERRUN (From Original Plan) 75 - 80%

19. DATE RECEIVED BY
 NAME: Fred Teem DATE: 1/19/82

Page 1 of 1 pages

Appendix C

Instructions for Preparing the Management Progress Reports

A. General

The HUD Project Management System utilizes two basic forms to plan and control the use of project resources. The Baseline Plan Form HUD-441.1 details the work to be performed. The Progress Report Form HUD-661.1 compares actual progress with the approved Baseline Plan.

Should a project deviate seriously from technical achievement, schedule, or expenditure targets, more detailed planning and reporting forms may be required. These will be separately described in a guideline titled: Management of Very Large or Troubled Projects.

Detailed instructions for completing the HUD-661.1 follow. Instructions for completing the Progress Report, HUD-441.1, are contained in Appendix B. Brief instructions are also printed on the backs of the forms. HUD Awardees are required to follow the instructions when preparing these forms. Forms prepared improperly or submitted with errors will be returned to the Awardee for correction and resubmission.

The Baseline Plan and the Progress Report are divided into numbered boxes. Boxes containing data common to both reports will have the same number. If a report does not require certain data, the numbered box does not appear on the form.

B. Detailed Instructions (HUD-661.1 Progress Report)

Box 1. Enter project title.

Box 2. Enter the name and address of the Awardee as shown in the Agreement. Should the address of the performing organization (Awardee) change, enter the new address and phone number of the performing organization. On rare occasions, a successor organization takes over the work under a formal process called "novation." In such cases, show the name and address of the successor organization.

Box 3a. Enter the name of the Government Technical Representative (GTR).

Box 4a. Enter the name of the Contracting (or Assistance Agreement) Officer (CO).

Box 5. Enter the name of the Government Technical Monitor (GTM), if any. If there is more than one GTM, enter the additional name(s).

Box 6a-b. (Not applicable to the Progress Report).

Box 6c. Enter the number and date of the latest approved Baseline Plan. The original approved Plan is number 1. Revisions are numbered sequentially.

Box 7a. Enter the ending date of the current reporting period.

- Box 7b. Indicate whether this is a preliminary or final report. When actual accounting cost data is not available in time to meet the required submission date for the Progress Report, the Project Manager is required to submit a preliminary Report using estimated data. When actual data becomes available, the Awardee must submit a final Report, unless the difference between the estimated and actual cost data is not significant and concurrence of the GTR is obtained.
- Box 7c. Indicate the reporting frequency for the Progress Reports as specified in the Agreement.
- Box 8a. Enter the project completion date as defined in the original Agreement. If a time period is specified, convert it to a completion date.
- Box 8b. Enter the project completion date as defined in the latest Agreement modification. Otherwise enter the same date as shown in Box 8a.
- Box 9. Enter the Agreement number as shown in the signed Agreement.
- Box 10. Enter the Project Code (obtained from the GTR).
- Box 11a. Enter the original total Agreement value. Do not confuse Agreement value with funds obligated to perform the work, which may be for a period less than the full length of the Agreement. (A nine-month project that begins at the end of one Federal fiscal year and carries over into the next might have each year's share obligated separately.)
- Box 11b. Enter the Agreement value as it may have been revised by written Agreement modification. Otherwise enter the same as Box 11a.
- Box 12. Enter the total funds obligated to the project by the Government as shown in the Agreement.
- Box 13. Enter the total amount of funds that have been received by the Awardee for work performed.
- Box 14. Enter the balance of funds that will be received by the Awardee when the project is completed. This amount is the difference between the total estimated cost of the project as shown in the Agreement (and Box 11b) and the funds received to date as shown in Box 13.
- Box 15a-c. Enter the name and date; initial by the preparer.
- Box 16a-d. Enter name and title, sign and date. The Performer's Official Certifying the Plan is usually the Project Manager.
- Box 17. Leave blank for HUD use.
- Box 18-25. (Boxes 18 through 25 are not applicable to the Progress Report.)

Box 26. The Status of Costs Incurred Section is a graphic summary of the planned and actual cumulative costs of the project.

- a) Select a calendar arrangement for the top of the chart that displays months or quarters corresponding to the reporting periods stated in the Agreement. On Agreements longer than 12 months, a supplemental HUD-661.1 may be required, showing the total life of the project by quarters, including the annual part reported on the base HUD-661.1.
- b) Enter a dollar scale down the left column that will accommodate the total Agreement cost at completion.
- c) Draw a cumulative cost curve using a dashed line that indicates the planned cumulative incurred cost. This is the original or Plan One cost curve and is shown on all Progress Reports.
- d) If the original approved Plan has been revised, use a dot-dash line to represent the current approved planned cost.
- e) If the latest estimate of total costs differs from the approved Plan, draw that curve using the line indicated in the Legend. The total dollars should also be entered in Box 36. These are important signals and should be entered as early as possible to permit time for proper corrective action.
- f) Indicate cumulative actual costs to date with a solid line.
- g) Reporting of Earned Value (Budgeted Cost of Work Performed) is required unless otherwise ordered by the GTR. Using a dotted line, chart this cumulative amount through the end of the reporting period. The value must agree with the amounts shown in Boxes 28c and 31.

