1.8.3 Site System Engineering FY 1997 Program Plan

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Office of Environmental Restoration and
Waste Management

Westinghouse
Hanford Company

P.O. Box 1970
Richland, Washington

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U.S. Department of Energy under Contract DE-AC06-87RL10930

Approved for Public Release

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FY 1997 PROJECT HANFORD BREAKDOWN STRUCTURE

1.8.3 SITEWIDE SYSTEM ENGINEERING PROJECT MULTI-YEAR WORK PLAN

1.0 TECHNICAL BASELINE

The technical baseline describes the work (functions) to be accomplished and the technical standards that govern the work. The following information is provided in this section of the MYWP: Project Mission; Project End Point Targets; Summary-Level Forecasting Data (waste type, nuclear material, facility, infrastructure needs); Drivers (key mission and regulatory); Functional Definitions; Project Life Cycle Requirements; Project Issues and Assumptions.

1.1 Project Mission

This section contains a narrative description of the project scope and end result(s) or end state(s) that the project will achieve, supported by the primary project responsibilities.

This element will integrate the site level technical baseline for the Hanford Cleanup mission consistent with RLPD 430.1 and RLID 430.1.. The primary activities in this element include: 1) Manage Technical Systems Integration; 2) Develop and Maintain the Hanford Site Technical Baseline; and 3) Provide the Hanford Site Technical Integration Infrastructure.

1.2 Project End Point Targets

This section identifies the significant end point targets, technical objectives and safety objectives to be achieved in accomplishing the project mission. This includes general and specific objectives, deliverables, or activities that are essential to the project mission. This information provides an overview of the activities and deliverables that are contained in the schedule section.

1.2.1 End Point Targets

This section contains the End Point Targets that are established in the Hanford Mission Direction Document. They provide the basis for the project mission and are implemented through technical requirements contained in the Hanford Site Technical Baseline.

The MDD did not assign end point targets to the Sitewide System Engineering Project.

1.2.2 Technical Objectives

This section contains the Technical Objectives that achieve the end point targets. They are established in various Project specific documents and are implemented through technical requirements contained in the Hanford Site Technical Baseline.

- Manage technical systems integration of the Hanford Site
- Develop and maintain the Hanford Site Technical Baseline
- Provide the Hanford Site Technical Integration infrastructure

1.2.3 Safety Objectives

This section contains the Safety Objectives that are established in the Mission Direction Document.

The MDD did not assign safety objectives to the Sitewide System Engineering Project.

1.3 Summary-Level Forecasting Data

This section contains forecast information about the project inputs and outputs during the project life cycle. The forecast information is an integral part of the technical basis for the planning, scheduling, and budgeting process.

1.3.1 Waste Type Data

This section contains the waste (Solid Waste, Tank Waste, Liquid Effluents, Special Case Waste) inventory and volume projection data. These data are used to track the waste through generation, transfer, receipt, storage, and disposition. The scheduling and budgeting of work for a project must reflect the plans for disposition of waste.

The Sitewide System Engineering Project does not generate or process waste. However, the Sitewide System Engineering Project gathers this data from the other Hanford Projects and incorporates it into the Hanford Site Technical Baseline. This supports preparation of the Project MYWP Sections 1.

1.3.2 Nuclear Materials

This section contains the nuclear materials (Special Nuclear Materials, Nuclear Fuel, Cesium capsules, Strontium capsules) inventory and volume projection data. These data are used to track the nuclear materials through transfer, receipt, storage, and disposition. The scheduling and budgeting of work for a project must reflect the plans for disposition of nuclear materials.

The Sitewide System Engineering Project does not generate or process Nuclear Materials. However, the Sitewide System Engineering Project gathers this data from the other Hanford Projects and incorporates it into the Hanford Site Technical Baseline. This supports preparation of the Project MYWP Sections 1.

1.3.3 Facilities (Excess, Deactivated)

This section contains the facility forecasting data (facility deactivation, decontamination and decommissioning, and closure). The facility data are used to track the facility through acquisition, operations and maintenance, and disposal. The scheduling and budgeting of work for a project must reflect the plans for disposition of excess and deactivated facilities.

The Sitewide System Engineering Project does not acquire, operate, maintain or dispose facilities. However, the Sitewide System Engineering Project gathers facilities data from the other Hanford Projects and incorporates it into the Hanford Site Technical Baseline. This supports preparation of the Project MYWP Sections 1.

- 1.3.4 Infrastructure (e.g., Power, Steam, Water, Roads, Railroad, Sanitary Waste)
This section contains the forecasting data for infrastructure support. These data are used to ensure the required infrastructure is available when it is needed. The scheduling and budgeting of work for a project must reflect the services (infrastructure) that are necessary to achieve the project mission.

The Sitewide System Engineering Project does not provide the site infrastructure. However, the Sitewide System Engineering Project gathers this data from the other Hanford Projects and incorporates it into the Hanford Site Technical Baseline. This supports preparation of the Project MYWP Sections 1.

- 1.4 Drivers
This section identifies the documents that are sources of project requirements, including Key and Regulatory Drivers.

- 1.4.1 Key Drivers
This section lists the source documents that tend to drive the project mission (e.g. Mission Direction Document, Tri-Party Agreement).

NAME	TITLE
RLID 430.1	Hanford Site Systems Engineering Policy
RLPD 430.1	System Engineering Criteria Document and Implementing Directive
WHC-SD-WM-SEMP-004 Rev 0	Hanford Site System Engineering Management Plan

- 1.4.2 Regulatory Drivers
This section contains the source documents that must be followed as the Project mission is accomplished.

No additional regulatory drivers apply specifically to 1.8.3.

1.5 Functional Definitions

This section contains the Hanford Site Technical Baseline functions that are assigned to the project. It describes the project work in terms consistent with the Hanford Site Technical Baseline.

Function Number	Function Description
1.0	<u>Manage Program</u> : The MANAGE PROGRAM function provides all program planning, management direction, evaluation, and the management system. This function does not directly contribute to the final state but provides the management needed to conduct the mission. The function includes specification of management policies and procedures, configuration management, scheduling, allocation of all resources, definition of performance criteria, and resolution of regulatory problems.
2.0	<u>Acquire Mission Essential Capabilities</u> : The ACQUIRE MISSION ESSENTIAL CAPABILITIES function provides all new intellectual and physical resources. This includes personnel, consultants, services, supplies, equipment, construction projects, and subcontracts of all kinds.
3.0	<u>Obtain Public Acceptance</u> : The OBTAIN PUBLIC ACCEPTANCE function provides all the public interactions needed to complete the mission including public relations, reviews of all plans and priorities, as needed to minimize potential conflicts between the stakeholder interests and mission activities.

