DISTRICT PERFORMANCE MANAGEMENT

PROJECT MANAGEMENT PLAN

S-5A PUMP STAITION REFURBISHMENT

Project Manager Name:	Tzufit Boyle
Project SAP PS ID	100056
PMP Monitoring & Control Rev#:	0
PMP Monitoring & Control Rev Date:	
Report Section Update Date:	

SOUTH
FLORIDA
WATER
MANAGEMENT
DISTRICT

PROJECT MANAGEMENT PLAN

S-5A Pump Station Refurbishment

Tzufit Boyle, P.E.
Project Manager

Original Date: 21 December 2010
Rev. Date:
Rev#:

TABLE OF CONTENTS

APPROVALS

This project management plan is a living document with adjustments made through the procedure in the Monitor & Control section of this plan. This page will not need to be revised as changes are implemented. The following page (Revisions) provides an overview of all revisions to this plan. The Monitor & Control section provides details for all revisions requested, their status and any associated required approvals.

PROJECT INFORMATION (PRINT)

Resource Area (requesting the project in AWP) Operations and Maintenance

Project Title (exactly as it appears in SAP PS) S-5A Building Hardening & Service Bridge Repair

Project SAP PS ID **100056**

Project ID (Other) N/A

Project Manager: **Maura Merkel**

Project Manager Supervisor: **Teri Swartz**

Project Sponsor(s): **Alex Damian**

BUSINESS REVIEWS & APPROVAL (SIGN)

Alex Damian, Project Sponsor	Date
Doug Bergstrom, Business Services Director	Date
Karen Estock, Program Manager	Date

Project Management Methodology & Financial Compliance Review:
This project management plan is completed to Standards as set forth in the Districts Project Management Methodology Manual and SAP Project System 7900 Course Instruction. The project also meets specific requirements of the resource area's executing and supporting the project.

Stephan Destin, Project Control Lead	Date
Project Control Support	Date
Teri Swartz, Project Manager Supervisor	Date
Olga Lopez, Finance Manager	Date

PMP REVISION LOG

Revisions to the Project Management Plan are performed per the procedures documented in the Monitoring & Controlling documentation. The project management plan is a living document that will be updated or revised during the life of the project to reflect the current approved plan.

All changes to the project management plan document including those performed in SAP Project System will result in a revision to this Project Management Plan document. An issue/change form & log of all project issues, (changes to the PMP, changes to the SAP PS Working Plan and changes to the SAP PS Target Plan) are maintained in the Monitor & Control section of this manual. No change is to be made to these plans without a corresponding approved issue/change form. A summary of the changes to this Project Management Plan is documented in the table below:

Note:

PMP Rev-0 is reserved for initial approval of the Initiation Project Management Plan. PMP Rev-0 always corresponds to the Issue & Change Management Request Form 0. Future revisions after rev-0 begin with Rev-1. All revisions after Rev-0 could be for any purpose and as such are not pre defined like Rev-0.

PMP REVISION TABLE

PMP Rev No.	Date	PMP Revision Log Description	Project Phase Select Initiation, Planning, Execution, or Closeout	Issue & change Management Request Form Number (Required)
Rev. 000		Approval of The Initiation PMP (SAP Executive Approval)	Initiation	0

RESOURCE AREA PMP PERIODIC PROJECT PERFORMANCE REPORTING & REVIEW LOG

Reports defined in the Report section are to be completed and reviewed each month.

Report reviews must occur by Resource Area Management. Review of the report data by Resource Area Management is documented by completing the Resource Area Management Report Review Date field below which is the same as the Review Date in the Resource Area Project Review And Action Plan report located in the Report section of this manual. See the Report section for full project reporting requirements.

Report Data Date	Resource Area PMP Periodic Project Performance Reporting & Review Log	Project Phase Select Initiation, Planning, Execution, or Closeout	Project Team and Resource Area Management Report Concurrence Date
	District Standard Reports Located In Report Section	Planning	
	District Standard Reports Located In Report Section	Planning	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Execution	
	District Standard Reports Located In Report Section	Closeout	

RESPONSIBILITY FOR BUILDING THE PMP

The PMP at the District integrates the classically separated Project Charter, the Project Management Plan, and Periodic Performance Reports. Only this single document needs to be maintained over the life of the project. The PMP requires construction by the Project Manager of the project. The skills required to successfully construct the PMP include completion of District required project management training.

The Charter is now incorporated into the sections entitled:

Approvals, Executive Summary, & Team

REQUIREMENTS FOR MAINTAINING/REVISING THE PMP

This document is to be maintained over the projects life, including periodic updates to all components which have changed. Only changes documented through the change control process may be reflected within this plan and in the Revision Table. Changes to the Performance Report Section do not initiate a corresponding approved change control request as this section simply updates performance against the plan and is not a change t o the plan.

The PMP must be maintained so that it is always equal to the original approved plan plus all approved changes. The changes are documented using the Districts Monitoring & Controlling Methodology. The associated forms and log section in the Monitoring & Controlling Section of this PMP is to be maintained with this documentation.

REQUIREMENTS FOR MAINTAINING PERFORMANCE REPORTS IN THE PMP

The PMP integrates periodic Project Performance Reporting. By integrating plan and performance information the complete project may be reviewed in terms of plan and actual performance within this single document. The reporting section of this PMP contains the standard District Reports and frequency with which they are to be maintained. The reports are to be updated and inserted into this PMP document according to the update frequency.

PMP CONSTRUCTION AND MAINTENANCE SUPPORT

Your Resource Area Project Control Specialist and or Subject Matter Expert will provide you with support in the use of this document for constructing, maintaining, and reporting your projects overall plan and performance through all project phases

MANDATES:

List any governmental mandates that define why this project is being performed

PROJECT LOCATION

The project will reside at this physical location when completed: S-5A is located in Palm Beach County, on the south side of the C-51 Canal and Southern Boulevard (State Road 80) at the L-40 borrow canal, approximately 1.5 miles east of the Twenty Mile Bend.

PROJECT SCOPE SUMMARY

Define the scope that is & is not included in the project:

The project scope consists of 3 separate design efforts which will comprise the total station refurbishment. These elements are defined as follows:

Pump Station Building Hardening

Design work already completed:

1. *Removal, extension, reattachment, disposal, and/or replacement of all appurtenances attached to the pump station exterior, and verification of clearances and structural steel frame tightness*
2. *Fabrication and placement of the elevated support beam to the interior face of the east and west walls*
3. *Removal and reconstruction of the east and west roof cap beam*
4. *Strengthening concrete columns and providing additional concrete columns*
5. *Placing a reinforced shotcrete hardening to all exterior walls*
6. *Painting the pump station exterior*
7. *Painting the interior and exterior of the Gas Pressure Reducing Station*

Additional scope items:

1. *Pump station ventilation analysis using engine selection matrix*
2. *Building envelope design modifications if required to provide additional ventilation*
3. *Replacement of deteriorated roof drain piping*

Pump Station Service Bridge Repairs

Design work already completed:

1. *Steel Grating: Remove and replace in Span 6.*
2. *W24 x 76 wide flange beams and C12 x 20.7 channels: Remove, prepare surface, hot dip galvanize and reassemble in the bridge. Replace missing nuts at grating connections. Reuse bearing plates and sole plates. Install new 1/8" neoprene pads.*
3. *Remove and replace concrete service platform and inner and outer concrete beam supports.*
4. *Remove excess concrete previously spilled on top of pier walls.*
5. *Repair concrete abutment and pier wall bearing surfaces and sides of wall where concrete is spalled off.*
6. *Remove pipe on top of Pier Wall 4.*
7. *Replace trash racks.*

8. *Coordinate relocation of raw water intake pipe. Pipe is currently supported at each span centerline with brackets attached to the exterior steel W24 x 76 beams. Coordinate support of pipe attached to Abutment Wall 1. Coordinate relocation of intake support rods. Intake pipe support will be relocated from W24 x 76 beams to pier walls under separate contract. (See below for a change to this scope item.)*
9. *Replace approach guardrail.*
10. *Replace fencing on north side of bridge adjacent to trash rack with FDOT W Beam System bolted to concrete service platform.*
11. *Install new chain-link security fencing on concrete structure.*
12. *Apply painted pavement markings.*

Additional scope items:

1. *Relocate pump intake supports from the service bridge beams to the pier walls.*
2. *(This design detail has already been completed by another consultant.)*

Pump Station Refurbishment

Design work already completed under original work order (see original project documents for additional details):

1. *Refurbishment and upgrade of six(6) engines, refurbishing of six (6) pumps, and replacement of six (6) chain drives*
2. *Raw water system improvements*
3. *Jacket water system improvements*
4. *Lube oil cooling system improvements*
5. *Lube oil supply system improvements*
6. *Waste lube/fuel collection system improvements*
7. *Fuel oil system improvements*
8. *Vacuum system improvements*
9. *Air system improvements*
10. *Generator replacement*
11. *Electrical upgrades*
12. *Instrumentation and control system upgrades*
13. *Pump station building modifications*
14. *Bridge crane replacement*
15. *Utility modifications*
16. *Fuel farm modifications*

Updated Final Design work order included the following (partially complete):

1. *Identify suitable replacement engines*
2. *Redesign generator foundations*
3. *New generator water cooling system*

Additional scope items:

1. *Incorporate Tier 4 compliant engines (required after January 1, 2011)*
2. *Replace existing backflow multiflap-gate system with new stainless steel slide gates*
3. *Repair intake and discharge bay scour damage and spalls identified by Substructure Structural Integrity Evaluation Report*
4. *Install cathodic protection system*
5. *Evaluate auxiliary systems (raw water cooling, electrical) for any required modifications.*

Project Planning activities:

1. *Determine the cost for the needed design revisions.*
2. *Investigate the pros and cons of owner furnishing the engines, gearboxes, etc., in order to complete construction within 3 dry seasons.*
3. *Determine if FDEP permit will be required for wet well replacement for raw water system.*
4. *Determine the early/late completion dates for needed permits including water main permit from FDOT and PBCHD.*
5. *Determine if there is time and a need for a physical scale model test.*
6. *Determine the early/late completion dates for the design and construction of the new FPL service.*
7. *Determine the early/late completion dates for the design deliverables.*
8. *Determine the early/late start dates for construction.*

PROJECT SCHEDULE

If the project is in the Initiation Phase insert the estimated start and finish dates for the project.
If the project is in the Planning Phase or further insert the:
Start Date as shown on Gantt Chart from the Schedule section
Finish Date as shown on Gantt Chart from the Schedule section

Plan Start Date *19 March 2010*. *Plan Finish Date* *FY 2018*.

PROJECT GOALS/OBJECTIVES

*State the objectives expected to be achieved by implementing the project. Set **measurable** project goals to be realized and the benefits to be achieved by establishing why the project has been commissioned and what it is expected to achieve. State the performance measures to be used to track whether the objectives are being met.*

Goals / Objectives: *The S-5A Pump Station Refurbishment project will provide a Useful Life Expectancy of 50 additional years*.

Performance Measures:

- *Intermediate Design – Phase 1: Bridge & Hardening (March 2011)*
- *Final Design – Phase 1 (May 2011)*
- *Corrected Final Design – Phase 1 (June 2011)*
- *Construction – Phase 1 (September 2012)*
- *As Built Drawings – Phase 1 (September 2012)*
- *Design & Construction – Phase 2: Pump Station Refurbishment (September 2015)*

Project Justification

Include the business need that the project will address and if applicable, tie it to the District's mission; detail the benefits to the District. Include any historical background or references.
Justification: *S-5A is a flood control pump station that is over 50 years old and reaching the end of its useful life. Continued operation will require a major capital investment*.

PROJECT DELIVERABLES

Identify any measurable, tangible, verifiable outcome(s), result(s), or item(s) that must be produced to complete a project or part of a project, including any deliverable(s) subject to approval by the project sponsor or customer. *Design Drawings, Construction Documents, As-Built Drawings.*

Identify Annual Work Plan deliverables with WBS & milestone activity ID from Project System

AWP or Other Deliverable	**Quarter**
Complete Evaluation of Pump Station Hardening and Service Bridge Repair.	FY11, Qtr 4
Complete Construction of Pump Station Hardening and Service Bridge	FY12, Qtr 4
Complete Construction of Pump Station Refurbishment	FY15, Qtr 4

ASSETS

Insert a listing of all assets to be created by the project

Asset list

Asset List
1. Building Hardening and Bridge Repair
2. Pump Station Refurbishment

FUNDING/COSTS/RESOURCES

From the Annual Work Plan Decision Package worksheet insert estimated or budgeted funding amount for all the information below for the first fiscal year of the project. For all other years you may complete just the total dollar field. Add or delete rows (years) to the table below if required to insure all years of the project are identified. Insure the grand totals are entered.

Fund: 5613222000/402000/580720
3315206000/202000

	Fiscal Year	**L)** Ad Valorem	**M)** Dedicated $	**N)** Total FTE	**O)** Total FTE $	**P)** Total Ad Valorem Contract $	**Q)** Total $
Year 1	2011						$300,000
Year 2	2012						$5,000,000
Year 3	2013						$0
Year 4	2014						$0
Year 5	2015						$75,000,000
	Grand Total						$80,300,000

COSTS

Actual Cost Settlement:
The Costs will settle to Resource Area O&M and West Palm Beach Field Station.

RESOURCE REQUIREMENTS

If estimated the resource requirements are depicted in the table above for Funding-Total All Years. If budgeted insert the resource documentation as shown in the Resources section of this plan.

ASSUMPTIONS

Describe any suppositions or beliefs about the project related to resources, scope, expectations, schedules, etc. that, for planning purposes, will be considered to be true, real, or certain. Assumptions may correlate to project risks and any assumptions that could be a risk to the project must be included in the risk plan.

1. The scope, as identified in this document, will not be modified unless the modifications are approved by the Sponsors and Management Oversight Committee.
2. The resources identified above as project team members will be made available at the time they are needed to execute their tasks.
3. The project will be fully funded through its duration.
4. The District is able to procure a responsible and responsive contractor(s) in a timely manner.

CONSTRAINTS

Describe any limitations or exceptions under which the project must be conducted. Include time, money, resource availability, skill levels and any physical, political, or environmental constraints
1. Project team will need to take into account operational need of the structure during construction.
2. Pump station must remain fully operational during the wet season (June 1 through November 30). Only one pumping system may be taken out of service at a time during the dry season (December 1 through May 30).
3. The project team and the contractor must coordinate with the District Water Managers with regard to any pump station service interruptions.

RELATED PROJECTS

Identify other projects that may affect or constrain this project or any other projects that may be affected or constrained by this project. None.

PROJECT MANAGEMENT OVERSIGHT TEAM LISTING & RESPONSIBILITY

The oversight team is not the team which is directly executing the project or responsible for planning, execution, or performance of any of its WBS elements or activities.

The oversight team provides guidance to the project manager. This team is responsible for approving policies, plans, standards, and procedures including quality assurance, risk management, and performance measurement plans. The oversight team approves changes, monitors performance and assists the project manager in resolving issues escalated by the project manager. If applicable, identify the name(s), role(s), and responsibilities of the Project Management Oversight Team.

Name	Role	Responsibility
Alex Damian	O&M Assistant Department Executive Director	Approves policies and sets performance measures
Doug Bergstrom	O&M Business Services Director	Approves changes and funding, O&M Infrastructure Maintenance
John Dunnuck	ERCP Business Services Director	Approves changes and funding, ERCP
Karen Estock	O&M Department Director, Infrastructure Maintenance, North	Monitors performance and assists in resolving O&M infrastructure issues
Joel Arrieta	O&M Department Director, Infrastructure Maintenance, Central	Monitors performance and assists in resolving O&M infrastructure issues
Susan Sylvester	O&M Department Director, Operations	Assists in resolving structure operations issues
Jeff Kivett	ERCP Engineering Director	Monitors performance and assists resolving engineering design issues
Ulrich Cordon	ERCP Construction Director	Monitors performance and assists resolving engineering design issues

PROJECT TEAM LISTING & REQUIREMENTS

The project team is the list of team members, by name, directly supporting the project which is responsible for developing the strategies to deliver the project. The identified resources will be responsible for development and maintenance of all project management plan elements throughout all project phases associated with the work they are supporting for the project. These team members include those that are responsible for any portion of any WBS element or activity.

List the functional managers supporting the project and their estimate of the number of resources required to support the project. The signature page (next page) demonstrates the Resource Area commitment to provide the resources as defined below.