Box 27. The Status of Technical Progress Section is a graphic summary of scheduled Tasks and Activities. Enter a calendar across the top identical with that in Box 26. Projects of greater than one year may require a supplemental HUD-661.1, as in Box 26 instructions above.

Box 27a. Preparation of the Original Schedule

Enter a list of Tasks/Activities that constitute the Agreement work. This list should be the same as the Tasks/Activities in the approved Baseline Plan. Subtasks and Milestones should also be added.

For each Task/Activity listed, draw a schedule bar in the calendar section so that the left end of the bar is under the planned start date and the right end of the bar is under the planned completion date.

Insert a triangle over each end of the bar. Future revisions may cause the schedule bar to move. The original start and stop triangles do not move. They are shown on all subsequent Progress Reports.

Enter Milestone symbols (ϕ) under the proper date.

Be sure the Task/Activity list is arranged chronologically so that the schedule bars and Milestones present a clear, logical sequence of the planned work, and so that interdependencies among the Tasks may be discerned.

Preparation of a Revised Schedule

If a modification to the Agreement results in changes to the scheduled Tasks/Activities, the changes should be indicated in this section.

The original Tasks/Activities and their planned start/stop dates (triangles) must remain.

New Tasks/Activities and Milestones should be listed with their appropriate symbols.

Changes to existing Task/Activity schedules are indicated by moving the schedule bars to show revised actual or planned start/stop dates. Indicate completed work on the schedule bars by shading in the completed portion. The legend on the form and the example in this Appendix illustrate the method used to show a schedule change.

Draw a status date line vertically through the graph to represent the end date of the reporting period.

- Box 27b. Enter the estimated or planned dollar value of each Task/Activity.
- Box 27c. Enter the estimated percent of completion for each listed Task/Activity.
- Box 27d. Calculate and enter the dollar value of the completed work on each line by multiplying the total dollar value of each Task (Box 27b) by the estimated percent of completion of each Task (Box 27c).
- Box 28a. The total dollar value of the listed Tasks/Activities must equal the amount shown in Box 11b.
- Box 28b. Calculate this value by dividing the total value of the completed work (Box 28c) by the total Agreement value (Boxes 28a or 11b).
- Box 28c. This figure represents the Awardee's best estimate of the dollar value of the work produced to date as differentiated from the cost of producing that work. The total earned value of work completed to date is obtained by adding up the earned value of each Task/Activity.
- Box 29. Enter the dollar value of work scheduled to date (BCWS) as indicated in Box 20 of the approved Baseline Plan.
- Box 30. Enter the cumulative dollar value of actual costs incurred to date (Actual Cost of Work Performed).
- Box 31. Unless otherwise directed by the GTR, enter the earned value of work

performed to date (BCWP) (Must agree with the value in Box 28c).

- Box 32. Cost Variance represents the difference between the earned value of the work performed to date and the actual cost of performing that work. Enter the dollar difference between the Earned Value shown in Box 31 and the Actual Cost of Work Performed shown in Box 30. Show negative variances in parentheses.
- Box 33. Schedule Variance represents the difference between the earned value of the work performed to date and the planned costs. Enter the dollar difference between the Earned Value shown in Box 31 and the Budgeted Cost of Work Scheduled shown in Box 29.
- Box 34. Simple Variance represents the difference between the planned costs to date and the actual costs of the work produced to date. If Earned Value is reported and Boxes 32 and 33 are filled, enter Not Applicable (N/A). Otherwise enter the dollar difference between the Budgeted Cost of Work Scheduled shown in Box 29 and the Actual Cost of Work Performed shown in Box 30. Show negative variances in parentheses.
- Box 35. This figure represents the percent of the project work that is completed. It is the same number that appears in Box 28b.
- Box 36. Enter the latest estimate of the total costs at completion of the project. If it differs from the Agreement value, the estimate should be charted in the Status of Costs Incurred section. The reasons for the revised estimate should also be addressed in the Narrative Progress Report.
- Box 37. If the latest estimate of total project costs differs from the Agreement value, calculate the revised percent of completion of the project by dividing the earned value to date (Box 28c) by the latest estimate at completion and insert in this box.
- Box 38. Enter the difference, if any, between the latest estimate at completion and the original Agreement value.
- Box 39. Enter the difference, if any, between the latest estimate at completion and the current Agreement value.
- Box 40. Enter the latest estimated completion date for the project.
- Box 41. If the latest estimated completion date differs from the completion date indicated in the original Agreement, enter the number of calendar weeks difference.
- Box 42. If the latest estimated completion date differs from the completion date indicated in the current Agreement, enter the number of calendar weeks difference.