1.6 Project Life-Cycle Requirements as defined in RLID 430.1

This section contains the requirements for each project life cycle phase including the project management requirements.

1.6.1 Management Requirements

This section contains the management requirements (generally key dates and project performance milestones) for the project.

MANAGEMENT REQUIREMENTS	
1	Manage Technical System Integration of the Hanford Site
2	Continue to develop and maintain the Hanford Site Technical Baseline
3	Provide the Hanford Site Technical Integration Infrastructure

1.6.2 Acquisition Requirements

This section contains the acquisition requirements (e.g. Environmental Impact Statements, Resource Conservation and Recovery Act [RCRA] Permits).

1.8.3 has no specific requirements in this area.

1.6.3 Operations and Maintenance Requirements

This section contains the operations requirements (e.g. retrieve, treat, store and dispose of X cubic meters of waste) and the maintenance requirements (e.g. availability and maintainability requirements).

1.8.3 has no specific requirements in this area.

1.6.4 Disposal Requirements

This section contains the disposal requirements (e.g. essential safety systems must be identified and maintained operational during deactivation, all radionuclides must be removed or stabilized during decontamination).

1.8.3 has no specific requirements in this area.

1.7 Project Issues and Assumptions

This section contains the issues that must be resolved by the project. These include project specific issues, as well as the site-level issues that have been assigned to the project for resolution. It also contains the assumptions that are used as a basis for the development of project plans until the issues are formally resolved with records of decision.

ASSUMPTIONS: The following assumptions have been made for this WBS element:

- Project support is provided as needed for development and maintenance of Site Wide System Engineering products and activities.
- Update existing Site SEMP will be a minor revision to the existing Site SEMP to account for new organizations and nomenclature.
- Update procedures for the Site SEMP is a minor revision to the procedural material in the current WHC Site SEMP.
- Project Managers will support the System Requirements Review with resources and funding as needed.
- Projects are required to resolve open issues affecting their projects as assigned in the Technical Issues Management List.
- Support for gathering, organizing, storing, and reporting forecasting data will be provided from the Projects and PID. Without this support, this will be a minimal activity to utilize data currently residing in the Hanford Site Technical Baseline.
- The level of support for the Site Requirements Review will be minimal (e.g., less than two man months).

2.0 WORK BREAKDOWN STRUCTURE

2.1 Work Breakdown Structure Hierarchy

- 1.8.3 - Site System Engineering
 - 1.8.3.1 - Manage Technical Systems Integration
 - 1.8.3.2 - Develop and Maintain Hanford Site Technical Baseline
 - 1.8.3.3 - Provide Hanford Site Technical Integration/Infrastructure

2.2 Work Breakdown Structure Dictionary

Technical Content/Work Statement

This element will integrate the site level technical baseline for the Hanford Cleanup mission. The primary activities in this element include: 1) Manage Technical Systems Integration; 2) Develop and Maintain the Hanford Site Technical Baseline; and 3) Provide the Hanford Site Technical Integration Infrastructure.

This WBS dictionary describes all of the work necessary to fully implement a complete Site Wide System Engineering Program. This WBS describes the work to follow through with the FY 96 activities, and to comply with RLPD 430.1 and RLID 430.1. to comply with the Project Hanford Management Contract Request for Proposal (RFP), and to fully implement the WHC recommended Site Wide System Engineering program. Activities that have been identified as "stretch" goals, and are not funded in FY 97, are shaded.

The Site Technical Integration path forward during FY 97 will evolve as Mission Description Document content and the role of the integrating contractor are finalized. This evolution may result in additions, deletions, or adjustments to the activities described in this dictionary. These will be handled through baseline change requests, as necessary.

WORK BREAKDOWN STRUCTURE DICTIONARY		
1 PROJECT TITLE/PARTICIPANT Site Technical Integration	2 DATE	3 IDENTIFICATION NO. RL-7660-0
4 WBS ELEMENT CODE 1.8.3	5 WBS ELEMENT TITLE Site System Engineering	
6 INDEX LINE NO.	7 REVISION NO. AND AUTHORIZATION 0	8 DATE
9 APPROVED CHANGES		
10 SYSTEM DESIGN DESCRIPTION	11 BUDGET AND REPORTING NUMBER	

1.8.3.1 Manage Technical Systems Integration: This element manages the Technical Integration effort:

1.8.3.1 TASKS FUNDED FOR FY 97
Direct the Technical Integration for the Hanford Site
Conduct Site Wide System Engineering Integration Group (SWSEIG) meetings and manage resulting actions (RLID 2.5)
Identify and track site level issues (RLID 2.4.2) <ul style="list-style-type: none">- Coordinate activities to identify and resolve open issues identified as part of the technical baseline development and maintenance- Establish and support ad hoc issue resolution teams (RLID 2.4.2)- Work with Projects to resolve Site Level interface issues- Provide effective risk management for the site technical baseline- Complete risk analyses and assessments
Support DOE interfaces with the Defense Nuclear Facilities Safety Board and National Academy of Sciences
Monitor and report on cost, schedule and technical performance for WBS element 1.8.3
Develop the annual MYWP for WBS element 1.8.3

1.8.3.2 Develop and Maintain Hanford Site Technical Baseline: This element develops and maintains the Hanford Cleanup Technical Baseline (HSTB) to a level sufficient to support credible integrated technical planning of the Project Hanford Projects and Sub-Projects.

1.8.3.2 TASKS FUNDED FOR FY 97
Continue Super ICD development (submit for review and approval) (RLID 2.4.1)
Perform System Engineering Analysis <ul style="list-style-type: none">- Perform Site Systems Analyses to validate HSTB (complete primary streams and initiate secondary streams) (RLID 2.3.1)
Support project level planning based on HSTB data <ul style="list-style-type: none">- Issue Project Technical Baseline Sections (Sections 1) of Multi-Year-Work-Plans for select Project Hanford Projects and Sub-Projects (RLID 2.4.1, Fig. 2, and 2.2)
Maintain RDD-100 capability to support the activities above including data entry, report preparation and license maintenance; <ul style="list-style-type: none">- Integration of Project RDD-100 files- Ad hoc report writing Gather, organize, store, and report forecasting data to support Project MYWPs development(Waste, materials, facilities, infrastructure) (RLID 2.4.1, 2.2) <ul style="list-style-type: none">- Provide integrated waste stream data (waste, nuclear materials, and facilities) tracked to the intra-project level for development of technical and financial plans. Hanford Site Cleanup Specification review and approval (RLID 2.4.1) <ul style="list-style-type: none">- Produce the documents required for the SRR:- Coordinate support for the SRR:<ul style="list-style-type: none">- Define entrance and exit criteria- Identify participants- Logistical support (meeting rooms, recorders etc.)- Document distribution 30 days in advance- Physical preview with reviewers

1.8.3.3 Provide Hanford Site Technical Integration Infrastructure: This element provides the necessary infrastructure to enable system engineering and systems management to be successful.