Name	Role	Responsibility
Tzufit Boyle	Applicant, ERCP Engineering Project Manager	PMP and day-to-day project management
Teri Swartz	Project Manager Supervisor	Project oversight
Rich Virgil	Responsible Manager, O&M Infrastructure Maintenance	Oversight for O&M projects
Jon Mitnik	Responsible Manager, ERCP Engineering Projects	Oversight of engineering project management
Greg Cantelo	Responsible Manager, ERCP Engineering Design	Oversight of engineering project design
Mike Hiscock	Responsible Manager, ERCP Construction	Oversight of project Construction
Richard Barnes	Responsible Project Manager, Surveying	Oversight of surveying
Maura Merkel	Project Manager, Planning	Project manager for overall project for Planning
Matt Morrison	Responsible Manager, Planning	Oversight of planning

PROJECT TEAM LISTING & REQUIREMENTS (CONT)

Project Team Listing - Requirements by Resource Area

Functional Manger = Person Responsible, Applicant = Project Functional Lead identified by Functional manager, Resource = Functional Employee
Performing work on project activities(s) assigned by the Functional Manager.

List Functions	Functional Mngr.	Skill of Functional Employee	Identify Employee As Person Responsible, Applicant, or Resource	Total FTE Required for Complete Project
Everglades Restoration & Capital Proj.				
1. Engineering project management	Tzufit Boyle	Civil Engineering		CW
2. Engineering design	Arcadis/Shaw	Civil / Electrical /Mechanical, Engineering		Contract
3. Planning	Maura Merkel	Civil Engineering		0.15
4. Permitting	Nirmala Jeyakumar	Permitting		0.05
5. Construction	Jeffery McCann	Construction Management		0.20
Operations and Maintenance				
1.Project identification		Civil Engineering		
2. Project initiation		Civil Engineering		
3. Project oversight	Teri Swartz	Civil Engineering		0.15
4. Project monitoring		Civil Engineering		
Regulatory and Public Affairs				
1.				
2.				
3.				
4.				
Corporate Resource				
1. Project monitoring and reporting		PMP Certification		0.03
2.				
3.				
4.				
Total Resource Requirements				

PROJECT RESOURCE AREA TEAM COMMITMENT & SIGNATURES

The resource area's supporting the project with team members identified in the prior Project Team listing are to sign off on the team listing commitment below.

It is the understanding that the supporting resource area's will actively own their portion of the Project Management Plan and be actively managing their assigned WBS elements from project initiation through closure while meeting the requirements of the project as well as their resource area.

Commitment to Provide Resources by Resource Area (DED, ADED, or BSD)

Everglades Restoration and Capital Projects		
John Dunnuck		
Print	Sign	Date

Operations & Maintenance		
Doug Bergstrom		
Print	Sign	Date

Regulatory & Public Affairs		
N/A		
Print	Sign	Date

Corporate Resources		
N/A		
Print	Sign	Date

SAP PROJECT SYSTEM ELEMENTS OF THE PMP

The sections (WBS through Plan Value) which follow contain PMP elements which are directly developed within SAP Project System.

These SAP Project System PMP elements are integrated into this document once they are developed in SAP PS to provide a single source of information for the PMP. As with all PMP elements this data must be revised each time an approved monitor/control change revises them.

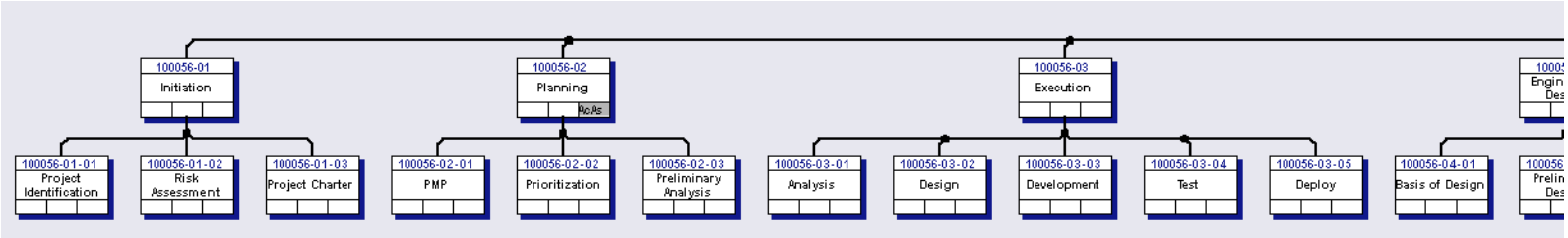
- WORK BREAKDOWN STRUCTURE
- ORGANIZATIONAL BREAKDOWN STUCTURE
- WORK DEFINITION
- SCHEDULE
- RESOURCES
- PLANNED VALUE

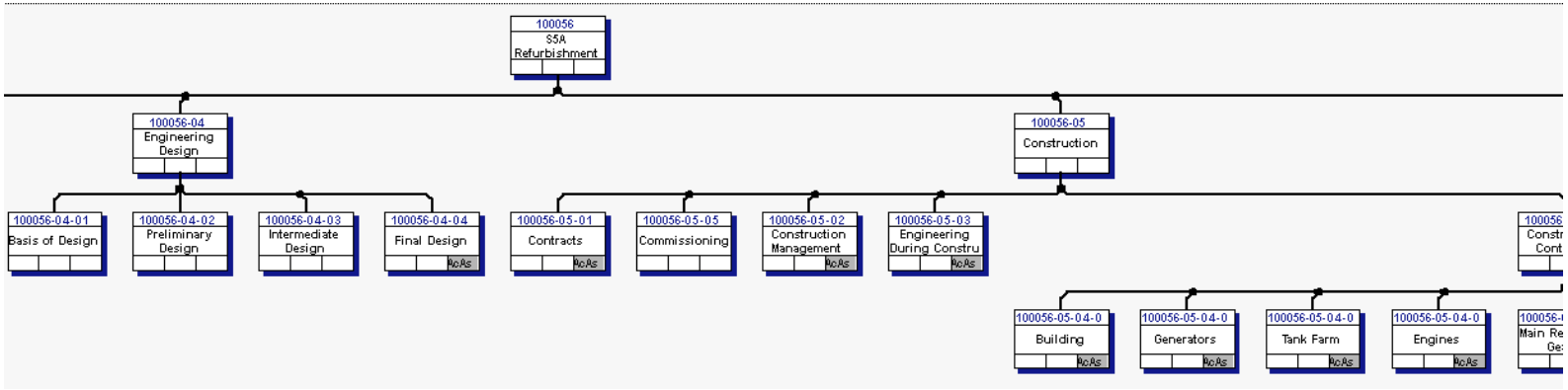
WORK BREAKDOWN STRUCTURE (WBS)

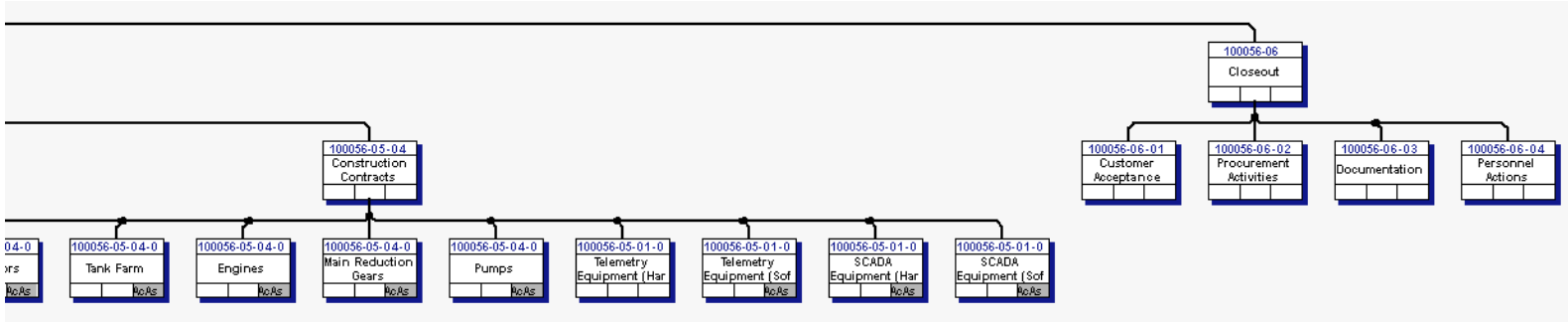
WORK BREAKDOWN STRUCTURE CHART (BY WBS)

The District utilizes a standard Work Breakdown Structure. The District standard WBS structure template that will be utilized is _____.

SAP PROJECT SYSTEM REPORT: CJ20N_____ VARIANT_____







WORK BREAKDOWN STRUCTURE TABULAR REPORT (BY WBS)

SAP PROJECT SYSTEM REPORT: CN41 VARIANT_____

Project object	Project object	Project cost sch 000	Actual costs	Start (B)	Finish (B)	Actl.Start	Finish (A)	Work	Work (A)	Person Responsible
S5A Refurbishment	100056	9,509,181.40 USD	486,863.79 USD	09/05/2008	07/31/2015	01/14/2009	12/09/2010	13,456.0 HR	81.0 HR	Teri Swartz
S5A Refurbishment	100056	9,509,181.40 USD	486,863.79 USD	09/05/2008	07/31/2015	01/14/2009	12/09/2010	13,456.0 HR	81.0 HR	Teri Swartz
Initiation	100056-01	0.00 USD	0.00 USD							Richard Virgil
Project Identification	100056-01-01	0.00 USD	0.00 USD							Richard Virgil
Risk Assessment	100056-01-02	0.00 USD	0.00 USD							Richard Virgil
Project Charter	100056-01-03	0.00 USD	0.00 USD							Richard Virgil
Planning	100056-02	127,698.47 USD	2,543.28 USD	09/12/2008	07/31/2015	04/22/2010	12/09/2010	2,800.0 HR	68.0 HR	Lai Shafau
Execution	100056-03	0.00 USD	0.00 USD							Richard Virgil
Analysis	100056-03-01	0.00 USD	0.00 USD							Richard Virgil
Design	100056-03-02	0.00 USD	0.00 USD							Richard Virgil
Development	100056-03-03	0.00 USD	0.00 USD							Richard Virgil
Test	100056-03-04	0.00 USD	0.00 USD							Richard Virgil
Deploy	100056-03-05	0.00 USD	0.00 USD							Richard Virgil
Engineering Design	100056-04	2,871,273.74 USD	484,320.51 USD	09/05/2008	12/10/2013	01/14/2009	10/18/2010	2,324.0 HR	13.0 HR	Teri Swartz
Basis of Design	100056-04-01	0.00 USD	0.00 USD							Teri Swartz
Preliminary Design	100056-04-02	0.00 USD	0.00 USD							Teri Swartz
Intermediate Design	100056-04-03	0.00 USD	0.00 USD							Teri Swartz
Final Design	100056-04-04	2,871,273.74 USD	484,320.51 USD	09/05/2008	12/10/2013	01/14/2009	10/18/2010	2,324.0 HR	13.0 HR	Teri Swartz
Construction	100056-05	6,510,209.19 USD	0.00 USD	02/04/2010	07/31/2015			8,332.0 HR	0.0 HR	Michael Hiscock
Contracts	100056-05-01	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Commissioning	100056-05-05	0.00 USD	0.00 USD							Michael Hiscock
Construction Management	100056-05-02	969,150.00 USD	0.00 USD	02/04/2010	07/31/2015			7,500.0 HR	0.0 HR	Michael Hiscock
Engineering During Construction	100056-05-03	541,059.19 USD	0.00 USD	10/03/2011	07/31/2015			832.0 HR	0.0 HR	Teri Swartz
Construction Contracts	100056-05-04	5,000,000.00 USD	0.00 USD	10/03/2011	07/31/2015					Michael Hiscock
Building	100056-05-04-01	5,000,000.00 USD	0.00 USD	10/03/2011	07/31/2015					Michael Hiscock
Generators	100056-05-04-02	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Tank Farm	100056-05-04-03	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Engines	100056-05-04-04	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Main Reduction Gears	100056-05-04-05	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Pumps	100056-05-04-06	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
Telemetry Equipment (Hardware)	100056-05-01-02	0.00 USD	0.00 USD							Michael Hiscock
Telemetry Equipment (Software)	100056-05-01-03	0.00 USD	0.00 USD	12/29/2011	03/23/2015					Michael Hiscock
SCADA Equipment (Hardware)	100056-05-01-04	0.00 USD	0.00 USD	10/03/2011	03/23/2015					Michael Hiscock
SCADA Equipment (Software)	100056-05-01-05	0.00 USD	0.00 USD	11/30/2011	03/23/2015					Michael Hiscock
Closeout	100056-06	0.00 USD	0.00 USD							Richard Virgil
Customer Acceptance	100056-06-01	0.00 USD	0.00 USD							Richard Virgil
Procurement Activities	100056-06-02	0.00 USD	0.00 USD							Richard Virgil
Documentation	100056-06-03	0.00 USD	0.00 USD							Richard Virgil
Personnel Actions	100056-06-04	0.00 USD	0.00 USD							Richard Virgil

ORGANIZATIONAL BREAKDOWN STRUCTURE (OBS)

ORGANIZATIONAL BREAKDOWN STRUCTURE BY OBS (RESPONSIBLE PERSONS & APPLICANTS WITH WBS)

The Organizational Breakdown Structure (OBS) specifies the individuals responsible for all phases of project management for their assigned WBS elements as indicated below in the Applicant field. The Applicant is responsible to the project manager for their assigned WBS elements and all related District standards, procedures and performance..The responsible person is insures Applicants perform their assigned WBS elements to District standards.

SAP PROJECT SYSTEM REPORT: CN43N OBS WITH WBS VARIANT_____

Person responsible	Applicant	Lev	WBS element	Name	Basic start date	Finish (B)	Actual start	Act.finish
Teri Swartz	Lai Shafau	1	100056	S5A Refurbishment	09/05/2008	07/31/2015		
Richard Virgil	Lai Shafau	2	100056-01	Initiation				
Richard Virgil	Lai Shafau	3	100056-01-01	Project Identification				
Richard Virgil	Lai Shafau	3	100056-01-02	Risk Assessment				
Richard Virgil	Lai Shafau	3	100056-01-03	Project Charter				
Lai Shafau	Maura Merkal	2	100056-02	Planning	09/12/2008	07/31/2015		
Richard Virgil	Lai Shafau	3	100056-02-01	PMP	09/12/2008	09/12/2008		
Richard Virgil	Lai Shafau	3	100056-02-02	Prioritization				
Richard Virgil	Lai Shafau	3	100056-02-03	Preliminary Analysis				
Richard Virgil	Lai Shafau	2	100056-03	Execution				
Richard Virgil	Lai Shafau	3	100056-03-01	Analysis				
Richard Virgil	Lai Shafau	3	100056-03-02	Design				
Richard Virgil	Lai Shafau	3	100056-03-03	Development				
Richard Virgil	Lai Shafau	3	100056-03-04	Test				
Richard Virgil	Lai Shafau	3	100056-03-05	Deploy				
Teri Swartz	Tzufit Boyle	2	100056-04	Engineering Design	09/05/2008	12/10/2013		
Teri Swartz	Tzufit Boyle	3	100056-04-01	Basis of Design				
Teri Swartz	Tzufit Boyle	3	100056-04-02	Preliminary Design				
Teri Swartz	Tzufit Boyle	3	100056-04-03	Intermediate Design				
Teri Swartz	Tzufit Boyle	3	100056-04-04	Final Design	09/05/2008	12/10/2013		
Michael Hiscock	Jeffrey LeBlanc	2	100056-05	Construction	02/04/2010	07/31/2015		
Michael Hiscock	Jeffrey LeBlanc	3	100056-05-01	Contracts	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	3	100056-05-05	Commissioning				
Michael Hiscock	Jeffrey LeBlanc	3	100056-05-02	Construction Management	02/04/2010	07/31/2015		
Teri Swartz	Tzufit Boyle	3	100056-05-03	Engineering During Construction	10/03/2011	07/31/2015		
Michael Hiscock	Jeffrey LeBlanc	3	100056-05-04	Construction Contracts	10/03/2011	07/31/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-01	Building	10/03/2011	07/31/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-02	Generators	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-03	Tank Farm	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-04	Engines	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-05	Main Reduction Gears	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-04-06	Pumps	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-01-02	Telemetry Equipment (Hardware)				
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-01-03	Telemetry Equipment (Software)	12/29/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-01-04	SCADA Equipment (Hardware)	10/03/2011	03/23/2015		
Michael Hiscock	Jeffrey LeBlanc	4	100056-05-01-05	SCADA Equipment (Software)	11/30/2011	03/23/2015		
Richard Virgil	Lai Shafau	2	100056-06	Closeout				
Richard Virgil	Lai Shafau	3	100056-06-01	Customer Acceptance				
Richard Virgil	Lai Shafau	3	100056-06-02	Procurement Activities				
Richard Virgil	Lai Shafau	3	100056-06-03	Documentation				
Richard Virgil	Lai Shafau	3	100056-06-04	Personnel Actions				