1.8.3.3 TASKS FUNDED FOR FY 97
Maintain the existing Hanford Site SEMP <ul style="list-style-type: none">- Provide informational briefings to key Project personnel on Sitewide System Engineering process
Provide formal configuration management for the technical baseline information
Implement a system engineering process (SEMP) <ul style="list-style-type: none">- Update the procedural information in the existing Site SEMP through the Sitewide System Engineering Integration Group- Continue to develop and maintain the Hanford Site Technical Baseline consistent with RLID 430.1 and RLID 430.1
Administer HSTB (RDD-100) <ul style="list-style-type: none">- Pay RDD-100 license fee- Upgrade to current RDD-100 version- Provide system backups

1.8.3.3 STRETCH GOALS NOT FUNDED FOR FY 97

Provide integrated information management system related to site technical baseline and forecasting data

Procure and deploy a comprehensive set of System Engineering computer based tools

Interface with the Chief Information Office to define the Technical Integration information needs

Projects/Services are required to be able to interface electronically with the SWSE database for transfer and revision of data (RLID Attachment D)

[illegible]

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- 3.0 SCHEDULE BASELINE
 - 3.1 Program Master Baseline Schedule
 - 3.2 Milestone List
 - 3.3 Milestone Description Sheets

3.1 Program Master Baseline Schedule

Name	% Done	Estimate	Start	Estimate	Finish	Subsite
DIRECT TECHNICAL INTEGRATION	0 M	10/1/86	9/30/87	01		
SITE WIDE SYSTEM ENGINEERING GROUP	0 M	10/1/86	9/30/87	02		
CHARGE ISSUES	0 M	10/1/86	9/30/87	03		
Provide Technical Issues Management List Monthly	0	10/1/86	9/30/87	04		
MEETING MINORS SITE TECHNICAL	0	10/1/86	9/30/87	10		
Done Call to Projects	0	2/1/87	2/1/87	11		
Projects Provide Information	0	2/1/87	2/28/87	12		
Update HSTB	0	2/1/87	5/1/87	13		
HSTB Rev 6	0	5/1/87	5/1/87	14		
Update HSTB	0	5/1/87	5/28/87	15		
HSTB Rev 7	0 M	9/30/87	9/30/87	16		
Finalize ICD Matrix Permit	0	12/8/87	12/31/87	18		
SITE SYSTEMS ANALYSES Primary Streams	0 M	10/1/86	1/31/87	20		
Projects Review and Comment - Primary	0	2/3/87	3/7/87	21		
SITE Specific Analysis Secondary Streams	0 M	4/30/87	6/1/87	22		
Projects Review and Comment on Secondary Streams	0	6/25/87	9/8/87	23		
SITE SPECIFICATION	0	10/1/86	5/1/87	30		
Integrate MOD with HSTB	0	10/1/86	9/30/87	31		
INTERFACIAL CONTROL RECOMMENDATION	0	10/1/86	9/30/87	40		
Input Interface Information into HSTB	0	10/1/86	1/28/87	41		
Output ICD Matrix from HSTB	0	1/31/87	1/31/87	43		
Projects Review and Comment	0	1/31/87	2/28/87	44		
Reconcile Comments	0	2/28/87	5/1/87	45		
Input ICD Data into HSTB	0	5/1/87	9/28/87	46		
Small ICD Matrix for Review and Approval	0 M	9/30/87	9/30/87	47		
MEETING MINORS PLAN PREPARATIONS	0	5/1/87	9/30/87	50		
Prepare Initial Draft Sections 1	0	5/1/87	5/1/87	51		
Support Workshops	0	5/1/87	8/1/87	52		
Gather Waste Type Data	0	5/1/87	8/1/87	53		
Gather Nuclear Material Data	0	5/1/87	8/1/87	54		
Gather Facilities Data	0	5/1/87	8/1/87	55		
Gather Infrastructure Data	0	5/1/87	8/1/87	56		
Enter data into HSTB	0	5/1/87	8/1/87	57		
Send Sections for Approval	0	9/30/87	9/28/87	58		
ADMINISTER MEETING MINORS SITE TECHNICAL	0 M	10/1/86	9/30/87	60		
PREPARE SYSTEMS ENGINEERING PROCESS	0 M	10/1/86	9/30/87	70		

MILESTONE LIST			
Milestone Type*	Control Number	Milestone Description	Milestone Completion Date
Contractor	TSI-97-001	Monthly Issues Management List	Sept 30, 1997
DOE-RL	TSI-97-002	Project MYWP Sections 1 for Approval	Sept 29, 1997
DOE-RL	TSI-97-003	Super ICD Matrix Draft for Approval	Sept 29, 1997
Contractor	TSI-97-004	Hanford Site Technical Baseline Rev. 6	May 1, 1997
Contractor	TSI-97-005	Hanford Site Technical Baseline, Rev 7	Sept 30, 1997