WORK DEFINITION

WORK DEFINITION DETAILS WITH WBS, SCOPE, AND RESOURCE REQUIREMENTS

SAP PROJECT SYSTEM REPORT: CN41N VARIANT_____

Project Structure Overview	Identification	Work center	Work	Unit...	Proj.cost plan	Duration	Unit/duration	Person Respons.
S5A Refurbishment	100056		13,456.0	HR	9,509,181.40	1,736.0	HR	00020286
S5A Refurbishment	100056		13,456.0	HR	9,509,181.40	9,999.9	HR	00020286
Initiation	100056-01				0.00			00020227
Project Identification	100056-01-01				0.00			00020227
Risk Assessment	100056-01-02				0.00			00020227
Project Charter	100056-01-03				0.00			00020227
Planning	100056-02		2,800.0	HR	127,698.47	9,999.9	DAY	00020301
Project Management	5003453		2,800.0	HR	127,698.47	1,329	DAY	273
Project Coordination Support	5003453 0010	PM325	2,000.0	HR	100,557.90	1,280	DAY	
PROJECT MANAGER LEAD	2000 PM325 /002	PM325	2,000.0	HR		1,280	DAY	
5003453 0010 1	5003453 0010 1	PM325						
5003453 0010 2	5003453 0010 2	PM325						
5003453 0010 3	5003453 0010 3	PM325						
5003453 0010 4	5003453 0010 4	PM325						
5003453 0010 5	5003453 0010 5	PM325						
5003453 0010 6	5003453 0010 6	PM325						
5003453 0010 7	5003453 0010 7	PM325						
5003453 0010 8	5003453 0010 8	PM325						
5003453 0010 9	5003453 0010 9	PM325						
5003453 0010 10	5003453 0010 10	PM325						
5003453 0010 11	5003453 0010 11	PM325						
5003453 0010 12	5003453 0010 12	PM325						
5003453 0010 13	5003453 0010 13	PM325						
5003453 0010 14	5003453 0010 14	PM325						
5003453 0010 15	5003453 0010 15	PM325						
5003453 0010 16	5003453 0010 16	PM325						
5003453 0010 17	5003453 0010 17	PM325						
5003453 0010 18	5003453 0010 18	PM325						
5003453 0010 19	5003453 0010 19	PM325						
5003453 0010 20	5003453 0010 20	PM325						
5003453 0010 21	5003453 0010 21	PM325						
5003453 0010 22	5003453 0010 22	PM325						
5003453 0010 23	5003453 0010 23	PM325						
5003453 0010 24	5003453 0010 24	PM325						
5003453 0010 25	5003453 0010 25	PM325						
5003453 0010 26	5003453 0010 26	PM325						
5003453 0010 27	5003453 0010 27	PM325						
5003453 0010 28	5003453 0010 28	PM325						

WORK DEFINITION DETAILS WITH WBS, SCOPE, AND RESOURCE REQUIREMENTS (CONTINUED)

Project Structure Overview	Identification	Work center	Work	Unit...	Proj.cost plan	Duration	Unit/duration	Person Respons.
5003453 0010 29	5003453 0010 29	PM325						
5003453 0010 30	5003453 0010 30	PM325						
5003453 0010 31	5003453 0010 31	PM325						
5003453 0010 32	5003453 0010 32	PM325						
5003453 0010 33	5003453 0010 33	PM325						
5003453 0010 34	5003453 0010 34	PM325						
5003453 0010 35	5003453 0010 35	PM325						
5003453 0010 36	5003453 0010 36	PM325						
5003453 0010 37	5003453 0010 37	PM325						
O&M Support	5003453 0020	EN320	800.0	HR	27,140.57	1,280	DAY	
ENGINEERING SPECIALIST 3	2000 EN320 /002	EN320	800.0	HR		1,280	DAY	
5003453 0020 1	5003453 0020 1	EN320						
5003453 0020 2	5003453 0020 2	EN320						
5003453 0020 3	5003453 0020 3	EN320						
5003453 0020 4	5003453 0020 4	EN320						
5003453 0020 5	5003453 0020 5	EN320						
5003453 0020 6	5003453 0020 6	EN320						
5003453 0020 7	5003453 0020 7	EN320						
5003453 0020 8	5003453 0020 8	EN320						
5003453 0020 9	5003453 0020 9	EN320						
5003453 0020 10	5003453 0020 10	EN320						
5003453 0020 11	5003453 0020 11	EN320						
5003453 0020 12	5003453 0020 12	EN320						
PMP	100056-02-01				0.00	24.0	HR	00020227
Prioritization	100056-02-02				0.00			00020227
Preliminary Analysis	100056-02-03				0.00			00020227
Execution	100056-03				0.00			00020227
Analysis	100056-03-01				0.00			00020227
Design	100056-03-02				0.00			00020227
Development	100056-03-03				0.00			00020227
Test	100056-03-04				0.00			00020227
Deploy	100056-03-05				0.00			00020227
Engineering Design	100056-04		2,324.0	HR	2,871,273.74	9,999.9	DAY	00020286
Basis of Design	100056-04-01				0.00			00020286
Preliminary Design	100056-04-02				0.00			00020286
Intermediate Design	100056-04-03				0.00			00020286

WORK DEFINITION DETAILS WITH WBS, SCOPE, AND RESOURCE REQUIREMENTS (CONTINUED)

Project Structure Overview	Identification	Work center	Work	Unit...	Proj.cost plan	Duration	Unit/duration	Person Respons.
Final Design	100056-04-04		2,324.0	HR	2,871,273.74	9,999.9	DAY	00020286
Final Design	4094689		2,324.0	HR	774,617.44	1,323	DAY	507
Internal Review (INT Labor)	4094689 0010	TP977	500.0	HR	23,895.00	30	DAY	
MS - Final Design Completion	-> 4094689 0050				0.00			
SECTION LEADER	2000 TP977 /002	TP977	500.0	HR		30	DAY	
4094689 0010 1	4094689 0010 1	TP977						
Design Development (EXT)	4094689 0030				652,921.00	0	DAY	
4094689 0030 1	4094689 0030 1							
4094689 0030 2	4094689 0030 2							
MS - PreFinal Design Completion	4094689 0040				0.00	0	DAY	
MS - Final Design Completion	4094689 0050				0.00	0	DAY	
Internal Review (INT Labor)	<- 4094689 0010				0.00			
Project Management (INT Labor)	4094689 0060	EN345	1,824.0	HR	83,101.44	0	DAY	
ENGINEER LEAD	2000 EN345 /002	EN345	1,824.0	HR		0	DAY	
4094689 0060 1	4094689 0060 1	EN345						
4094689 0060 2	4094689 0060 2	EN345						
4094689 0060 3	4094689 0060 3	EN345						
4094689 0060 4	4094689 0060 4	EN345						
Air Permit Renewal	4094689 0090				5,000.00			
External Review	4094689 0100				0.00	30	DAY	
4094689 0100 1	4094689 0100 1							
Tracking - PreFinal Design	4094689 0110				0.00	0	DAY	
Tracking - Final Design	4094689 0120				0.00	0	DAY	
MS - TRB	4094689 0130				0.00	0	DAY	
MS - Governing Board	4094689 0140				0.00	0	DAY	
Supplement Staff Support (EXT)	4094689 0160				0.00	0	DAY	
4094689 0160 1	4094689 0160 1							
Staff Augmentation JV Costs	4094689 0170				9,700.00			
Tech. Serv. Suppl. Staff Support (EXT)	5000229				16,000.00	0	DAY	507
Tech. Serv. Suppl. Staff Support (EXT)	5000229 0010				16,000.00	0	DAY	
Substructure Investigation (EXT)	5000748				196,336.30	1,323	DAY	358
Substructure Evaluation (EXT)	5000748 0010				196,336.30	0	DAY	
FY11 Contractural Services - Bridge	5003454				50,000.00	241	DAY	273
Service Bridge Repair Design	5003454 0020				50,000.00	0	DAY	
FY12-Contractural Services	5003455				1,500,000.00	552	DAY	273
PS S5A Refurbish Design	5003455 0010				1,500,000.00	0	DAY	
Project Management (Contract) FY11	5005680				68,320.00	771	DAY	226
Contract Proj Management (Taylor) FY11	5005680 0010				68,320.00	246	DAY	

WORK DEFINITION DETAILS WITH WBS, SCOPE, AND RESOURCE REQUIREMENTS (CONTINUED)

Project Structure Overview	Identification	Work center	Work	Unit...	Proj.cost plan	Duration	Unit/duration	Person Respons.
Project Management (Contract) FY11	5005680				68,320.00	771	DAY	226
Contract Proj Management (Taylor) FY11	5005680 0010				68,320.00	246	DAY	
FY11 Contractural Services - Building	5005728				250,000.00	241	DAY	273
PS Building Hardening Design	5005728 0010				250,000.00	0	DAY	
Construction	100056-05		8,332.0	HR	6,510,209.19	9,999.9	DAY	00020211
Contracts	100056-05-01				0.00	9,999.9	DAY	00020211
Contracts	4094694				0.00	873	DAY	077
Commissioning	100056-05-05				0.00			00020211
Construction Management	100056-05-02		7,500.0	HR	969,150.00	9,999.9	DAY	00020211
Construction Management	4112344		7,500.0	HR	969,150.00	1,383	DAY	507
CM/CI (INT Labor)	4112344 0010	TP977	7,500.0	HR	369,150.00	0	DAY	
SECTION LEADER	2000 TP977 /002	TP977	7,500.0	HR		0	DAY	
Specialty CI (EXT)	4112344 0020				600,000.00	0	DAY	
Engineering During Construction	100056-05-03		832.0	HR	541,059.19	9,999.9	DAY	00020286
Engineering During Construction	4112345		832.0	HR	541,059.19	965	DAY	507
Project Management (INT Labor)	4112345 0010	PM325	832.0	HR	41,059.19	240	DAY	
PROJECT MANAGER LEAD	2000 PM325 /002	PM325	832.0	HR		240	DAY	
FY12-EDC	4112345 0020				500,000.00	0	DAY	
Construction Contracts	100056-05-04				5,000,000.00	9,999.9	DAY	00020211
Building	100056-05-04-01				5,000,000.00	9,999.9	DAY	00020211
FY12-Building Hardening and Service Brid	4114536				5,000,000.00	965	DAY	507
Construction Contract	4114536 0010				5,000,000.00	0	DAY	
Generators	100056-05-04-02				0.00	9,999.9	DAY	00020211
Generators	4114537				0.00	873	DAY	507
Tank Farm	100056-05-04-03				0.00	9,999.9	DAY	00020211
Tank Farm	4114538				0.00	873	DAY	507
Engines	100056-05-04-04				0.00	9,999.9	DAY	00020211
Engines	4114539				0.00	873	DAY	507
Main Reduction Gears	100056-05-04-05				0.00	9,999.9	DAY	00020211
Main Reduction Gears	4114540				0.00	873	DAY	507
Pumps	100056-05-04-06				0.00	9,999.9	DAY	00020211
Pumps	4114541				0.00	873	DAY	507
Telemetry Equipment (Hardware)	100056-05-01-02				0.00			00020211
Telemetry Equipment (Software)	100056-05-01-03				0.00	9,999.9	DAY	00020211
Telemetry Equipment (Software)	4114591				0.00	813	DAY	507
SCADA Equipment (Hardware)	100056-05-01-04				0.00	9,999.9	DAY	00020211
SCADA Equipment (Hardware)	4114592				0.00	873	DAY	507

WORK DEFINITION DETAILS WITH WBS, SCOPE, AND RESOURCE REQUIREMENTS (CONTINUED)

Project Structure Overview	Identification	Work center	Work	Unit...	Proj.cost plan	Duration	Unit/duration	Person Respons.
SCADA Equipment (Software)	100056-05-01-05				0.00	9,999.9	DAY	00020211
SCADA Equipment (Software)	4114593				0.00	833	DAY	507
Closeout	100056-06				0.00			00020227
Customer Acceptance	100056-06-01				0.00			00020227
Procurement Activities	100056-06-02				0.00			00020227
Documentation	100056-06-03				0.00			00020227
Personnel Actions	100056-06-04				0.00			00020227

CAPITOL WBS ELEMENTS (BY WBS)

The District utilizes a standard Work Breakdown Structure. Identify all WBS elements that will result in one or more assets created by the project. The sum of these WBS elements must make up the assets identified in the Executive Section of this manual.

SAP PROJECT SYSTEM REPORT: CN41

VARIANT_____

WBS element	Name	AA element	Investment profile
100056	S5A Refurbishment		
100056-01	Initiation		
100056-01-01	Project Identification		
100056-01-02	Risk Assessment		
100056-01-03	Project Charter		
100056-02	Planning	X	
100056-02-01	PMP		
100056-02-02	Prioritization		
100056-02-03	Preliminary Analysis		
100056-03	Execution		
100056-03-01	Analysis		
100056-03-02	Design		
100056-03-03	Development		
100056-03-04	Test		
100056-03-05	Deploy		
100056-04	Engineering Design		
100056-04-01	Basis of Design		
100056-04-02	Preliminary Design		
100056-04-03	Intermediate Design		
100056-04-04	Final Design	X	ZPS01
100056-05	Construction		
100056-05-01	Contracts	X	ZPS01
100056-05-05	Commissioning		
100056-05-02	Construction Management	X	ZPS01
100056-05-03	Engineering During Construction	X	ZPS01
100056-05-04	Construction Contracts		
100056-05-04-01	Building	X	ZPS01
100056-05-04-02	Generators	X	ZPS01
100056-05-04-03	Tank Farm	X	ZPS01
100056-05-04-04	Engines	X	ZPS01
100056-05-04-05	Main Reduction Gears	X	ZPS01
100056-05-04-06	Pumps	X	ZPS01
100056-05-01-02	Telemetry Equipment (Hardware)		
100056-05-01-03	Telemetry Equipment (Software)	X	ZPS01
100056-05-01-04	SCADA Equipment (Hardware)	X	ZPS01
100056-05-01-05	SCADA Equipment (Software)	X	ZPS01
100056-06	Closeout		
100056-06-01	Customer Acceptance		
100056-06-02	Procurement Activities		
100056-06-03	Documentation		
100056-06-04	Personnel Actions		

SCHEDULE

PROJECT SCHEDULE DEVELOPMENT AND RESOURCE REQUIREMENTS

The project schedule represents the sequence of work as shown by the logic connecting each activity. The schedule accurately reflects the planned start and finish dates for all activities as well as the timing and value of expenditures.

All activities are planned below the lowest level of the business standard WBS structure and all activities are at the lowest level of the WBS which has been established for the project. This is the required level for all projects to manage scope, schedule, planned cost, actual cost, physical progress, performance, forecasts and estimates.