* TPA, HQ, RL, FO, and selected contractor milestones

* On Tri-Party Agreement Milestones, also designate if they are HQ, RL

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Monthly Issues Management List			Date:
Assigned To: M.L. Grygiel			CIN:
Program WBS Designator: 1.8.3			Due Date: Sep 30,97
Control Number: TSI-97-001			Rev: 0
MILESTONE TYPE: _DOE-HQ _DOE-RL [X]CONTRACTOR	DIVISION: _State _Federal [X] DOE _RCRA _TPA Number	DELIVERABLE: [X]Report _Letter _Drawings _Other (specify)	ADDRESS TO: _DOE-HQ [X]DOE-RL [X]Other (WHC Programs)
<p>Milestone Description: Issue management is an important task in the Site Wide System Engineering (SWSE) activities. The cleanup mission at Hanford is very large and complex and there are a number of obstacles that prevent Hanford from accomplishing the mission. These obstacles, called issues, cut across Hanford Projects and Services as well as other DOE sites. Whether the issues are simple or complex, there must be a consistent and systematic process for resolving them. The approach that will be used by the Site Wide System Engineering Integration Group (SWSEIG) to track site level issues is described in the Site System Engineering Management Plan.</p> <p>The Sitewide Technical Issue Management List (TIML) will be maintained as part of the Hanford Site Technical Baseline Database. The list will be printed from the database on a monthly basis. The HSTB is maintained under configuration control in accordance with the guiding procedure. It is updated by Technical Systems Integration (TSI) as issues are added, changed, or completed. TSI will maintain the TIML at the site and Project interface levels.</p> <p>The TIML is a matrix (table) that lists all the current issues and shows the status of each issue. The matrix includes information on the priority (impacts), champion, owner, due date and status of the issues.</p>			
<p>Description of what constitutes completion of this milestone: WHC will provide the Hanford Site Technical Issues Management List to RL each month, by the second Friday of the month.</p>			
Milestone Description Approval			
Cost Account Manager Date		Program/Project Manager Date	
M.L. Grygiel		C. Edwards	
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			
Milestone Completion Acceptance			
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Project MYWP Sections 1			Date:
Assigned To: M.L. Grygiel			CIN:
Program WBS Designator: 1.8.3			Due Date: Sep 29,97
Control Number: TSI-97-002			Rev: 0
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	☐ DOE-HQ ☒ DOE-RL ☒ Other (WHC Programs)
<p>Milestone Description: The Hanford Site is managed through a series of Multi-Year-Work-Plans (MYWPs). The MYWPs have 5 Sections: 1) Technical Baseline; 2) WBS Definitions; 3) Schedule Baseline 4) Cost Baseline; 5) Execution Year Description. The Hanford Site Technical Baseline Database will be used as the source for Project level MYWP Sections 1. This will ensure the technical basis for the Projects is consistent and integrated.</p> <p>Section 1 contains the following type of information:</p> <ul style="list-style-type: none"> Project Mission Project Objectives (End Point Targets) Forecasting Data (Waste, Materials, Facilities, Infrastructure) Drivers Functional Definitions Life Cycle Requirements Issues and assumptions 			
<p>Description of what constitutes completion of this milestone: Sections 1 of MYWPs consistent with the Project Hanford Breakdown Structure will be provided to the Projects.</p>			
Milestone Description Approval			
Cost Account Manager Date		Program/Project Manager Date	
M.L. Grygiel		C. Edwards	
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes		S. H. Wisness	
Milestone Completion Acceptance			
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes		S. H. Wisness	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Super ICD Matrix Draft for Approval			Date:
Assigned To: M.L. Grygiel			CIN:
Program WBS Designator: 1.8.3			Due Date: Sep 29,97
Control Number: TSI-97-003			Rev: 0
MILESTONE TYPE: _DOE-HQ ☒ DOE-RL _CONTRACTOR	DIVISION: _State _Federal ☒ DOE _RCRA _TPA Number	DELIVERABLE: ☒ Report _Letter _Drawings _Other (specify)	ADDRESS TO: _DOE-HQ ☒ DOE-RL ☒ Other (WHC Programs)
<p>Milestone Description: The Super ICD is a management tool and framework for identifying and managing interfaces for Project Hanford. It is a Site level index of functional interfaces (data elements) as defined in the Hanford Site Technical Baseline (HSTB) and it provides a matrix of data elements between projects for the life cycle of the Hanford Cleanup Mission. The matrix shows where Memorandums's of Understanding are required between Projects.</p> <p>The Super ICD will contain the following: Introduction, definition of terms, Hanford Projects N² Diagrams, and Data Element Interface information. A further description of the Super ICD can be found in the Site System Engineering Management Plan.</p> <p>Technical Systems Integration (TSI) will generate the tables of information for the Super ICD from the HSTB database. The Project representatives are responsible for providing the requested information, reviewing the HSTB outputs, and maintaining the information current via change control.</p> <p>Description of what constitutes completion of this milestone: A draft of the Super ICD Matrix that has been reviewed by the Project representatives to the Site Wide System Engineering Integration Group will be submitted to RL for review and approval.</p>			
Milestone Description Approval			
Cost Account Manager Date M.L. Grygiel		Program/Project Manager Date C. Edwards	
Program Element Manager Date P.A. Baynes		DOE Program Manager Date S. H. Wisness	
Milestone Completion Acceptance			
Program Element Manager Date P.A. Baynes		DOE Program Manager Date S. H. Wisness	

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Hanford Site Technical Baseline Rev. 6			Date:
Assigned To: M.L. Grygiel			CIN:
Program WBS Designator: 1.8.3			Due Date: May 1,97
Control Number: TSI-97-004			Rev: 0
MILESTONE TYPE: _DOE-HQ [X]DOE-RL _CONTRACTOR	DIVISION: _State _Federal [X] DOE _RCRA _TPA Number	DELIVERABLE: [X]Report _Letter _Drawings _Other (specify)	ADDRESS TO: _DOE-HQ [X]DOE-RL [X]Other (WHC Programs)
<p>Milestone Description: The Hanford Site Technical Baseline Database provides the traceability from the Hanford Mission to the Hanford Site Specification, and ultimately to the Project Multi-Year Work Plans.</p> <p>It is the controlled source of information in the Hanford Site Specification, Super ICD Matrix, Site Systems Analyses, and the Technical Issues Management List. It contains the relationships between the Site cleanup functions, requirements, and architecture. It also provides a method for mapping the WBS elements to the Site Technical Baseline.</p> <p>As such it is necessary to keep the information in the HSTB as current as possible. One method for accomplishing that goal is the annual update via a Project level data call.</p> <p>Description of what constitutes completion of this milestone: Issuance of the ECN that documents update of the HSTB to Rev. 6.</p>			
Milestone Description Approval			
Cost Account Manager Date		Program/Project Manager Date	
M.L. Grygiel		C. Edwards	
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			
Milestone Completion Acceptance			
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			

Westinghouse Hanford Company MILESTONE DESCRIPTION SHEET			
Title: Hanford Site Technical Baseline Rev. 7			Date:
Assigned To: M.L. Grygiel			CIN:
Program WBS Designator: 1.8.3			Due Date: Sep 30,97
Control Number: TSI-97-005			Rev: 0
MILESTONE TYPE: ☐ DOE-HQ ☒ DOE-RL ☐ CONTRACTOR	DIVISION: ☐ State ☐ Federal ☒ DOE ☐ RCRA ☐ TPA Number	DELIVERABLE: ☒ Report ☐ Letter ☐ Drawings ☐ Other (specify)	ADDRESS TO: ☐ DOE-HQ ☒ DOE-RL ☒ Other (WHC Programs)
<p>Milestone Description: The Hanford Site Technical Baseline Database provides the traceability from the Hanford Mission to the Hanford Site Specification, and ultimately to the Project Multi-Year Work Plans.</p> <p>It is the controlled source of information in the Hanford Site Specification, Super ICD Matrix, Site Systems Analyses, and the Technical Issues Management List. It contains the relationships between the Site cleanup functions, requirements, and architecture. It also provides a method for mapping the WBS elements to the Site Technical Baseline.</p> <p>As such it is necessary to keep the information in the HSTB as current as possible. One method for accomplishing that goal is the annual update via the Project level MYWP preparations.</p>			
Description of what constitutes completion of this milestone: Issuance of the ECN that documents update of the HSTB to Rev. 7.			
Milestone Description Approval			
Cost Account Manager Date		Program/Project Manager Date	
M.L. Grygiel		C. Edwards	
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			
Milestone Completion Acceptance			
Program Element Manager Date		DOE Program Manager Date	
P.A. Baynes			

- 4.0 COST BASELINE
 - 4.1 B/A and Cost Baseline Summaries By Year
(BCWS/PMB/Life-Cycle Cost)
 - 4.2 Basis of Estimate
 - 4.3 Planned Staffing Profiles (Average Full-Time
Equivalents)

FY 97 PLANNING WORKSHEET

1.8.3 - Sys Engr. Exc. & Mgmt. Program Element Manager: M. Grygiel

Notes:		F Y 9 6 B A C	E A C	P L A N N E D	D E L T A	P R O P . U S E
(A) Planned scope						
System Engr. - TBD						
Y2001	Manage Technical Site Integration	318				
Y2002	Develop and Maintain the Hanford Site Technical Baseline	283				
Y2003	Provide Technical Site Integration Infrastructure	63				
Subtotal		664				
G&A/CSP		86				
TBD Total		750				
(B) Baseline Development - "Out of Current Scope"						
Y2001	Manage Technical Site Integration	200				
Y2002	Develop and Maintain the Hanford Site Technical Baseline	900				
Y2003	Provide Technical Site Integration Infrastructure	2300				
Total out of Scope		3400				
Total (A) planned and (B) out of scope		4150				

BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
1.8.3.1 Manage Technical Systems Integration: This element manages the Technical Integration effort:				
1	Direct the Technical Integration for the Hanford Site - Support DOE interfaces with the Defense Nuclear Facilities Safety Board and National Academy of Sciences - Monitor and report on cost, schedule and technical performance for WBS element 1.8.3 - Develop the annual MYWP for WBS element 1.8.3.	Oct 1996 Sep 1997	125	Grygiel
			100	Baynes
			125	Bennett
			63	Buriak
2	Site Wide System Engineering Integration Group Weekly meetings - agendas - minutes - attendance	Oct 1996 Sep 1997	25	Bath
			25	Baynes
			25	Project Representatives
3	ISSUES MANAGEMENT Actively manage issue generation and closeout - Ad Hoc Teams - Monthly Issue Management List Update the HSTB via change requests Owners Resolve Issues	Oct 1996 Sep 1997	225	Bath
			25	Baynes
			50 +TBD	Project Representatives

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BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
1.8.3.2 Develop and Maintain Hanford Site Technical Baseline: This element develops and maintains the Hanford Cleanup Technical Baseline (HSTB) to the level that is necessary for a site level System requirements review (SRR):				
4	MAINTAIN HANFORD SITE TECHNICAL BASELINE Incorporate Change Requests as Submitted Prepare Report Writers ICD Issues Management List MYWP Section 1	Oct 1996 Sep 1997	50	Bailey
4b	Data Call to Projects	Feb 1997		Bailey
4c	Projects Provide Information	Feb 1, 1997 Feb 28, 1997	22	Project Representatives
4d	Update HSTB	Feb 1, 1997 May 1, 1997	44	Bailey
4e	Rev. 6 HSTB	Apr 1997		Bailey
4f	Update HSTB	Aug 1, 1997 Sep 29, 1997	29	Bailey
4g	Rev. 7 HSTB Based on MYWP Input	Sep 30, 1997		Bailey

BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
5	SITE SYSTEMS ANALYSES			
5a	Develop Site Systems Analyses - Primary Streams - Solid Waste TRU - Solid Waste - Spent Nuclear Fuel - Transition Projects - Infrastructure - Liquid Effluents - Environmental Restoration	Oct 1, 1996 Jan 1, 1997	58	Bailey
5b	Project Review and Comment - Primary Streams - Solid Waste TRU - Solid Waste - Spent Nuclear Fuel - Transition Projects - Infrastructure - Liquid Effluents - Environmental Restoration	Feb 3, 1997 Mar 7, 1997	24	Project Representatives

BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
5c	Develop Site Systems Analyses - Secondary Streams - Solid Waste - Spent Nuclear Fuel - Transition Projects - Infrastructure - Liquid Effluents - Environmental Restoration	Apr 30, 1997 Aug 1, 1997	33	Bailey
5d	Project Review and Comment - Primary Streams - Solid Waste - Spent Nuclear Fuel - Transition Projects - Infrastructure - Liquid Effluents - Environmental Restoration	Aug 25, 1997 Sep 26, 1997	24	Project Representatives
6	SITE SPECIFICATION Respond to comments on Site Specification Submit Site Specification to RL for review and approval	Oct 1, 1996 May 1, 1997	38	Contract
			30	Baynes
6a	Integrate MDD with HSTB	Oct 1, 1996 Sep 30, 1997	125	McBeath

BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
7	INTERFACE CONTROL DOCUMENTATION	Oct 1, 1996 Sep 30, 1997	63	Lee
7a	Input Project interface work into HSTB	Oct 1, 1996 Jan 28, 1997	60	Lee
7b	Finalize ICD Matrix Document Format	Jan 28, 1997 Jan 31, 1997	3	Lee
7c	Output ICD Matrix Document from HSTB	Jan 31, 1997		Lee
7d	Projects review and comment	Jan 28, 1997 Feb 28, 1997	15	Lee
			20	Project Representatives
7e	Reconcile Project Comments	Feb 28, 1997 May 1, 1997	34	Lee
			23	Project Representatives
7f	Update the HSTB with reconciled Project Interfaces	Aug 1, 1997 Sep 29, 1997	31	Lee
7g	Submit ICD Matrix Document to RL for review and approval	Sep 30, 1997		Lee
8	PREPARE PROJECT LEVEL MYWP SECTIONS 1	May 1, 1997 Sep 30, 1997	21	Baynes

BASIS OF ESTIMATE
SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
8a	Prepare Section 1 of the MYWPs as directed by RL guidance			
8b	Support MYWP workshops	May 1, 1997 Aug 1, 1997	22	Project Representatives
8c	Gather Waste Type Data - Request information - Extract from BEMR and Project technical baselines - Support Workshops - Update HSTB via change requests - Integrate data in HSTB and BEMR	May 1, 1997 Aug 1, 1997	32	Sommer
			56	Project Representatives
8d	Gather Nuclear Material Data - Request information - Extract from BEMR and Project technical baselines - Support Workshops - Update HSTB via change requests - Integrate data in HSTB and BEMR	May 1, 1997 Aug 1, 1997	32	Sommer
			56	Project Representatives
8e	Gather Facilities Data - Request information - Extract from facility core database - Support Workshops - Update HSTB via change requests - Integrate data in HSTB and BEMR	May 1, 1997 Aug 1, 1997	26	Lee
			28	Project Representatives