SCHEDULE REPORTS & PURPOSE

1-2 EXECUTIVE LEVEL OVERVIEWS

3 FULL DETAIL SCHEDULE FOR USE BY THE PROJECT TEAM IN MANAGING SCHEDULE DETAILS

4 CRITICAL PATH – LIST OF ITEMS THAT WILL DELAY PROJECT IF NOT PERFORMED ON TIME.

5 MILESTONES MUST INCLUDE MILESTONES CORRESPONDING TO QUARTERLY ANNUAL WORK PLAN COMMITMENT ITEMS

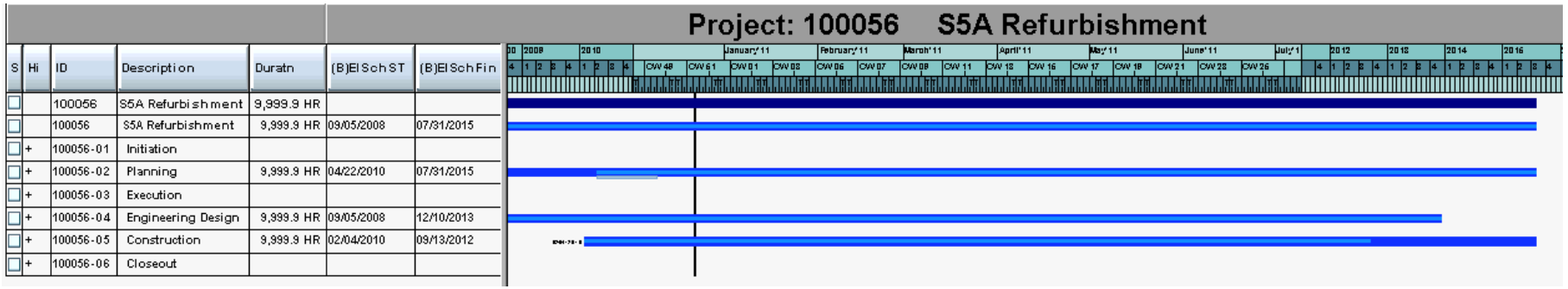
6 ALL ACTIVITIES MUST INCLUDE ONE OR MORE PREDECESSORS AND SUCCESSORS EXCEPT FOR THE FIRST AND LAST

Include the following reports by replacing the sample reports which follow with the reports for your project

1. Schedule Gantt Chart Level 2 (by WBS & ES)	Transaction CJ20N Variant_____
2. Schedule Gantt Chart Level 3 (by WBS & ES)	Transaction CJ20N Variant_____
3. Schedule Gantt Chart All Levels (by WBS & ES with critical path)	Transaction CJ20N Variant_____
4. Schedule Gantt Chart Critical Path Only (by WBS & ES)	Transaction CJ20N Variant_____
5. Schedule Milestone (by WBS)	Transaction CJ20N Variant_____
6. Schedule Predecessor & Successor Report	Transaction CN49N Variant_____

SCHEDULE GANTT CHART LEVEL 2 (BY WBS & ES)

SAP PROJECT SYSTEM REPORT: CJ20N VARIANT_____



S	Hi	ID	Description	Duratn	(B)El Sch ST	(B)El Sch Fin
☐		100056	S5A Refurbishment	9,999.9 HR		
☐		100056	S5A Refurbishment	9,999.9 HR	09/05/2008	07/31/2015
☐	+	100056-01	Initiation			
☐	+	100056-02	Planning	9,999.9 HR	04/22/2010	07/31/2015
☐	+	100056-03	Execution			
☐	+	100056-04	Engineering Design	9,999.9 HR	09/05/2008	12/10/2013
☐	+	100056-05	Construction	9,999.9 HR	02/04/2010	09/13/2012
☐	+	100056-06	Closeout			

SCHEDULE GANTT CHART LEVEL 3 (BY WBS & ES)

SAP PROJECT SYSTEM REPORT: CJ20N VARIANT_____ DATE: _____

Project: 100056 S5A Refurbishment

S	Hi	ID	Description	Duratn	(B)El Sch ST	(B)El Sch Fin
		100056	S5A Refurbishment	9,999.9 HR		
		100056	S5A Refurbishment	9,999.9 HR	09/05/2008	07/31/2015
		100056-01	Initiation			
		100056-01-01	Project Identification			
		100056-01-02	Risk Assessment			
		100056-01-03	Project Charter			
		100056-02	Planning	9,999.9 HR	04/22/2010	07/31/2015
		[illegible]	ProjectCoordination Support	1,260.0 DAY	04/22/2010	05/21/2015
		[illegible]	O&M Support	1,260.0 DAY	07/01/2010	07/31/2015
		100056-02-01	PMP	24.0 HR		
		100056-02-02	Prioritization			
		100056-02-03	Preliminary Analysis			
		100056-03	Execution			
		100056-03-01	Analysis			
		100056-03-02	Design			
		100056-03-03	Development			
		100056-03-04	Test			
		100056-03-05	Deploy			
		100056-04	Engineering Design	9,999.9 HR	09/05/2008	12/10/2013
		100056-04-01	Basis of Design			
		100056-04-02	Preliminary Design			
		100056-04-03	Intermediate Design			
		100056-04-04	Final Design	9,999.9 HR	09/05/2008	12/10/2013
		100056-05	Construction	9,999.9 HR	02/04/2010	09/13/2012
		100056-05-01	Contracts	9,999.9 HR		
		100056-05-05	Commissioning			
		100056-05-02	Construction Management	9,999.9 HR	02/04/2010	02/04/2010
		100056-05-03	Engineering During Construction	9,999.9 HR	10/03/2011	09/13/2012
	+	100056-05-04	Construction Contracts	9,999.9 HR	10/03/2011	09/06/2012
		100056-06	Closeout			
		100056-06-01	Customer Acceptance			
		100056-06-02	Procurement Activities			
		100056-06-03	Documentation			
		100056-06-04	Personnel Actions			

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

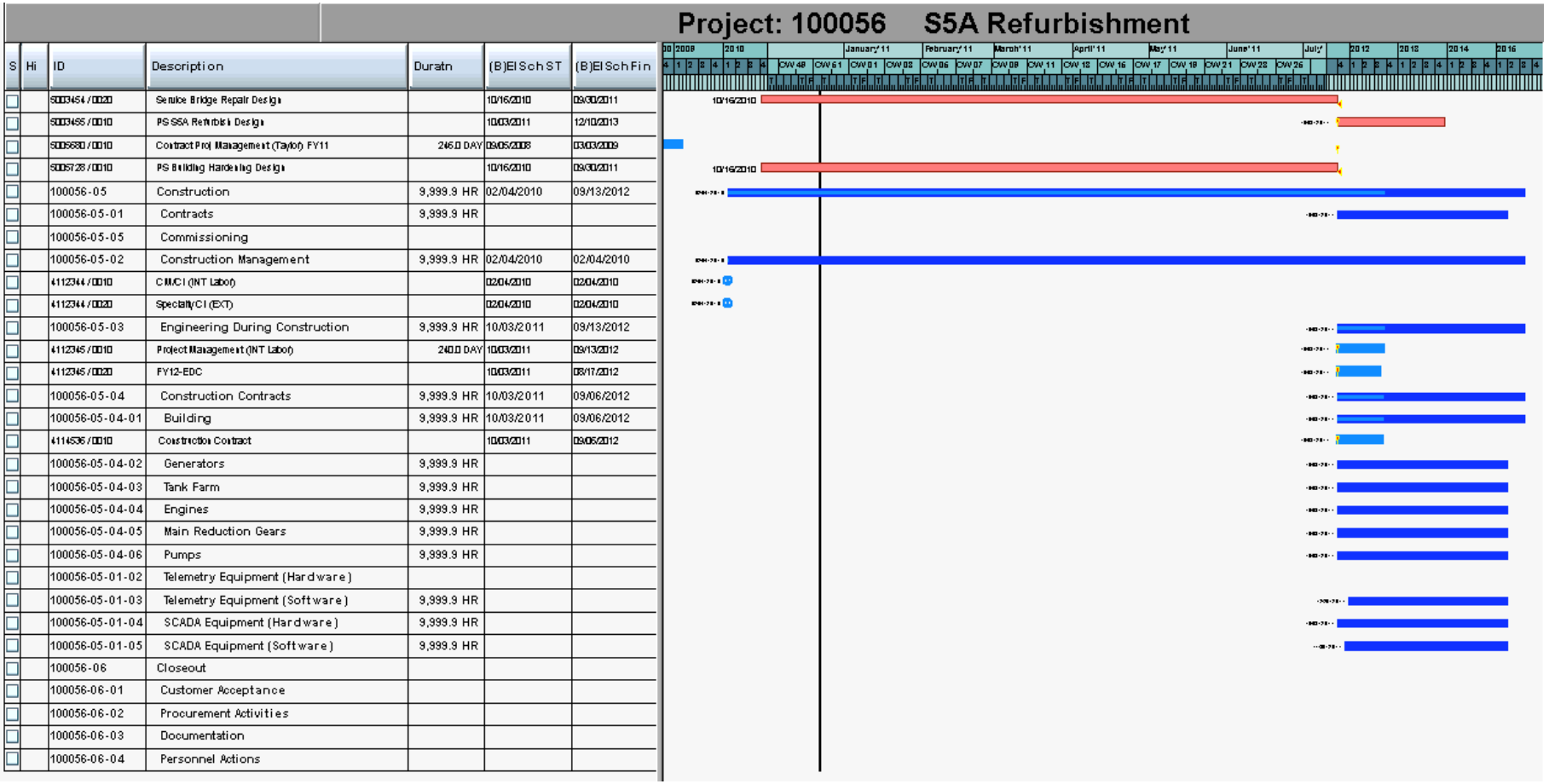
SCHEDULE TIME SCALED LOGIC DIAGRAM ALL LEVELS (BY WBS & ES WITH CRITICAL PATH)

SAP PROJECT SYSTEM REPORT: CJ20N VARIANT_____

Project: 100056 S5A Refurbishment

S	Hi	ID	Description	Duratn	(B)El Sch ST	(B)El Sch Fin
☐		100056	S5A Refurbishment	9,999.9 HR		
☐		100056	S5A Refurbishment	9,999.9 HR	09/05/2008	07/31/2015
☐		100056-01	Initiation			
☐		100056-01-01	Project Identification			
☐		100056-01-02	Risk Assessment			
☐		100056-01-03	Project Charter			
☐		100056-02	Planning	9,999.9 HR	04/22/2010	07/31/2015
☐		5003453/0010	Project Coordination Support	1,280.0 DAY	04/22/2010	05/21/2015
☐		5003453/0020	O&M Support	1,280.0 DAY	07/01/2010	07/31/2015
☐		100056-02-01	PMP	24.0 HR		
☐		100056-02-02	Prioritization			
☐		100056-02-03	Preliminary Analysis			
☐		100056-03	Execution			
☐		100056-03-01	Analysis			
☐		100056-03-02	Design			
☐		100056-03-03	Development			
☐		100056-03-04	Test			
☐		100056-03-05	Deploy			
☐		100056-04	Engineering Design	9,999.9 HR	09/05/2008	12/10/2013
☐		100056-04-01	Basis of Design			
☐		100056-04-02	Preliminary Design			
☐		100056-04-03	Intermediate Design			
☐		100056-04-04	Final Design	9,999.9 HR	09/05/2008	12/10/2013
☐		4094689/0010	Internal Review (INT Labor)	30.0 DAY	03/27/2009	05/07/2009
☐		4094689/0030	Design Development (EXT)		01/14/2009	01/14/2009
☐		4094689/0040	MS - Pre Final Design Completion		09/05/2008	09/05/2008
☐		4094689/0050	MS - Final Design Completion		09/30/2009	09/30/2009
☐		4094689/0060	Project Management (INT Labor)		01/19/2010	02/03/2010
☐		4094689/0090	Air Permit Renewal		09/05/2008	09/05/2008
☐		4094689/0100	External Review	30.0 DAY	03/26/2009	05/05/2009
☐		4094689/0110	Tracking - Pre Final Design		09/05/2008	09/05/2008
☐		4094689/0120	Tracking - Final Design		09/05/2008	09/05/2008
☐		4094689/0130	MS - TRB		09/05/2008	09/05/2008
☐		4094689/0140	MS - Governing Board		09/05/2008	09/05/2008
☐		4094689/0170	Staff Augmentation JV Costs		09/05/2008	09/05/2008
☐		5000229/0010	Tech. Serv. Suppl. Staff Support (EXT)		09/25/2009	09/25/2009
☐		5000748/0010	Substructure Evaluation (EXT)		09/05/2008	09/05/2008

SCHEDULE TIME SCALED LOGIC DIAGRAM ALL LEVELS (BY WBS & ES WITH CRITICAL PATH) – CONTINUED



S	Hi	ID	Description	Duratn	(B)El Sch ST	(B)El Sch Fin
		5003454 / 0020	Service Bridge Repair Design		10/16/2010	09/30/2011
		5003455 / 0010	PS-S5A Refurbish Design		10/03/2011	12/10/2013
		5005680 / 0010	Contract Proj Management (Taylor) FY11	245.0 DAY	09/05/2008	03/03/2009
		5005728 / 0010	PS Building Hardening Design		10/16/2010	09/30/2011
		100056-05	Construction	9,999.9 HR	02/04/2010	09/13/2012
		100056-05-01	Contracts	9,999.9 HR		
		100056-05-05	Commissioning			
		100056-05-02	Construction Management	9,999.9 HR	02/04/2010	02/04/2010
		4112344 / 0010	CM/CI (INT Labor)		02/04/2010	02/04/2010
		4112344 / 0020	Specialty/CI (EXT)		02/04/2010	02/04/2010
		100056-05-03	Engineering During Construction	9,999.9 HR	10/03/2011	09/13/2012
		4112345 / 0010	Project Management (INT Labor)	240.0 DAY	10/03/2011	09/13/2012
		4112345 / 0020	FY12-EDC		10/03/2011	08/17/2012
		100056-05-04	Construction Contracts	9,999.9 HR	10/03/2011	09/06/2012
		100056-05-04-01	Building	9,999.9 HR	10/03/2011	09/06/2012
		4114536 / 0010	Construction Contract		10/03/2011	09/05/2012
		100056-05-04-02	Generators	9,999.9 HR		
		100056-05-04-03	Tank Farm	9,999.9 HR		
		100056-05-04-04	Engines	9,999.9 HR		
		100056-05-04-05	Main Reduction Gears	9,999.9 HR		
		100056-05-04-06	Pumps	9,999.9 HR		
		100056-05-01-02	Telemetry Equipment (Hardware)			
		100056-05-01-03	Telemetry Equipment (Software)	9,999.9 HR		
		100056-05-01-04	SCADA Equipment (Hardware)	9,999.9 HR		
		100056-05-01-05	SCADA Equipment (Software)	9,999.9 HR		
		100056-06	Closeout			
		100056-06-01	Customer Acceptance			
		100056-06-02	Procurement Activities			
		100056-06-03	Documentation			
		100056-06-04	Personnel Actions			

SCHEDULE GANTT CHART CRITICAL PATH ONLY (BY WBS & ES)

SAP PROJECT SYSTEM REPORT: CJ20N VARIANT_____

SCHEDULE MILESTONE (BY WBS) REPORT

SAP PROJECT SYSTEM REPORT: CJ20N VARIANT_____

SCHEDULE PREDECESSORS & SUCCESSORS (BY ACTIVITY)

SAP PROJECT SYSTEM REPORT: CN49N VARIANT_____

RESOURCES

RESOURCE PLAN

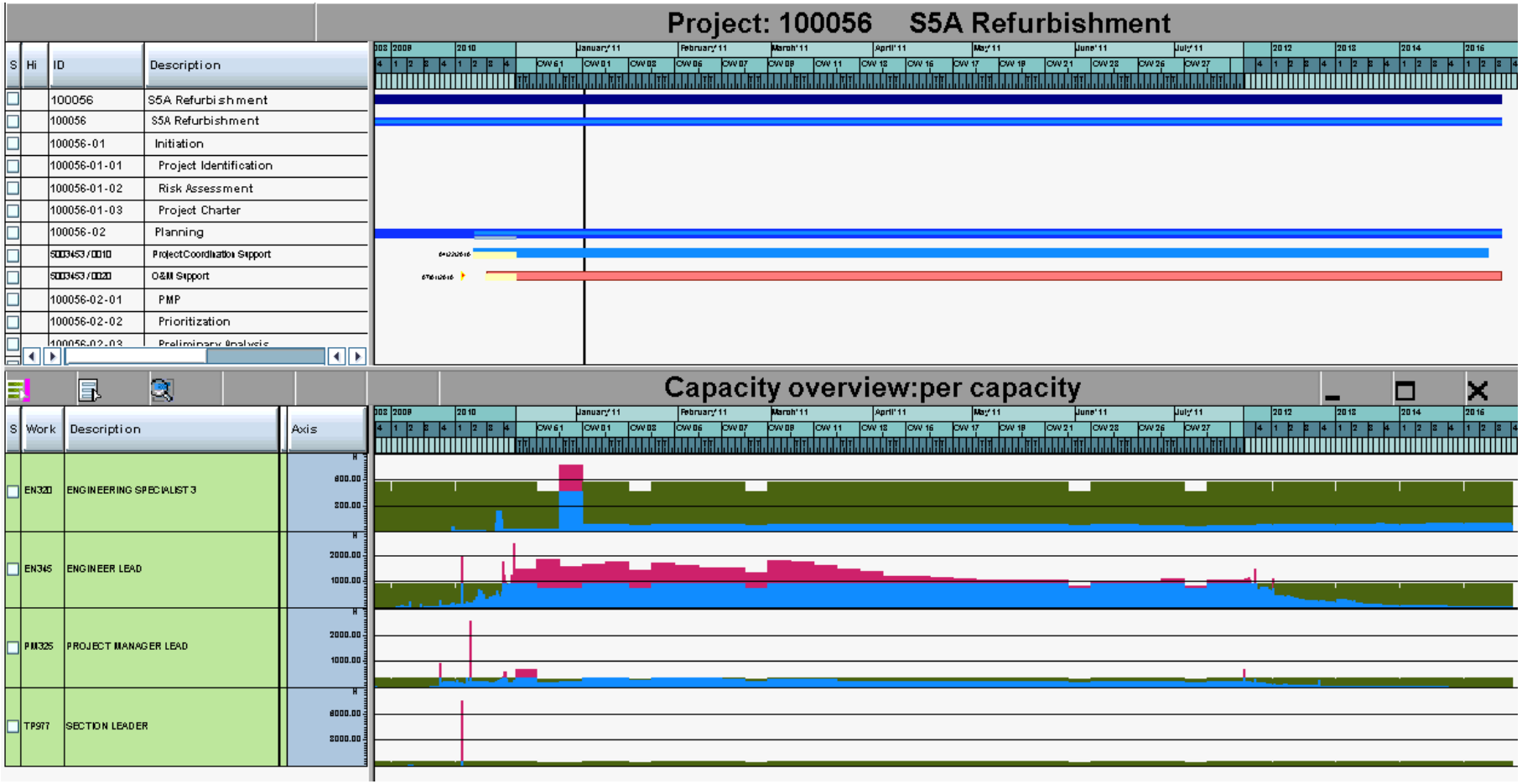
The Project Resource Plan details the human and material resources needed, how the resources will be used, the skill levels required, the time the resources are needed, and the type of resource, employee, contractor or equipment, needed. The plan is a description of what types of resources are required, in what quantities, for each activity or activity element in the WBS. The project manager or project liaison must gain concurrence with the manager of the resource that the resources planned to perform the work are correct in type, quantity, duration and will be available to support the projects requirements before the project plan is approved. The commitment for these resources is demonstrated by the signatures of the resource areas in the Project Team section of this plan.