BASIS OF ESTIMATE

SITE TECHNICAL BASELINE INTEGRATION - FY 97

No.	TASK	DATE (Begin - End)	WORK DAYS	TEAM
8f	Gather Infrastructure Data - Request information - Support Workshops - Update HSTB via change requests - Integrate data in HSTB	May 1, 1997 Aug 1, 1997	22	Lee
			64	Rinne
			56	Project Representatives
8h	Submit MYWP Sections 1 for approval	Sep 29, 1997		Bailey
8i	Enter MYWP Data into HSTB	May 1, 1997 Aug 1, 1997	13	Bailey
1.8.3.3 Provide Hanford Site Technical Integration Infrastructure: This element provides the necessary infrastructure to enable System engineering and Systems management to be successful.				
9	Administer HSTB (RDD-100) - Pay RDD-100 license fee - Upgrade to current RDD-100 version - Provide System backups	Oct 1996 Sept 1997	25	Bailey
			63	Porter
			25K	Site License Fee
			25K	Project License Fee
10	Prepare SE Process Documents as requested	Oct 1996 Sep 1997	50	Baynes

RESOURCE TOTALS BY MAJOR TASKS (\$000)				
NAME	WORK DAYS 1.8.3.1	WORK DAYS 1.8.3.2	WORK DAYS 1.8.3.3	TOTAL 1 FTE = 250
Bailey		225	25	250
Bath	250			250
Baynes	150	50	50	250
Bennett	125			125
Buriak	63			63
Grygiel	125			125
Lee		250		250
Porter			63	63
TOTAL	713	525	138	1376
TOTAL X \$504	360K	265K	70K	695K
Contract Support		300	25K (RDD-100)	55K
REQUIRED SUPPORT THAT IS FUNDED BY OTHER SOURCES				
McBeath		125		125
Project Representatives	75 +TBD	331		406 +TBD
Rinne		125		125
Sommer		125		125
TOTAL				781 +TBD

Exhibit: Program Average FTE Projections by COCS Categories

Program WBS/Title

1.8.3 SITEWIDE SYSTEM ENGINEERING

COCS	Title	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
C000	Crafts										
C010	Carpenters										
C020	Electricians										
C030	Heating Air-Conditioning and Refrig Mechanics (HVAC)										
C040	Machinists										
C050	Masons										
C060	Millwrights										
C070	Painters										
C080	Plumbers and Pipefitters										
C090	Structural and Metal Workers										
C100	Vehicle and Mobile Equipment Mechanics										
C110	Welders										
C120	Other Crafts										
E000	Engineers										
E010	Chemical Engineers										
E020	Civil Engineers										
E040	Electrical Engineers										
E050	Environmental Engineers										
E060	Industrial Engineers										
E070	Mechanical Engineers										
E080	Nuclear Engineers										
E090	Petroleum/Mining Engineers										
E100	Plant Engineers										
E110	Quality Assurance/Control Engineers										
E120	Safety Engineers										
E130	Other Engineers	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
E140	Construction Engineers										
G000	General Admin, Secretarial & Clerical Support										
G010	Administrative Assistants										
G020	Office Clerks (General)										
G030	Office Clerks (Specialized)										
G040	Secretaries	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
G050	Typist and Word Processors										
G060	Other General Admin, Secretarial and Clerical Support										
L000	Laborers and General Service Workers										
L010	Firefighters										
L020	Food Service Workers										
L030	Janitors and Cleaners										

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S030	Geologists												
S040	Life Scientists												
S050	Materials Scientists												
S060	Mathematicians												
S070	Physicists												
S080	Social Scientists												
S090	Other Scientists												
S100	Computer Scientists												
T000	Technicians												
T010	Computer Operator/Coders												
T020	Drafters												
T030	Engineering Technicians												
T040	Environmental Sciences Technicians												
T050	Health Physics Technicians												
T060	Industrial Safety and Health Technicians												
T070	Instrument and Control Technicians												
T080	Laboratory Technicians												
T090	Media Technicians												
T100	Survey and Mapping												
T110	Other Technicians	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Total		5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5

Subcontractor Exhibit

Dollars In Thousands

Project Hanford Breakdown Structure:

1.8.3

Project Hanford Title:

SITEWIDE SYSTEM ENGINEERING

FY 1997

FY 1998

	\$	FTEs	\$	FTEs
Expense				
Service Agreement	\$0	0	\$0	0
Technical Service	\$50k	2	\$50k	2
Clerical	\$0	0	\$0	0
Construction	\$0	0	\$0	0
Total	\$50k	2	\$50k	2

Definitions:

Subcontractor is any Hanford Site subcontractor to WHC, ICF KH, BCSR, PNNL, or BHI.

Dollars in Thousands: The base cost of the subcontract, excluding adders (procurement and G&A).

Service Agreement subcontracts obtain special knowledge or skills, typically not materials.

Technical Service subcontracts are primarily offsite and of a highly specialized nature.

Clerical subcontracts are for clerical support.

Construction subcontracts support capital efforts.

- 5.0 EXECUTION YEAR
 - 5.1 Performance Measure, Objectives, Measures, and Expectations
 - 5.2 Program Performance Baseline Schedule
 - 5.3 Cost Baseline by Month
 - 5.4 Cost Element by Year
 - 5.5 Program Funding
 - 5.6 Project Work Scope Mapping
 - * (See 3.1 for Master Program Baseline Schedule)

5.1 Performance Measures

This section identifies the Performance Measures and deliverables.

- Publish Monthly Issues Management List by the 15th of each month.
- Issue Project MYWP Section 1, consistent with the Integrated Site Baseline on September 29, 1997.
- Publish Super ICD Matrix Draft for approval by September 29, 1997.
- Issue Hanford Site Technical Baseline, Rev 6 by May 1. (This supports issuing the Integrated Site Baseline by July 31, 1997.)
- Issue Hanford Site Technical Baseline, Rev 7 by September 30, 1997.

BUDGET AUTHORITY SUMMARY BY YEAR BY ADS

(\$000s)

RL WBS #	ADS #	TITLE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	TOTAL
1.8.3	7660	SITEWIDE SE	750	750	750	750	750	750	750	750	750	750	7500
SUMMARY (1)			750	750	750	750	750	750	750	750	750	750	7500

(1) Summary Of All Programmatic ADS's And New B/A (See Exhibit
 2); Does Not Include Expense Carryover.

BUDGET AUTHORITY BY YEAR BY ADS

(\$000s)

RL WBS #	ADS #	TITLE	FUND TYPE	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTAL
1.8.3	SITE ENG	SystemS Expense		750	750	750	750	750	750	750	750	750	750	7500
		CENRTC												
		Line Item												
		GPP												
		Subtotal New		750	750	750	750	750	750	750	750	750	750	7500
		B/A												
		E x p e n s e												
		Carryover (1)												
		Total B/A		750	750	750	750	750	750	750	750	750	750	7500

PROGRAM NEW	7500
B/A	

PROGRAM EXPENSE	
CARRYOVER	

PROGRAM TOTAL	7500
B/A	

f(1) Includes Only Expense Carryover Approved By Site Management Board (SMB) Prior To 10/1/96.

COST BASELINE BY YEAR BY ADS

(\$000s)

RL #	WBS #	ADS #	TITLE	FUND TYPE	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	TOTAL
1.8.3			SITE System SE	Expense	750	750	750	750	750	750	750	750	750	750	7500
				CENRTC											
				Line Item											
				GPP											
				Total BCWS/PMB (1)	750	750	750	750	750	750	750	750	750	750	7500
				Mgmt Reserve (2)											
				Line Item Contingency (2)											
				Expected Carryover (3)											
				TOTAL	750	750	750	750	750	750	750	750	750	750	7500

PROGRAM	7500
BCWS/PMB	

PROGRAM	7500
TOTAL	

(1) Budgeted Cost Of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB).

(2) Management Reserve And Line Item Contingency Held By RL.

(3) Includes Expected Expense Carryover Requested By Formal Change Control In FY1997.

COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY FUND TYPE BY MONTH

(\$000s)

L WBS #	PROGRAM TITLE	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
8.3	Sitewide System Eng	Expense	110.9	54.8	57.5	54.2	47.4	67	49.5	51.1	62.1	78.2	62.9	55	750.4
		CENRTC													
		Line Item													
		GPP													
		Total BCWS/PMB (1)	110.9	54.8	57.5	54.2	47.4	67	49.5	51.1	62.1	78.2	62.9	55	750.4
		Mgmt Reserve (2)													
		Line Item Contingency (2)													
		Expected Carryover (3)													
		TOTAL	110.9	54.8	57.5	54.2	47.4	67	49.5	51.1	62.1	78.2	62.9	55	750.4

ROGRAM BCWS/PMB	750.4
ROGRAM TOTAL	750.4

) Budgeted Cost Of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB).

) Management Reserve Held By RL And Line Item Contingency Held By RL.

) Includes Expected Expense Carryover Requested By Formal Change Control In FY1997.

COST BASELINE FOR EXECUTION YEAR BY PROGRAM BY COST ELEMENT BY MONTH

(\$000s)

RL WBS #	PROGRAM TITLE	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.8.3	Sitewide System Eng	0 Salaries & Cont of Serv	31.3	32.8	34.4	32.4	28.4	40.1	29.6	33.1	37.1	26.3	37.6	32.9	393.7
		1 Material										25			25
		2 Purchased Services		48											48
		3 Charges From Other Contr													
		4 Internal Services		2.5								4.5			7
		5 Internal Charges													
		6 BCS Richland													
		7 Overheads & Adders	29.1	22	23	21.8	19	26.8	19.8	20.5	25	22.4	25.3	22.1	276.7
		8 Revenue													
		Total BCWS/PMB (1)	110.9	54.8	57.4	54.2	47.4	66.9	49.4	53.6	62.1	78.2	62.9	55	750.4

PROGRAM BCWS/PMB 750.4

(1) Budgeted Cost Of Work Scheduled (BCWS) Equals Performance Measurement Baseline (PMB) And Is Consistent With BCWS/PMB (Exhibit 3).

Above Amounts Do NOT Include Management Reserve Held By RL, Line Item Contingency Held By RL, Or Expected Expense Carryover Requested By Formal Change Control In FY1997.

1.8.3

PROJECT WORK SCOPE MAPPING**Sitewide System Engineering****- FY 1996 to FY 1997 -**

Work Scope Title	(1) Identifiers		(2) Comment
	FY 1996	FY 1997	
Technical Systems Integration	1.8.2.3	1.8.3	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
System Engineering Program Execution and Management	1.8.2.3.1.	1.8.3.1	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
System Engineering Management	1.8.2.3.1.1	1.8.3.1	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
Integration	1.8.2.3.1.2	1.8.3.1	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
Technical Baseline Development	1.8.2.3.2	1.8.3.2	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
Develop Draft Program Plan Direction Documents	1.8.2.3.2.1	1.8.3.2	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3
Support for a System Requirements Review of a Site Specification - NOT FUNDED	1.8.2.3.2.2	1.8.3.2	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3 - NOT FUNDED
Open Issue Analysis/Resolution	1.8.2.3.2.3	1.8.3.2	Work scope transferred from ADS 1.8.2.3 into ADS 1.8.3 - NOT FUNDED
Integration Infrastructure - NOT FUNDED	1.8.2.3.3	1.8.3.3	Work transferred from ADS 1.8.2.3 into ADS 1.8.3 - NOT FUNDED
Value Engineering	1.8.2.3.4		Work scope not funded in FY97
Special Projects - NOT FUNDED	1.8.2.3.5		Work scope not funded in FY97

CA/MBS: 1Y23A1 SYS ENGR PROG EXEC & MGMT Funding Source: 1997 EXPENSE Cap Rev: 00 Cin: Start Completion
CA Manager: GRYGIEL, ML CAP Orig Date : 07/28/95 Budget (K\$): 750.0 Date Date
Resp Org: 02000 HANFORD SYSTEMS INTEGRATION Budget Analyst: A2 - HOLMES, JE Phone: 376-200310/01/96 09/30/96
GL Index: RBA B & R Number: EW3110010 B & R Title: PROGRAM CONTROL/SUPPORT CAP STATUS: D

WORK PACKAGE: 1Y23A110 MANAGE TECHNICAL SYSTEMS INTEG Scope of Work: Revision No: 00
Resp Org: 02100 SITE TECHNICAL INTEGRATION MANAGE TECHNICAL SYSTEMS INTEGRATION Date: 07/31/96

CAP STATUS: D

Task: 1Y23A11001 Y1831 MANAGE TECH SYS INTEGRATION Scope of Work: Revision No: 00
Responsible Org: 02100 SITE TECHNICAL INTEGRATION MANAGE TECHNICAL SYSTEMS INTEGRATION Date: 07/31/96
E V Method: 4 LEVEL OF EFFORT METHOD Cin Num:
Parent MBS: CAP STATUS: D