Include the following reports by replacing the sample reports with the reports for your project

1. Resource Profile (Total)	Transaction	Not Defined	Variant
2. Resource Table (Total)	Transaction	CN47N	Variant

RESOURCE PROFILE

SAP PROJECT SYSTEM REPORT: CJ20N/PPB/CAPACITY OVERVIEW VARIANT_____



RESOURCE LIST & REQUIREMENTS BY WORK CENTER

SAP PROJECT SYSTEM REPORT: CN47N VARIANT_____

WorkCntr	Work center text	Work
EN320	ENGINEERING SPECIALIST 3	800.0
	ENGINEERING SPECIALIST 3	**800.0**
EN320		**800.0**
EN345	ENGINEER LEAD	1,824.0
	ENGINEER LEAD	**1,824.0**
EN345		**1,824.0**
PM325	PROJECT MANAGER LEAD	2,000.0
		832.0
	PROJECT MANAGER LEAD	**2,832.0**
PM325		**2,832.0**
TP977	SECTION LEADER	500.0
		7,500.0
	SECTION LEADER	**8,000.0**
TP977		**8,000.0**
		13,456.0

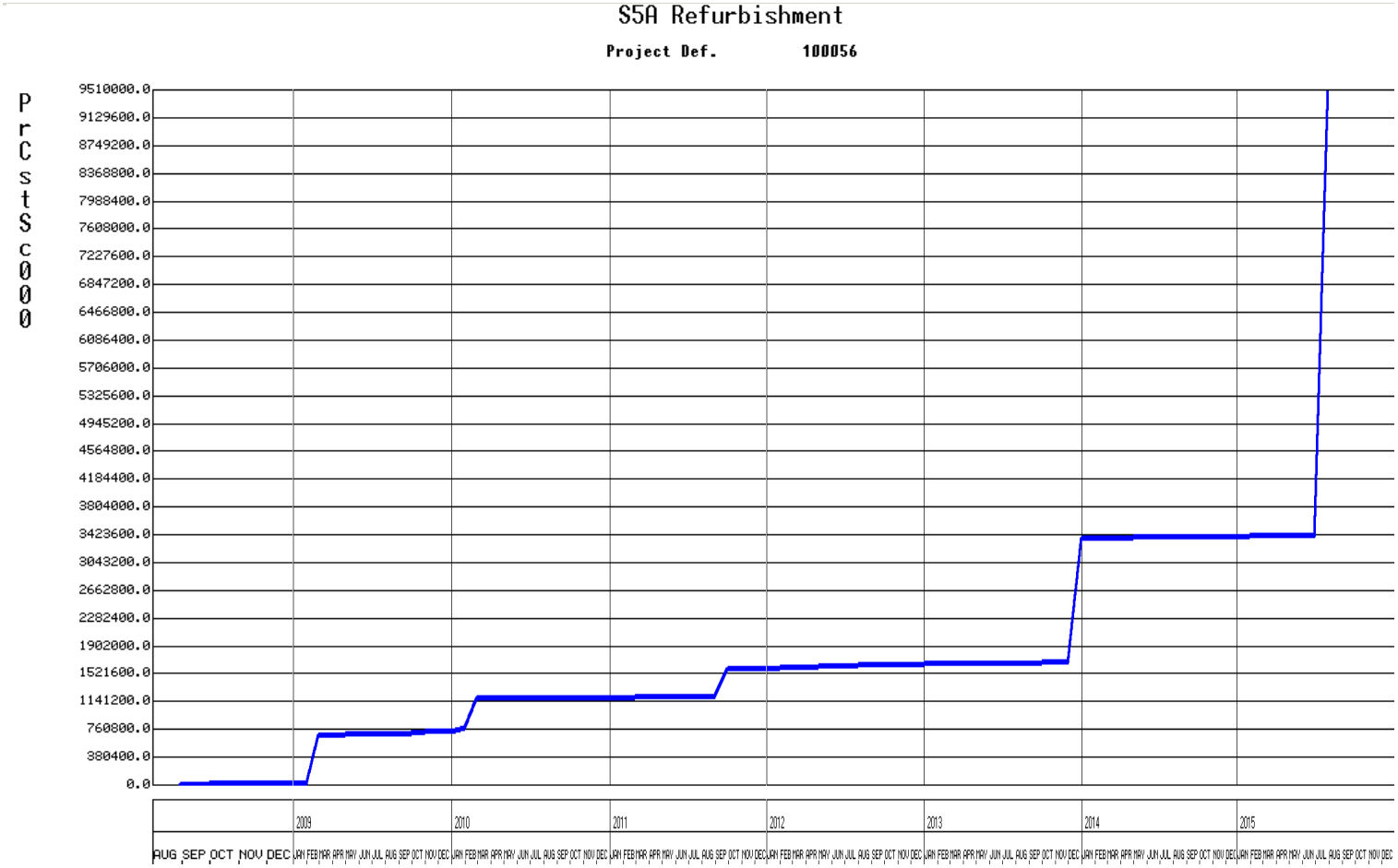
PLAN VALUE

The project Plan Value details the cost over time based on the resources assigned and the time they are scheduled to occur within the project. The cumulative value of this cost is plotted over time which provides the District with the projects planned expenditure for any given point in time during the projects life. Performance is managed to this plan curve which demonstrates how well the project is planned and or the projects performance to plan. Approved changes are reflected in the plan through the Districts Monitoring & Controlling process

1. Planned Value (Curve)	Transaction	CN41	Variant
2. Planned Value (Table)	Transaction	CN41	Variant

PLANNED VALUE CUMMULATIVE CURVE REPORT (DOLLARS)

SAP PROJECT SYSTEM REPORT: CN41 VARIANT_____



PLANNED VALUE TABLULAR REPORT (DOLLARS BY FISCAL YEAR, MONTH AND TOTALS)

SAP PROJECT SYSTEM REPORT: CN41

VARIANT_____

Project Def. 100056 S5A Refurbishment
No. of Year Per: 85(104)

Year	Per	Project cost sch 000	
Total		9,509,181.40	USD
0000		0.00	USD
	000	0.00	USD
2008		14,700.00	USD
2008	000	0.00	USD
2008	012	14,700.00	USD
2009		692,816.00	USD
2009	000	0.00	USD
2009	005	652,921.00	USD
2009	006	2,389.50	USD
2009	007	17,523.02	USD
2009	008	3,982.48	USD
2009	012	16,000.00	USD
2010		477,690.64	USD
2010	000	0.00	USD
2010	001	16,000.00	USD
2010	002	0.00	USD
2010	003	0.00	USD
2010	004	62,326.08	USD
2010	005	389,925.36	USD
2010	006	0.00	USD
2010	007	508.73	USD
2010	008	1,453.44	USD
2010	009	1,598.78	USD
2010	010	1,928.81	USD
2010	011	2,020.63	USD
2010	012	1,928.81	USD
2011		392,066.31	USD
2011	000	0.00	USD
2011	001	1,986.82	USD
2011	002	1,797.60	USD
2011	003	1,986.82	USD
2011	004	1,892.19	USD
2011	005	1,797.60	USD
2011	006	2,175.18	USD
2011	007	1,986.82	USD
2011	008	1,986.82	USD
2011	009	2,081.41	USD
2011	010	1,892.19	USD
2011	011	2,176.04	USD
2011	012	370,306.82	USD

Project Def. 100056 S5A Refurbishment
No. of Year Per: 85(104)

Year	Per	Project cost sch 000	
2012		65,520.12	USD
2012	000	0.00	USD
2012	001	5,639.22	USD
2012	002	5,370.65	USD
2012	003	5,639.22	USD
2012	004	5,370.65	USD
2012	005	5,370.65	USD
2012	006	5,907.75	USD
2012	007	5,639.22	USD
2012	008	5,907.75	USD
2012	009	5,639.22	USD
2012	010	5,639.22	USD
2012	011	6,176.32	USD
2012	012	3,220.25	USD
2013		25,456.88	USD
2013	000	0.00	USD
2013	001	2,323.46	USD
2013	002	2,020.38	USD
2013	003	2,020.38	USD
2013	004	2,121.42	USD
2013	005	1,919.38	USD
2013	006	2,121.42	USD
2013	007	2,222.42	USD
2013	008	2,222.42	USD
2013	009	2,020.38	USD
2013	010	2,222.42	USD
2013	011	2,222.42	USD
2013	012	2,020.38	USD
2014		1,722,555.62	USD
2014	000	0.00	USD
2014	001	2,393.03	USD
2014	002	1,976.85	USD
2014	003	1,698,521.25	USD
2014	004	2,184.95	USD
2014	005	1,976.85	USD
2014	006	2,184.95	USD
2014	007	2,288.97	USD
2014	008	2,184.95	USD
2014	009	2,184.95	USD
2014	010	2,288.97	USD
2014	011	2,184.95	USD
2014	012	2,184.95	USD

Project Def. 100056 S5A Refurbishment
No. of Year Per: 85(104)

Year	Per	Project cost sch 000	
2015		6,118,375.83	USD
2015	000	0.00	USD
2015	001	2,464.84	USD
2015	002	1,928.98	USD
2015	003	2,357.64	USD
2015	004	2,143.31	USD
2015	005	2,036.17	USD
2015	006	2,357.64	USD
2015	007	2,357.64	USD
2015	008	1,722.01	USD
2015	009	503.80	USD
2015	010	6,100,503.80	USD

QUALITY

QUALITY PLAN OVERVIEW

The quality plan establishes a plan for measuring deliverable acceptability in meeting quality requirements. Quality review procedures include identifying the quality review team members and the elements of work that they will be reviewing. The schedule of quality review is tied to WBS elements, activities, milestones and/or significant project activities.

Quality reviews, and sign offs for specific checks, are performed by those executing the work, those that are responsible for the work being performed to quality standards, and the customer where required
Complete the following form showing the name, role, sample signatures and initials of the quality review team that will be placed on quality documents and also complete the Quality Plan Sort by WBS on the following page..

SAMPLE SIGNATURES FOR QUALITY CONTROL SIGNOFF

Name (Print)	Quality Role	Signature Sample	Initials Sample

The quality plan which follows includes all WBS elements. Where WBS elements do not require a quality plan or those areas are to be marked N/A.

QUALITY PLAN-SORT BY WBS

QC Codes:

E= Signoff by Execution Team
N/A = QC not required
1 = QC by Execution Team, & SFWMD
2 = QC by Execution Team, SFWMD, & Customer
3-=QC by SFWMD & Customer
Note: Shaded cells require signature

WBS	**WBS Description** (Defined work quality test is associated with)	**QC Code**	**Execution Signoff**	**SFWMD Signoff**	**Customer Signoff**	**Test for Quality (**Identify standard used)	**Acceptance Criteria**	**Test Scheduled Date**
WBS	**Description**	**1**						
Activity A	**Description**	1						
Step 1	Description	3						
Step 2	Description	2						
Step 3	Description	N/A						
Activity B	**Description**	N/A						
Step 1	Description	N/A						
Step 2	Description	2						
Activity C	**Description**	N/A						
Step 1	Description	E						
Step 2	Description	N/A						

RISK MANAGEMENT PLAN

Rule of Thumb

All projects have risks. A project without any identified risks typically indicates a project with a week risk plan. Identify, analyze, and establish; risks, a risk resolution plan, and impact.

Risk Form

Utilize the risk form below to document all risk descriptions, triggers (what will cause the risk to occur), response plan (what will be done if the risk does occur), probability (percent chance of the risk occurring), impact (total cost if the risk occurred), and magnitude in dollars (probability times impact), hours (where applicable for labor) and duration impact to the activity the risk is associated with. Risk status must be planned for and maintained throughout the project life to determine which risks have passed and those that remain a threat at project completion.

Lack of Historical Performance & Unknowns

The Risk plan is paramount to insuring accuracy of project performance measurement. One of the most significant issues project managers may face is having to develop a project plan before the full required scope is known or where the scope is known but it is so unique there is no basis for developing an accurate estimate. When this occurs the project manager must complete the Risk plan for what is unknown. The costs and impacts of the risks in the risk plan are not to be included in the other elements of the PMP. IE; activity planned cost, resources, schedule, quality, communication, etc.

Management Acceptance of Risks

When management signs off on the plan they are also agreeing to the Risks and their associated defined costs. When Risks are realized the PM has the full authority to approve the required Issue Management and Change Control Request Form

Risk Planning Components

Risk Management Planning includes but is not limited to:

1. Identifying those things that could go wrong during the project.
2. Identifying the work the risk is associated with (Project, WBS, Activity, etc).
3. Identifying the type of risk (Risk Code: Estimating, Legal, Technological, etc).
4. Determining the likelihood of occurrence (probability).
5. Determining the impact to the project if the event occurs.
6. Determining the exposure level (dollars, duration, etc.).
7. Planning the risk response for those items most likely to occur.
8. Returning risk funding when risk has past.

RISK ASSESSMENT PLAN SORT BY WBS

Expand the table to cover all WBS elements and activities for the project. It is also acceptable to export the WBS full structure and activity list from SAP PS and develop a matrix as shown below with the same columns. You may add additional columns if needed but keep the order the same for the columns shown below. Insert the specific risk(s) for each activity of the project in the table below. You may have more than one risk per activity. If a risk covers all activities on a WBS element identify the risk at the WBS level. If a risk may impact the whole project you may identify the risk at the project level.

WBS	WBS Description	Risk Status	Risk Description	Risk Trigger	Risk Response	Risk Code	Probability Percent	Impact Dollars	Risk Dollars	Risk Hours	Risk Duration
		Planned Realized Not Realized				Estimating Technological Natural Man Made					
WBS	**Description**										
Activity A	**Description**										
Risk 1	Description	Planned									
Risk 2	Description	Planned									
Risk 3	Description	Planned									
Activity B	**Description**										
Risk 1	Description	Planned									
Risk 2	Description	Planned									
Risk 3	Description	Planned									
Activity C	**Description**										
Risk 1	Description	Planned									
Total								$	$	$	

COMMUNICATION PLAN

Establish the Communication Plan for the project by editing the As Needed Communications section in the file below to meet project requirements. The *Required Communications* and *Required Reporting* sections of this Plan are business standard requirements and are not to be edited.

Communication Plan Responsibility Codes O=Organize, A=Attend, C= Copy,

Project Communication Type   	**Frequency**	**Medium**	*Project Mgr*	*Project Team & WBS Element PM's*	*Resource Area Manager*	*Project Sponsor*	*Contract Specialist*	*Outreach Specialist*	*Executive Office*	*MAT*	*DLT*	*Enter Date(s) of Occurrence*
District Required Communications												
1. Project Initiation Kickoff Meeting	At kickoff	Meeting	**O**	**A**	**A/C**	**A**	**A**	**A**				
2. PMP Initiation Review	Prior to PMP Executive Approval	Meeting	**O**	**A**	**A/C**	**A**						
3. PMP Initiation Approval	Prior to development of full PMP	Meeting	**O**	**A**	**A/C**	**A**						
4. PMP (Full Plan) Development Meeting	During PMP development as Reqd.	Meeting	**O**	**A**	**A/C**	**A**						
5. PMP (Full Plan) Approval for Budget Submission Meeting	Prior to Budget Submission	Meeting			**O/A**							
6. PMP (Full Plan) Review Meetings	At kickoff, & revisions	Meeting	**O**	**A**	**A/C**	**A**						
7. Project Execution Kickoff Meeting	At kickoff	Meeting	**O**	**A**	**A/C**	**A**	**A**	**A**	**C**			
8. Bi Weekly Project Updates & Checks: Cost & Schedule Corrections, Time Entry, Receipt for work performed, Progress Entry, and Schedule Updates.	Weekly	Meeting	**O**	**A**								
9.Project Pre Close Meeting												
10. Project Closeout Meeting												
District Required Reporting												
Monthly Project Reports	Monthly (see Report section)	Email	**O**	**A**	**C**	**C**						See Approvals Section -Report Log
Resource Area Management Monthly Report Review & Action Plan Submitted to Executive Office	Monthly (see Report section)	Meeting	**A**		**O**							
Executive Office Monthly Report Reviews	As Requested	Meeting			**A**				**O**	**A**	**A**	
As Needed Communications												
Procurement Review Meetings	As Needed	Meeting	**O**	**A**	**C**		**A**	**A**				
Monitor & Control Review Meeting	As Needed		**O**	**A**	**C**							
Lessons Learned	As Needed	Meeting	**O**	**A**	**C**	**C**	**C**	**C**				
Project Newsletter	As Needed	Email	**O**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	**C**	

ACCEPTANCE

PROJECT ACCEPTANCE CRITERIA

The essential characteristics and/or performance requirements for the deliverables that have to be present for the project deliverables to be considered acceptable. These are based on objective and not subjective criterion. The project may utilize the template below or a modified version that supports the needs of the project. If additional procedures are required, list them.

A project completion and acceptance sign off form is also attached to formally confirm completion and acceptance of the project by the customer, sponsor and project manager. This form may be modified to meet specific project requirements.

Deliverable	**Criteria**

It is required for all projects to document customer acceptance on the following form. If another form is required by the business/customer imbed the required form after this District standard form in the PMP. If there are items missing on the form below they may be added. Do not delete the standard form.

CUSTOMER ACCEPTANCE

CUSTOMER PROJECT COMPLETION AND ACCEPTANCE SIGN OFF

Resource Area (Owner of The Project):			
Project Name:		**PS Project Number:**	
Project Manager:		**Date:**	

The undersigned agree in principle that the completed project satisfactorily meets the Acceptance Deliverables and Criteria set forth in the attached Project Acceptance Criteria Form

Client Signature	**Date**
Client Name	**Title**
Sponsor	**Project Manager**
Name & Title	**Name & Title**

PROJECT CLOSEOUT PROCEDURES

This section of the PMP captures lessons learned during the project, and documents closure completion.

These items are to be completed as the project progresses:

Lessons Learned Form

Project Management Plan Closeout Performance Review Form

Lessons Learned Form

Lessons learned are to be collected by WBS. Key inputs for lessons learned are to come from the WBS Applicant in conjunction with The WBS Responsible Person and Project Manager.

They may be collected at any appropriate level WBS. A project level lesson learned may be attached at the project level WBS. A specific lesson learned for Design should be written for and collected at the Design WBS element. This allows for lessons learned to be associated with standard work types, their standard District work structure, and collected across all projects for any standard WBS element/work type.

Project Management Plan Closeout Performance Review Form

This form lists the steps for project closure and the items to be closed.

When the project is ready to be closed, the Project Management Plan Closeout Performance Review form is to be completed by the project team and presented at the project technical closure meeting to review the required technical closure items (TECO) and at the project final closure meeting to review the final closure items (CLSD).

Closure Review Meetings

Each project level technical and final closure team meeting is to include the Business Performance Management Office to attend and validate completion of the closure requirements.

The Project Management Plan Closeout Performance Review is scored, and the score becomes part of the project record.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

CLOSEOUT

LESSONS LEARNED BY WBS

DATE: _____

WORKING PLAN ID: _____ TARGET PLAN ID: _____

WBS	WBS / activity Description where the issue occurred.	Issue description.	What was the root cause? (process, people, communication, dependencies)	How was the Issue Corrected? How may the issue be avoided in the future?	Estimated cost to be saved.	Estimated time to be saved.
WBS	**Description**					
Activity A	Description					
Step 1	Description					
Step 2	Description					
Step 3	Description					
Activity B	Description					
Step 1	Description					
Step 2	Description					
Activity C	Description					
Step 1	Description					
Step 2	Description					
Step 3	Description					

Project 100XXX TECO Review Date XX/XX/XX

TECO

CHECK	District Project Management Plan Closeout Performance Review The following TECO and CLSD steps must be completed in the order specified below. TOTAL TECO CLSD	SCORE	GRADE
☐	1. **Change Control.** Ensure resolution of all change control requests (**CN41**/Get project version… to compare working plan with latest approved target plan; **CN41**/Project definition attachments to view change control requests (CCRs), Charter, and PMP; **FMEDDW** to view budget changes).		
☐	2. **Receipts.** Receive all delivered goods and services (details in SAP 7800 manual). Verify with **ME2J** ▪ Use the **MIGO** SAP transaction to receive goods. If there is a remaining quantity in the PO line that is not going to be received, set the ***Delivery Complete Indicator*** so the unused funds are disencumbered and made available in FM. If the PO line was created in a previous FY, the unused funds are made available in the FY in which they were created and cannot be used in the current FY. ▪ Use the **ML81N** SAP transaction to receive services. If there is a remaining amount in the PO line that is not going to be received, click on ***Set Final Entry*** so the unused funds are disencumbered and made available in FM. If the PO was created in a previous FY, the unused funds are made available in the FY in which they were created and cannot be used in the current FY.		
☐	3. **Dis-encumbrance.** Complete Dis-encumbrance, Contract Closeout, and Contractor Evaluation forms and forward to Procurement as applicable. **Y_RD1_07000001** - Available Budget to verify		
☐	4. **Close P.O. Lines.** Notify the Purchasing Agent or Contract Specialist to "close" the Service PO line. By "close", we mean that any balance in a Service PO line is reduced to match the received amount, the Final Invoice field is checked (even when a final invoice has not been received or paid) and the PR line is flagged Closed if it was not already closed. This closes a PR line. Procurement sends the dis-encumbrance forms to the Budget office. ▪ To verify that a Goods PO line is closed, execute transaction **ME2J** and double-click the line. A Goods PO line is considered "closed" when the ***Deliv Compl.*** indicator is checked (Delivery tab) or the ***Tr./Ev. Goods receipt*** amount (Purchase Order History tab) matches the PO line ***PO Quantity*** x ***Net Price*** amount and the ***Tr./Ev. Invoice receipt*** (Purchase Order History tab) amount matches the PO Line ***PO Quantity*** x ***Net Price*** amount or the ***Final Invoice*** indicator is checked (Invoice tab). ▪ To verify that a Service PO line is closed, execute transaction **ME2J** and double-click the line. A Service PO line is considered "closed" when the ***Final Entry indicator*** (***Fin. Entry***) is displaying (in the Purchase Order History tab, click on the ***Material Document*** in the row that says ***SEnt***) or the ***Tr./Ev. Service Entry*** amount (Purchase Order History tab) matches the PO line ***PO Quantity*** x ***Net Price*** amount and the ***Tr./Ev. Invoice*** amount (Purchase Order History tab) matches to PO line ***PO Quantity*** x ***Net Price*** amount or the ***Final Invoice*** indicator is checked (Invoice tab).		
☐	5. **Stop Time Charges.** Communicate that no further time is to be charged to the internal activities or activity elements.		
☐	6. **Correct Posting Errors.** a. Run audit reports (**Y_RD1_07000001**, **CN41**, **CJI3**, **CN48N**) to determine if incorrect postings (time or costs) exist or expected postings are missing.		
☐	b. Correct errors (time corrections can be done by employees back to 2 pay periods; for corrections older than 2 pay periods, the payroll administrator gets involved; JEs/JVs are performed by Finance and Accounting respectively).		
☐	c. Re-run audit reports (**Y_RD1_07000001**, **CN41**, **CJI3**, **CN48N**) to verify that errors have been corrected.		
☐	7. **Create final confirmations** (**CNF**) for all activities and activity elements (**PPB**). Verify using **PPB**.		
☐	8. **Update Physical % complete** field to 100% in all activities and activity elements with the exception of milestones (PPB). Verify using PPB.		
☐	9. **Reschedule the project** in the **PPB** (use **Strict Bottom-Up** scheduling option). The Basic dates of the Project Definition and WBS Elements should be a roll up of all subordinate objects. Verify using **PPB**.		
☐	10. **Validate actual dates** in Project Planning Board (**PPB**) and save project.		
☐	11. Execute the **ZPS_WBS_PERCENT** SAP transaction to roll up the Physical % Complete. Verify in **PPB**.		
☐	12. **TECO the WBS Element/Project**. TECO status does not allow scheduling or further changes in a PO line, but will allow for receiving of goods, services or invoice processing including payments. Verify using **PPB**.		

Project 100XXX CLSD Review Date XX/XX/XXXX

CLSD

CHECK	District Project Management Plan Closeout Performance Review	SCORE	GRADE
☐	13. Hold the Pre-Close Meeting in conjunction with the Finance Manager to ensure all parties are in agreement that the WBS Element/Project is ready to be closed out. The following parties are invited to the meeting: ▪ Business Performance Management Division ▪ Business Services Director ▪ Field Station Supervisor (capital projects only) ▪ Division Director of Field Operations (capital projects only) ▪ PM Supervisor ▪ Project Manager ▪ WBS Element's PM ▪ WBS Element's PM Supervisor. ▪ Finance Manager ▪ Accounts Payable ▪ Professional Accountant ▪ Asset Accountant ▪ Purchasing Agent/Contract specialist ▪ Project Controls & or SME		
	Project Management Plan Document Closure. Close the PMP updating the complete document with the final plan (original plan including all approved changes)		
☐	14. PMP Approvals		
☐	15. PMP Executive Summary		
☐	16. PMP Team		
☐	17. PMP WBS		
☐	18. PMP OBS		
☐	19. PMP Work Definition		
☐	20. PMP Schedule		
☐	21. PMP Resources		
☐	22. PMP Planned Value		
☐	23. PMP Quality		
☐	24. PMP Risk		
☐	25. PMP Communication		
☐	26. PMP Acceptance		
☐	27. PMP Closeout		
☐	28. PMP Monitor/Control		
☐	29. PMP Reports		
☐	30. Ensure Finance Manager transfer unused funds outside of the project. Validate this via: **FMEDDW**, **Y_RD1_07000001**, or **ZZPU_C02_Q009** - BW Budget vs. Actual vs. Planned.		
☐	31. Ensure Accounts Payable close invoices and check the ***Final Invoice*** indicator.		
☐	32. Ensure Asset Accountant perform final settlements and notifies Project Manager, PM Supervisor, Finance Manager, and Asset Manager when final settlements are completed.		
☐	33. Ensure Asset Manager has tagged assets and put them into service.		
☐	34. Hold Closeout Meeting. Pre-close meeting parties are invited to this meeting. Validate that all previous steps have been complete and are accurate. *If project is being closed, review and sign off final PMP.		
☐	35. Attach updated PMP and any other documents to project definition level in SAP PS.		
☐	36. Notify Finance Manager to close WBS Element/Project.		
☐	37. Finance Manager sets the WBS Element/Project to **System Status** = **CLSD**.		
☐	38. Archive project files according to the resource area and District Clerk's Office procedures.		

Score	Grade	Code
Greater than 87	A	Green
From 76 to 87	B	Green
From 64 to 75	C	Yelow
From 52 to 63	D	Red
Less than 52	F	Red

MONITOR/CONTROL

MONITORING AND CONTROLLING PLAN

OVERVIEW

The purpose of this section of the PMP is to document the Monitoring & Controlling plan for the project. Monitoring & Controlling is the tool for understanding project performance by comparing actual performance to the Project Management Plan, identifying deviations to the PMP, documenting issues driving deviation, and resolving these issues through issues management, and change control when possible.

Issues Categories:

Issues driving deviation will fall into the broad categories of being resolvable within the existing PMP, requiring a change to the PMP, or un resolvable, resulting in deviation to the PMP. It is very important to understand that changes to the target PMP elements which the project is measured against is not allowed for lack of performance that is not driven by a change in the PMP requirements (IE: change in scope, schedule, quality, etc.)

Issue Identification and Disposition:

Issues are identified and documented by any project team member or stakeholder and an issue form describing the issue is given to the project manager for resolution.

WBS element owners have specific responsibility for identifying and assisting the project manager in the resolution of issues. Each WBS element owner (SAP Project System Applicant) is responsible to the project manager (SAP Project System Responsible Person) for actively developing, executing, monitoring/controlling and closing out their assigned WBS elements. Each WBS owner is responsible for providing the project manager with potential methods for resolving issues associated with their WBS elements. The WBS owner (Applicant) works with the WBS element manager (Responsible Person) to propose a resolution for the identified issues to the project manager.

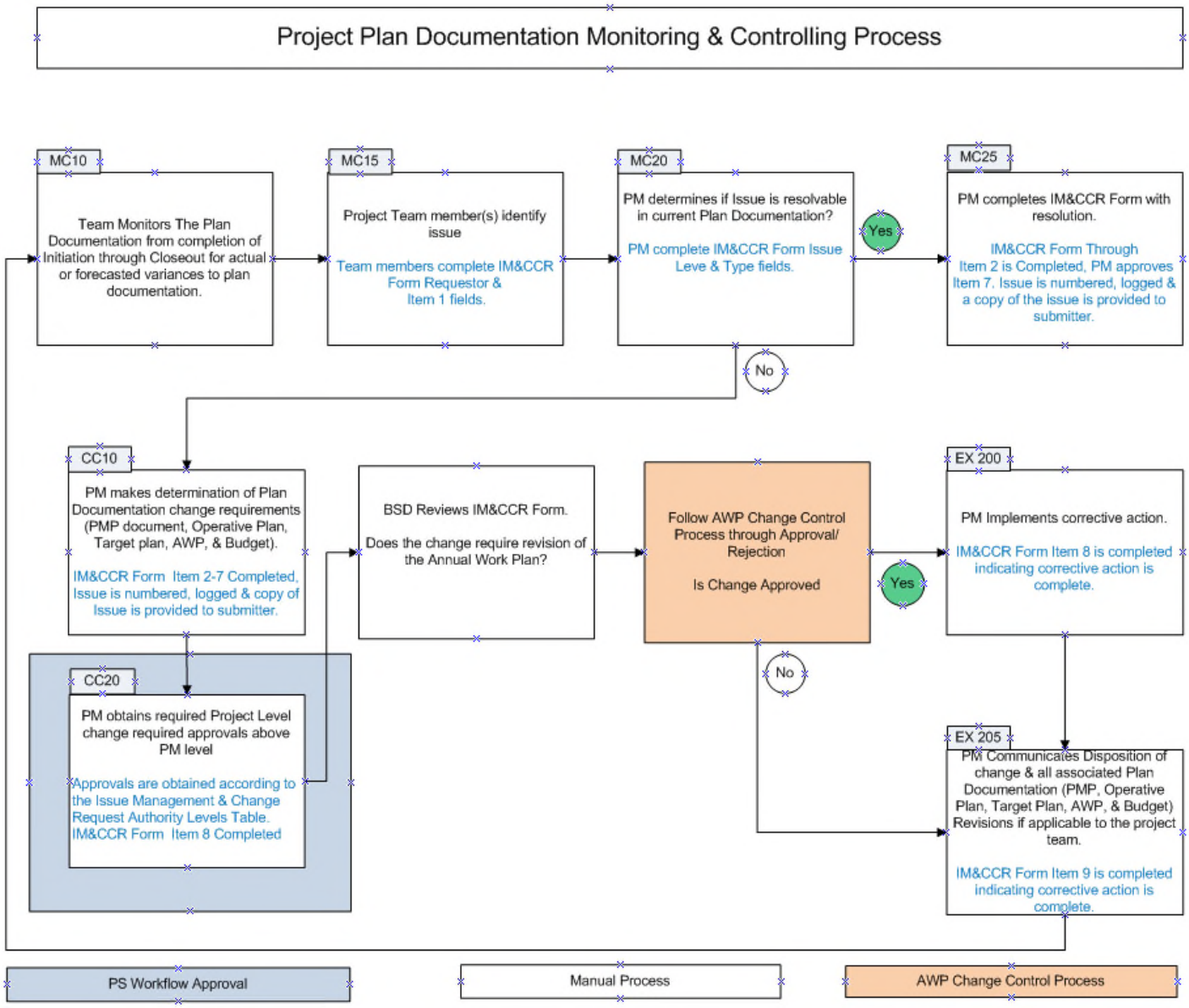
The project manager works with the owner of the WBS element that the issue is associated with and other appropriate team members & stakeholders to determine the disposition of the issue. If the issue is real, it is then determined if the issue is resolvable within the current PMP, is a change to the PMP requiring change control, or is simply an performance deviation for which change is not allowed.