Fiscal Year: 1997

Performing Org: 02100 SITE TECHNICAL INTEGRATION

Approved By: _____ GRYGIEL, ML 2-2983 Date: / /

Cost Elements:	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Staff	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
00 NON-EX LABOR Hrs	70	73	77	70	71	93	73	72	88	62	87	76	912
\$	1.5	1.6	1.7	1.5	1.5	2.0	1.6	1.6	1.9	1.3	1.9	1.6	19.7
Staff	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
01 EXEMPT LABOR Hrs	334	350	367	334	341	444	348	346	420	298	418	365	4365
\$	13.9	14.5	15.2	13.9	14.1	18.4	14.4	14.4	17.4	12.4	17.3	15.1	181.1
7C ORG OVERHEAD	6.8	7.1	7.4	6.8	6.9	9.0	7.0	7.0	8.5	6.0	8.5	7.4	88.3
Total BCMS Staff	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Hrs	404	423	444	404	412	537	421	418	508	360	505	441	5277
\$	22.1	23.2	24.3	22.1	22.6	29.4	23.1	22.9	27.8	19.7	27.7	24.2	289.1

Total BCMP: -----

WORK PACKAGE: 1Y23A120 DEV & MAINT. HSTB Scope of Work: Revision No: 00
Resp Org: 02100 SITE TECHNICAL INTEGRATION DEVELOP AND MAINTAIN HANFORD SITE TECHNICAL BASELINE Date: 07/31/96

CAP STATUS: D

Task: 1Y23A12001 Y1832 DEV & MAINT HSTB Scope of Work: Revision No: 00
Responsible Org: 02100 SITE TECHNICAL INTEGRATION DEVELOP AND MAINTAIN HANFORD SITE TECHNICAL BASELINE Date: 07/31/96
E V Method: 4 LEVEL OF EFFORT METHOD NE Cin Num:
Parent MBS: CAP STATUS: D

Fiscal Year: 1997

Performing Org: 02100 SITE TECHNICAL INTEGRATION

Approved By: _____ GRYGIEL, ML 2-2983 Date: / /

Cost Elements:	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Staff	2.3	2.3	2.3	2.5	1.7	2.1	1.8	2.0	2.0	2.0	2.1	2.1	2.1

01 EXEMPT LABOR	Hrs	320	336	352	348	241	389	261	288	350	248	365	319	3817
	\$	13.3	13.9	14.6	14.4	10.0	16.1	10.8	12.0	14.5	10.3	15.1	13.2	158.4
21 PO CONTRACTS	\$	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0
4C MPR	\$	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5
7C ORG OVERHEAD		5.8	6.1	6.4	6.4	4.4	7.1	4.8	5.3	6.4	4.5	6.7	5.8	69.7
Total BCWS	Staff	2.3	2.3	2.3	2.5	1.7	2.1	1.8	2.0	2.0	2.0	2.1	2.1	2.1
	Hrs	320	336	352	348	241	389	261	288	350	248	365	319	3817
	\$	69.6	20.1	21.0	20.8	14.4	23.2	15.6	17.2	20.9	14.8	21.8	19.1	278.6

Total BCWP:

WORK PACKAGE:	1Y23A130 SITE TECH INTEG INFRASTRUCTURE	Scope of Work:	Revision No: 00
Resp Org:	02100 SITE TECHNICAL INTEGRATION	PROVIDE HANFORD SITE TECHNICAL INTEGRATION INFRASTRUCTURE	Date: 07/31/96

Task:	1Y23A13001 Y1833 SITE TECH INTEGR INFRASURCTUR	Scope of Work:		Revision No: 00
Responsible Org:	02100 SITE TECHNICAL INTEGRATION	PROVIDE HANFORD SITE TECHNICAL INTEGRATION		Date: 07/31/96
E V Method:	4 LEVEL OF EFFORT METHOD	INFRASTRUCTURE		Cin Num:
Parent WBS:				CAP STATUS: D

Fiscal Year: 1997

Performing Org: 02100 SITE TECHNICAL INTEGRATION

Approved By: _____ GRYGIEL, ML 2-2983 Date: / /

Cost Elements:		Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
00 NON-EX LABOR	Staff	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Hrs	42	44	46	42	43	56	44	43	53	37	52	46	548
	\$	0.9	0.9	1.0	0.9	0.9	1.2	0.9	0.9	1.1	0.8	1.1	1.0	11.8
01 EXEMPT LABOR	Staff	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
	Hrs	42	44	46	42	43	56	44	43	53	37	52	46	548
	\$	1.7	1.8	1.9	1.7	1.8	2.3	1.8	1.8	2.2	1.5	2.2	1.9	22.7
19 COMPUTER-HAR	\$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0
4C MPR	\$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	4.5
7C ORG OVERHEAD		1.2	1.2	1.3	1.2	1.2	1.6	1.2	1.2	1.5	1.0	1.4	1.3	15.2
Total BCWS	Staff	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
	Hrs	84	88	92	84	86	112	88	86	106	74	104	92	1096
	\$	3.8	4.0	4.2	3.8	3.9	5.1	4.0	3.9	4.8	32.9	4.7	4.2	79.3

Total BCNP:

[illegible]

00 NON-EX LABOR	Hrs	112	117	123	112	114	149	117	115	141	99	139	122	1460
	\$	2.4	2.5	2.7	2.4	2.5	3.2	2.5	2.5	3.0	2.1	3.0	2.6	31.5
	Staff	5.0	5.0	5.0	5.2	4.4	4.8	4.5	4.7	4.7	4.7	4.8	4.8	4.8
01 EXEMPT LABOR	Hrs	696	730	765	724	625	889	653	677	823	583	835	730	8730
	\$	28.9	30.3	31.7	30.0	25.9	36.9	27.1	28.1	34.1	24.2	34.6	30.3	362.2
19 COMPUTER-HAR	\$	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0
21 PO CONTRACTS	\$	48.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.0
4C MPR	\$	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	0.0	0.0	7.0
7C ORG OVERHEAD		13.8	14.4	15.1	14.3	12.5	17.6	13.0	13.5	16.4	11.6	16.6	14.5	173.2
Total BCWS	Staff	5.8	5.8	5.8	6.0	5.2	5.6	5.3	5.5	5.5	5.5	5.6	5.6	5.6
	Hrs	808	847	888	836	739	1038	770	792	964	682	974	852	10190
	\$	95.6	47.2	49.5	46.7	40.9	57.7	42.6	44.0	53.6	67.4	54.2	47.4	646.9
Total GA/CSP		15.3	7.6	7.9	7.5	6.5	9.2	6.8	7.0	8.6	10.8	8.7	7.6	103.5
Total with GA/CSP		110.9	54.8	57.5	54.2	47.4	67.0	49.5	51.1	62.1	78.2	62.9	55.0	750.4

Approval Signatures:

Function Mgr:

/ /

Cap Status

Budgets:

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PBR/SCH:

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D

C.A. Mgr:

/ /

Activity Mgr:

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