Resolution Authority Levels:

Different levels of authorization are required to authorize implementation of issue resolution recommendations.

DETAILED PROCESS

Issue Identification and Resolution Process Map



Monitor & Controlling Process Map Descriptions

The following descriptions are provided to help clarify the process steps outlined in the process map shown above. **Plan Documentation** refers to all documents defining any portion of the project plan. This includes but is not limited to the **PMP, SAP Operative Plan, SAP Target Plan, Annual Work Plan, & Budget**.

MC10 - Monitoring

This step includes monitoring for any issues driving deviation from the Plan Documentation. All project team members continuously monitor the project for actual, or forecasted deviations to the plan. The team monitors The PMP from completion of Initiation through Closeout

MC15 – Project Team Members Identify Issue

An Issue may be any deviation or forecasted deviation to the plan. Issues are identified in this step and the Issue is documented in the IM&CCR form. Team members complete IM&CCR Form **PS ID, Submitted By, Date, & Item 1 fields.** The form is turned into the PM

MC20 –PM Determines if the Issue is Resolvable in the Current Plan Documentation

PM receives the IM&CCR form from requestor. Issue is numbered, logged & copy of Issue is provided to submitter. This is the requestor's proof of issue submission which allows the submitter to follow up on the issue referring to the issue number, and obtain status of its resolution.

The PM determines if the issue may be resolved without changing the plan documentation or if a change to the plan will be required to resolve the issue. The PM completes the **Issue Level & Issue Type fields**.

MC25 –PM Completes IM&CCR Form with Resolution

If the issue is resolvable in the current plan the PM Completes IM&CCR Form **Item 2 field** is Completed, PM approves & completes **Item 7 fields**. Issue is numbered, logged & a copy of the issue is provided to submitter.

CC10-PM Determines Plan Documentation Change Requirements

If the issue is not resolvable in the current plan the PM determines Plan Documentation change requirements to the PMP document, Operative Plan, Target plan, AWP, & Budget.

PM completes IM&CCR Form Item 2-7. Issues resolution will typically require preventative or corrective action and fall into one of the four major categories A, B, C, or D shown in Table 2. Issues that are type D must be broken down by type on the IM&CCR form. If it is indicated that the AWP requires revision the IM&CCR form is attached to AWP change request form for backup information and submitted to AWP change control process.

CC20 – PM Obtains Required Approvals Above PM Level of Authority

Changes that exceed the authority level of the PM are forwarded for additional approval according to the Change Minimum Required Approval Levels Issue Management & Change Request Authority Levels Table which follows in this section. *These Approvals are in SAP PS Workflow*. Item 8 is completed.

EX 200 - PM Implements Corrective Action

The PM simply implements the corrective action. IM&CCR Form Item 9 is completed indicating corrective action is complete.

Project or Process Complete

When the work is complete and the financials are closed to changes for the fiscal year no further monitoring is required & no further changes will take place to the plan(s). Monitoring/Controlling, Issue Management and Change Control are complete for the work.

Thresholds

The District does not have thresholds below which issues or associated project changes are not required to be documented. The reason for this is when you set a minimum threshold level and have an issue that occurs just below that level the issue is undocumented and lost as if it never occurred. If you have another issue just below the threshold level and as such is also not documented you now have two issues which when combined are well over the threshold level that may significantly impact project performance. Both issues would be lost and even if the issues were ones that could have been approved to provide more time, funds, or other changes to the PMP, there is no documentation of occurrence or basis for making adjustments.

Document all issues and their associated impacts to the PMP. If issues are small and do not impact performance beyond what you are willing to accept responsibility for you may choose not to immediately resolve the issue. You may collect small issues that have minimal project impacts and implement a single change to the PMP for the collected issues. All issues on hand should be resolved for each reporting cycle to produce up to accurate project performance reports.

The District Project Management Plan elements to monitor performance against and potential indicators of performance are shown below.

Project Management Plan Elements to be Monitored

All Project Management Plan Elements (listed below) are monitored to determine if any deviation from plan is occurring. Where deviations are identified, an Issue Management Form must be completed. The Form describes the issue, impact to the plan, potential resolution including change control if required, and authorized signatures.

Approvals	Plan Value
Executive Summary	Quality
Team	Risk
WBS	Communication
OBS	Acceptance
Work Definition	Closeout
Schedule	Monitor & Control
Resources	Reports

Potential Indicators of Performance Deviation

The items that should be monitored and may provide indication that performance may be different from planned include but are not limited to the following:

- Performance reports from project execution
  - Schedule
  - Costs
  - Funding
  - Resources
- Rejected change requests
- Management directives
- Hurricanes (force majeure)
- Engineering
  - Revised drawings
  - Revised Specifications
- New customer requirements / specifications
- Revised schedule logic
- Revised milestone or interface points
- District budget/funding revisions
- Quality requirements, performance
- Risk requirements, performance
- Communication requirements, performance

Issue Type Definitions

Issue Types are shown below. For examples to assist with determination of issue type refer to the Districts Methodology manual.

Issue Type A. The issue is resolvable within the current plan. The project plan will not need to be modified. The project will regain performance as planned even though initial performance is not to plan.
Issue Type B. The issue is not resolvable within the current plan. The issue is a change to the plan and is not an issue due to lack of performing to the plan.
Issue Type C. The issue is a performance issue. The plan is still correct except that the project is not performing to the cost plan.
Issue Type D. The issue is a combination of two or more issue types (A, B, & C) The issue requires multiple resolution solutions.

Change Approval Level Signature Requirements

Change Approval Level	Description	Project Manager	Project Manager Supervisor	Division Manager	Department Manager	Resource Area Manager	AWP Review Board	Stakeholders
1	All Project Level PMP or Process changes	X	X					
2	All Project or Process changes impacting Division commitments.	X	X	X				
3	All Project or Process changes impacting Department commitments.	X	X	X	X			
4	All Project or Process changes impacting Resource Area commitments.	X	X	X	X	X		
5	All Project or Process changes impacting AWP commitments.	X	X	X	X	X	X	
6	All changes where other stakeholders are impacted.							X

1 All project or process change requests including:
- Moves of budget within the project or processes total budget.
- Moves of individual activities within the project schedule.

2 All Project or Process changes that impact Division commitments but do not impact AWP budget or schedule commitments for the Project or Process. Examples:
- One project or process in the Division impacts another project or process in the Division but does not impact AWP commitments.

3 All Project or Process changes that impact Department commitments but do not impact AWP budget or schedule commitments for the Project or Process. Examples:
- One project or process in the Department impacts another project or process in the Department but does not impact AWP commitments.

4 All Project or Process changes that impact Resource Area commitments but do not impact AWP budget or schedule commitments for the Project or Process. Examples:
- One project or process in the Resource Area impacts another project or process in the Resource Area but does not impact AWP commitments.

5 All changes impacting an AWP project and or process to be performed including:
- AWP Results indicators, AWP scheduled quarter results, AWP Budget

AWP changes must meet one, or more, of the six criteria approved by the DPM Steering Committee as follows:

1. Significant new initiative
2. Necessary resources redirected by Executive Office
3. Governing Board Direction
4. In the best interest of the District (state why it is)
5. Project deferred by a partner or third party
6. Weather
7. Significant financial savings

6 All changes where other stakeholders are impacted. Examples might include.
- Project Y requests a change that impacts project X. Project X should approve the change.
- Resource Area A is receiving a product to operate that is being built for them by Resource Area B. Resource Area A should approve all changes impacting their requirements.

7 All changes to a budget surplus which does not affect the annual work plan do not require the change to be brought to or approved by the DPM Steering Committee.

Change Control Annual Calendar

Change requests may be submitted and resolved throughout the projects life. For Annual Work Plan level changes the business follows the following calendar where changes may be submitted.

Description	January	February	March	April	May	June	July	August	September	October	November	December
Annual Work Plan changes to be considered for mid fiscal year.		X	X	X								
Special case reviews for changes.	X	X	X	X	X	X	X	X	X	X	X	X

Issue Management Log and Form

All issues are documented on the issue management form. The forms are turned into the project manager for resolution. The project manager logs the issue and places the issue log id on the issue form. A copy is then given to the person who turned in the issue. The issue form and log are updated as the issues move through the required approvals and implementation process. The log and form become a part of the project records imbedded in the PMP document. Other documents such as drawings, pictures, specifications, correspondence, what if schedules ect. Associated with issues should be stored with the projects other documentation and be clearly identified as to which issue each document supports.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

MONITORING & CONTROLLING - ISSUE & CHANGE MANAGEMENT LOG

Resource Area _____
Project Name _____

Project ID_____

Issue Type A. The issue is resolvable within the current plan. The project plan will not need to be modified. The project will regain performance as planned even though initial performance is not to plan.

Issue Type B. The issue is not resolvable within the current plan. The issue is a change to the plan and is not an issue due to lack of performing to the plan.

Issue Type C. The issue is a performance issue. The plan is still correct except that the project is not performing to the cost plan.

Issue Type D. The issue is a combination of two or more issue types (A, B, & C). The issue requires multiple resolution solutions.

Issue Management							***Change Management***										
Issue Number	Submitted By	Submitted Date	Summary Description of Issue	Issue Type(S) A,B,C,D	Issue Status (Open, Closed)	Issue Date Closed	Change Control Request # if Applicable	Change Control Status (Open, Closed)	Change Control Date Closed	Working Plan Budget Change	Working Plan Schedule Change	Working Plan Other Changes	Target Plan Budget Change	Target Plan Schedule Change	Target Plan Other Changes	AWP Plan Cost Change	AWP Plan Cost Change
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

PMP Issue Management & Change Control Request Form

PS ID: 100567	Issue Level (Project or AWP) P	Issue #: 1	Issue Type: (A, B,or C):A	Submitted By:: Mary Doe	Date: 7/01/2010

Issue Type Legend: Type A the issue is resolvable within current PMP and no change to plan is needed. Type B The Issue is a requirements change to the PMP or realized PMP Risk. The issue is not a performance issue. Type C The issue is a performance issue (only budget change allowed).

1. Issue Description (Completed by Anyone) Description, possible solution(s) & reasons for any desired changes. Attach additional details, estimates, drawings, PS Simulation data, or other information supporting the need for the requested changes

The construction contractor started on time but is currently 3 days behind schedule.

2. Disposition (Completed by PM)

The project manager analyzed the project schedule and confirmed with the contractor that the time could be made up with no impacts IE: to other activities, AWP deliverables, cost, or other stakeholders. Construction is expected to finish on time.

Sections 3 4,5, & 6 of this form are not required

3. PMP Changes (Completed by Project Control): Which version and elements of the PMP will need to be revised?). Only applicable for B issues or budget change on C issues. N/A for Type A issues. Insert supporting details at back of form electronically or reference supporting documents and there storage location if unable to attach a copy.

Project Management Plan Document (PMP) that requires revision Version

4. Identify other Project Plan documents that are being requested to be adjusted by this request. (Completed by Project Control):

SAP PS Target Plan: Version

Other Items or documents _____

5. Summarize Type B & C components of the requested change as appropriate.. A Issues do not require this section to be completed

Type	**Operative Plan** Budget (fund) Change	**Operative Plan** Schedule Change	**Operative Plan** Other Changes	**Target Plan** PMP/SAP PS/Plan Cost Change	**Target Plan** PMP/SAP PS Schedule Change	**Target Plan** Other PMP/SAP PS/ Changes	**Annual Work Plan** Changes (Scope, Budget, Schedule, Milestones
B	Change Amount ($'s)	Change in Critical Path (days)	Non schedule or budget changes	Change Amount ($'s)	Change in Critical Path (days)	Non schedule or budget changes	Complete AWP change request form
C	Change Amount ($'s)	Change in Critical Path (days)	Non schedule or budget changes	Change Amount ($'s)	Change in Critical Path (days)	Non schedule or budget changes	Complete AWP change request form

6. For Type B Issues identify the Target documentation below which will reflect the changes once they are approved. (Completed by Project Control):

Project Management Plan Version

SAP PS Target Baseline: Project Name Version

Other Items or documents _____

7.Required Approvals: :Project Manager Approval *John Doe* _____Date__07/02/2010

Resource Area Business Services Director *Jane Doe* _____ Date. 7/3/2010

8.Resource Area Project Control Implementation date (after all approvals are complete)_N/A_____ Date_____

Note: Project Control in conjunction with the WBS element PM and Overall Project PM certifies that the issue has been resolved in compliance with the Districts Project Control manual. Note closure date on the Monitoring & Controlling Issue & Change Log is when item 7 above is complete

9..Other Required Approvals (if desired))

XXXXXXXXXXXXXXXXXXXXXXXXXX_____Date_____

DRAFT

ANNUAL WORK PLAN CHANGE CONTROL FORM

Refer to the Budget Office for the current Annual Work Plan Change Control Form.

RESOURCE AREA PROJECT PERFORMANCE REPORT REVIEW & APPROVALS

This section of the PMP contains the standard District Reports, Frequency of Reporting, Responsibility for Construction, & Project /Resource Area Review Requirements.

PERFORMANCE REPORTING FREQUENCY

Reports described in this section are to be updated MONTHLY. Reports may be updated more frequently for short cycle projects but monthly is the business minimum requirement. Reports are required to be run to include all data through month. If you are reporting weekly ensure that the last weeks report for each month includes data through the end of the month.

WHAT PROJECTS ARE REQUIRED TO REPORT

All projects independent of status (Green, Yellow, or Red)  *are to be reviewed at least once a month by Resource Area Management. The* ***Resource Area Project Review And Action Plan Report*** *is to be utilized for the review. Review of the project is indicated by dating column C. An action plan must also be completed for projects in the red* *or yellow*  *status zone. Status is determined by overall performance as indicated by the projects One Page Performance Report*

WHEN DO PROJECTS BEGIN REPORTING

Reporting does not wait until execution. A change in expected cost, risk, schedule, quality, scope or requirements may occur before the project actually begins execution. As such projects are to begin reporting according to the reporting cycle once the project plan is approved.

REQUIRED PERIODIC PROJECT PERFORMANCE REPORTS

A project performing well is not exempt from review. All projects are to be periodically reviewed by Resource Area Management whether the performance is positive or negative according to the plan.

- *Report 1 is to be completed by Resource Area Management*
- *Reports 2,3&4 are to be approved by Resource Area Management after review with the Project Manager*
- *Reports 2,3,&4 are completed by the Project Manager after review and approval by the project team.*

1. *Resource Area Project Performance & Action Plan*
2. *One Page Project Performance Report*
3. *WBS Tabular Cost & Schedule Report (Through Activity Level)*
4. *Schedule Gantt Chart (By WBS through Activity Level*

HOW TO PRODUCE AND UPDATE REPORTS IN THIS SECTION

The procedures for running the reports are included in the Reporting section of the Project Control Manual. Note: The template for Report 2 is embedded in this document as an Excel file and the instructions for updating it are also included in the Report section of the Project Control Manual.

All reports are to be updated within this document by replacing the sample reports on the following pages with the updated reports for your specific project.

RESOURCE AREA PROJECT REVIEW AND ACTION PLAN REPORT

(Monthly Report to Executive Office)

REQUIREMENTS FOR COMPLETION OF THE RESOURCE AREA ACTION PLAN REPORT AND REPORTING TO THE EXECUTIVE OFFICE

All projects independent of status (Green, Yellow, or Red). are to be reviewed at least once a month by Resource Area Management.

The form below is to be utilized for the review. This form is to be maintained as a complete list for all Resource Area projects outside of this document and the reviews for this project are to be maintained below in this PMP. The Resource Area review list for all Resource Area projects is to be submitted monthly to the executive office.

PROJECT MANAGER RESPONSIBILITY

- *Completes column A by entering the Report data that the data was ran from SAP PS.*
- *Completes column B by entering the Overall Project Status from the One Page Project Report.*

RESOURCE AREA MANAGEMENT RESPONSIBILITY

- *Indicates review of the project report by dating column C of the form below with the Review date (required for all Projects)*
- *Complete Column D,E,& F for all projects with the status of red*  *or yellow*  *status zone (status is determined by the "overall project performance" as indicated on the following One Page Project Report.*
- *Updates the Result Obtained Date at each resource area project review meeting as needed.*

RESOURCE AREA PROJECT REVIEW AND ACTION PLAN REPORT

A	*B*	*C*	*D*	*E*	*F*	*G*
Project Report Date	*Status*	*Resource Area Management Review Date*	*Issues from One Page Report*	*Resource Area Action Plan & Expected Results*	*Result Promise Date*	*Result Obtained Date*
3/18/2010		*3/18/2010*	*Project is closed.*	*No further action may be taken.*	*N/A*	*N/A*

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

100050 - STA 5 REHABILITATION - PROJECT PERFORMANCE SUMMARY REPORT

Department	Identification and Development	**Report As of**	12/31/2009
Resource Area	O&M	**PM Supervisor**	Richard Chaplin
Planned Start	10/1/2008	**Project Manager**	Richard Chaplin
Planned Finish	9/30/2009	**Status**	CLSD/GOOD

Project Description

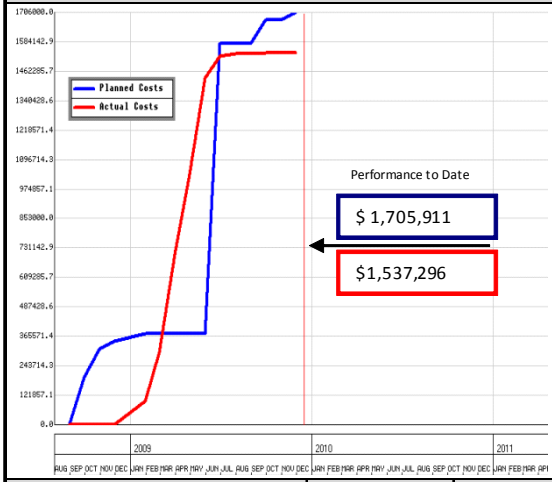
The District is embarking on a (90) ninety day project titled "The STA-5 Cell 1A Rehabilitation Project" that entails partially filling in the lower elevation slough area that runs through the southern section of Cell 1A. Soil to fill in the slough will be removed from the non-effective treatment area of Cell 1A.

	Performance	**96.0%**	**Dev = 4%**	**EVM**	**Forecasted Variance at Completion**	
	Cost	88.1%	Dev = 11.9%	CPI = 1.13	**Cost Variance**	$0
	Schedule	100.0%	Dev = 0%	SPI = 1	**Schedule Variance**	0 days
	Methodology	100.0%	Dev = 0%			

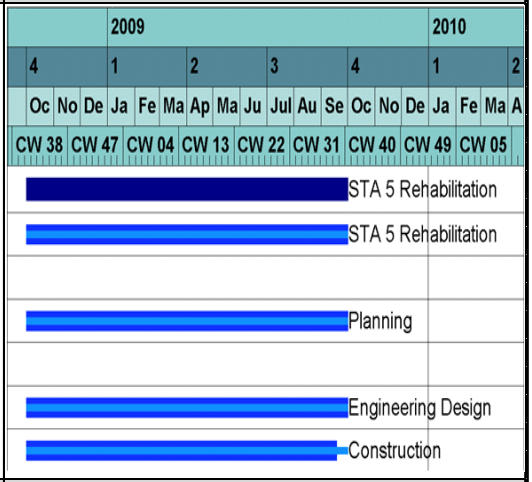
Annual Work Plan Milestones

Milestone	Planned Date	Actual Date
Engineering Design Completed	1/29/2009	1/20/2009

COSTS



SCHEDULE



	Project Financials	TOTAL	FY	Explanation of Costs and Schedule Variance
Total	**Physical %Complete**	100%		**Reasons**
	Earned Value (EV)	$1,705,911		
	PV At Completion (PVAC)	$1,705,911	$30,580	
	Budget	$2,113,201	$0	
	Forecast At Complet. (FAC)	$1,705,911		
	PVAC - FAC	$0		**Actions**
To Date	**Planned Value (PV)**	$1,705,911	$30,580	
	Actual Costs (AC)	$1,503,200	$0	
	Variance = PV - AC	$202,711	$30,580	

PMP Planned Value, Budget, and Schedule Change Management				Operative Plan
	Original PMP	**Approved Changes**	**Current PMP**	
PVAC	$1,804,931	-$99,020	$1,705,911	
Budget	$1,750,000		$2,113,201	
Duration	251 days	0 days	251 days	251 days

Assistance Required, Concerns, Risks

Report Sign-off

Business Services Director	**Project Manager**

Cost & Schedule Deviation from Plan < = ± 20% > ± 20 % & < = ± 40% > ± 40%

WBS TABULAR COST & SCHEDULE REPORT (THROUGH ACTIVITY)

Project object	Project object		Project cost sch 000		Actual costs		Start (B)	Finish (B)	Actl.Start	Finish (A)	Work
2010 SFER Production	100213		361,534.33	USD	309,020.68	USD	03/02/2009	04/06/2010	03/02/2009	03/09/2010	3,328.0 HR
2010 SFER Production	100213		361,534.33	USD	309,020.68	USD	03/02/2009	04/06/2010	03/02/2009	03/09/2010	3,328.0 HR
Initiation	100213-01		2,876.80	USD	2,655.20	USD	03/02/2009	03/31/2009	03/02/2009	03/23/2009	80.0 HR
Project Identification	100213-01-01		0.00	USD	0.00	USD					
Risk Assessment	100213-01-02		0.00	USD	0.00	USD					
Project Charter	100213-01-03		2,876.80	USD	2,655.20	USD	03/02/2009	03/31/2009	03/02/2009	03/23/2009	80.0 HR
Project Charter	4111862		2,876.80	USD	2,655.20	USD	03/02/2009	03/31/2009	03/02/2009	03/23/2009	80.0 HR
Create Project Charter	4111862	0010	2,876.80	USD	2,655.20	USD	03/03/2009	03/31/2009	03/02/2009	03/23/2009	80.0 HR
Planning	100213-02		4,315.20	USD	3,982.81	USD	03/03/2009	06/30/2009	03/24/2009	06/26/2009	120.0 HR
PMP	100213-02-01		4,315.20	USD	3,982.81	USD	03/03/2009	06/30/2009	03/24/2009	06/26/2009	120.0 HR
PMP	4111864		4,315.20	USD	3,982.81	USD	03/03/2009	06/30/2009	03/24/2009	06/26/2009	120.0 HR
Create PMP	4111864	0010	4,315.20	USD	3,982.81	USD	03/03/2009	05/29/2009	03/24/2009	04/20/2009	120.0 HR
MS - Hold Project Kick-Off Meetin	4111864	0020	0.00	USD	0.00	USD		04/15/2009	04/15/2009	04/15/2009	0.0 HR
MS - Finalize SOW for Editing Con	4111864	0030	0.00	USD	0.00	USD		06/30/2009	06/26/2009	06/26/2009	0.0 HR
MS - Finalize SOW for Peer Review	4111864	0040	0.00	USD	0.00	USD		06/30/2009	06/26/2009	06/26/2009	0.0 HR
Prioritization	100213-02-02		0.00	USD	0.00	USD					
Preliminary Analysis	100213-02-03		0.00	USD	0.00	USD					
Execution	100213-03		352,819.13	USD	301,984.39	USD	03/03/2009	04/06/2010	03/03/2009	03/01/2010	3,088.0 HR
Analysis	100213-03-01		0.00	USD	0.00	USD					
Design	100213-03-02		0.00	USD	0.00	USD					
Development	100213-03-03		352,819.13	USD	301,984.39	USD	03/03/2009	04/06/2010	03/03/2009	03/01/2010	3,088.0 HR
FY2009 Draft Volume I	100213-03-03-01		44,403.26	USD	34,999.19	USD	03/03/2009	10/07/2009	03/03/2009	10/07/2009	1,228.0 HR
FY2009 Draft Volume I	4111867		44,403.26	USD	34,999.19	USD	03/03/2009	10/07/2009	03/03/2009	10/07/2009	1,228.0 HR
Produce Draft Volume I (WQAD St	4111867	0010	34,810.31	USD	27,357.73	USD	03/03/2009	09/30/2009	03/03/2009	09/30/2009	1,020.0 HR
Internal Labor - S. Ollis	4111867	0010 0020	17,979.99	USD	21,689.70	USD			03/03/2009	09/30/2009	500.0 HR
Internal Labor - T. Stein	4111867	0010 0050	8,478.08	USD	1,729.80	USD			03/03/2009	09/30/2009	208.0 HR
Internal Labor - N. Yates	4111867	0010 0060	8,352.24	USD	3,938.23	USD			03/03/2009	09/30/2009	312.0 HR
MS - Web-Post Draft & Activate	4111867	0070	0.00	USD	0.00	USD		08/28/2009	08/28/2009	08/28/2009	0.0 HR
Produce Draft Volume I (ERA Sta	4111867	0090	9,592.95	USD	7,641.46	USD	03/03/2009	09/30/2009	03/03/2009	10/07/2009	208.0 HR
Internal Labor - G. Redfield	4111867	0090 0110	5,697.10	USD	6,279.52	USD			03/03/2009	09/30/2009	104.0 HR
Internal Labor - L. Davis	4111867	0090 0120	3,895.85	USD	697.76	USD			03/03/2009	09/30/2009	104.0 HR
MS - Start Peer Review Process	4111867	0140	0.00	USD	0.00	USD	08/31/2009		08/28/2009	08/28/2009	0.0 HR
FY2010 Final Volume I	100213-03-03-02		47,234.62	USD	17,352.27	USD	10/01/2009	03/01/2010	10/01/2009	03/01/2010	1,228.0 HR
FY2010 Final Volume I	4111868		47,234.62	USD	17,352.27	USD	10/01/2009	03/01/2010	10/01/2009	03/01/2010	1,228.0 HR
Produce Final Volume I (CSI Sta	4111868	0010	37,099.82	USD	13,021.68	USD	10/01/2009	03/01/2010	10/01/2009	03/01/2010	1,020.0 HR
Internal Labor - S. Ollis	4111868	0010 0020	19,040.01	USD	8,098.37	USD			10/01/2009	02/26/2010	500.0 HR
Internal Labor - T. Stein	4111868	0010 0050	8,993.91	USD	691.92	USD			10/01/2009	02/26/2010	208.0 HR
Internal Labor - N. Yates	4111868	0010 0060	9,065.90	USD	4,231.39	USD			10/01/2009	02/26/2010	312.0 HR
MS - Complete Peer Review Proce	4111868	0070	0.00	USD	0.00	USD		11/13/2009	11/12/2009	11/12/2009	0.0 HR
MS - Complete Final Vol. I Deli	4111868	0080	0.00	USD	0.00	USD		03/01/2010	02/23/2010	02/23/2010	0.0 HR
Produce Final Volume I (RS Staf	4111868	0090	6,010.15	USD	4,286.98	USD	10/01/2009	03/01/2010	10/01/2009	03/01/2010	104.0 HR
Internal Labor - G. Redfield	4111868	0090 0110	6,010.15	USD	4,286.98	USD			10/01/2009	02/26/2010	104.0 HR
Produce Final Volume I (PCF Sta	4111868	0140	4,124.65	USD	43.61	USD	10/01/2009	03/01/2010	10/01/2009	03/01/2010	104.0 HR
Internal Labor - L. Davis	4111868	0140 0150	4,124.65	USD	43.61	USD			10/01/2009	02/26/2010	104.0 HR

WBS TABULAR COST & SCHEDULE REPORT (THROUGH ACTIVITY LEVEL) – CONTINUED

Project object	Project object		Project cost sch 000		Actual costs		Start (B)	Finish (B)	Actl.Start	Finish (A)	Work
FY2010 Final Volume II	100213-03-03-03		8,453.76	USD	4,314.70	USD	10/01/2009	03/01/2010	10/01/2009	02/23/2010	222.0 HR
FY2010 Final Volume II	4111871		8,453.76	USD	4,314.70	USD	10/01/2009	03/01/2010	10/01/2009	02/23/2010	222.0 HR
Produce Final Volume II - S. Ol	4111871	0010	8,453.76	USD	4,314.70	USD	10/01/2009	03/01/2010	10/01/2009	02/23/2010	222.0 HR
MS - Web-Post Draft Ch. 6A	4111871	0020	0.00	USD	0.00	USD		10/15/2009	10/15/2009	10/15/2009	0.0 HR
MS - Receive GB Approval for Ch	4111871	0030	0.00	USD	0.00	USD		10/15/2009	10/15/2009	10/15/2009	0.0 HR
MS - Receive GB Approval for Ch	4111871	0040	0.00	USD	0.00	USD		11/13/2009	12/10/2009	12/10/2009	0.0 HR
MS - Receive GB Approval for Ch	4111871	0050	0.00	USD	0.00	USD		12/10/2009	12/10/2009	01/14/2010	0.0 HR
MS - Complete Final Vol. II Del	4111871	0060	0.00	USD	0.00	USD		03/01/2010	02/23/2010	02/23/2010	0.0 HR
MS - Receive GB Approval for Ch	4111871	0070	0.00	USD	0.00	USD	01/14/2010	01/14/2010	01/13/2010	01/13/2010	0.0 HR
FY2010 Final Executive Summary	100213-03-03-04		12,566.40	USD	10,654.03	USD	10/01/2009	03/01/2010	10/01/2009	02/26/2010	330.0 HR
FY2010 Final Executive Summary	4111872		12,566.40	USD	10,654.03	USD	10/01/2009	03/01/2010	10/01/2009	02/26/2010	330.0 HR
Produce Final Ex-S - S. Ollis	4111872	0010	12,566.40	USD	10,654.03	USD	10/01/2009	03/01/2010	10/01/2009	02/26/2010	330.0 HR
MS - Finalize SOW for Graphic D	4111872	0020	0.00	USD	0.00	USD		10/16/2009	10/13/2009	10/13/2009	0.0 HR
MS - Submit Final Ex-S to Print	4111872	0030	0.00	USD	0.00	USD		01/25/2010	01/25/2010	01/26/2010	0.0 HR
MS - Complete Final Ex-S Delive	4111872	0040	0.00	USD	0.00	USD		03/01/2010	02/23/2010	02/23/2010	0.0 HR
FY2009 & FY2010 Contracts	100213-03-03-05		240,161.09	USD	234,664.20	USD	06/01/2009	04/06/2010	06/26/2009	02/23/2010	80.0 HR
GSA Technical Editing Services	4111875		174,240.00	USD	171,090.00	USD	07/20/2009	01/13/2010	07/20/2009	01/13/2010	
FY2009 GSA Contract (Jul-Sep)	4111875	0070	74,880.00	USD	71,730.00	USD	07/20/2009	09/30/2009	07/20/2009	09/30/2009	
FY2010 GSA Contract (Oct-Jan)	4111875	0080	99,360.00	USD	99,360.00	USD	10/01/2009	01/13/2010	10/01/2009	01/13/2010	
Peer Review Services (FY2010)	5000149		2,557.00	USD	2,557.00	USD	10/26/2009	11/13/2009	10/26/2009	11/13/2009	
FY2010 GB Presentation - Dr. Bu	5000149	0010	2,557.00	USD	2,557.00	USD	10/26/2009	11/13/2009	10/26/2009	11/13/2009	
Ex-S Graphic Design Services	5000150		14,400.00	USD	12,375.00	USD	10/12/2009	02/12/2010	10/12/2009	02/12/2010	
FY2010 Ex-S Graphic Design	5000150	0010	14,400.00	USD	12,375.00	USD	10/12/2009	02/12/2010	10/12/2009	02/12/2010	
Ex-S Printing Services	5000151		16,287.00	USD	16,287.00	USD	01/25/2010	02/26/2010	01/25/2010	02/19/2010	
FY2010 Ex-S Printing	5000151	0010	16,287.00	USD	16,287.00	USD	01/25/2010	02/26/2010	01/25/2010	02/19/2010	
Peer Review Services (FY2009)	5000172		29,700.00	USD	29,700.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. Armstr	5000172	0200	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. Burger	5000172	0210	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. Burkho	5000172	0220	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. Stein	5000172	0230	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. van Do	5000172	0240	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
FY2009 Peer Review - Dr. Ward	5000172	0250	4,950.00	USD	4,950.00	USD	08/31/2009	10/23/2009	08/31/2009	10/23/2009	
PM Contract Oversight	5000173		2,977.09	USD	2,655.20	USD	06/01/2009	04/06/2010	06/26/2009	02/23/2010	80.0 HR
Execute Contracts - S. Ollis	5000173	0010	2,977.09	USD	2,655.20	USD	06/01/2009	04/06/2010	06/26/2009	02/23/2010	80.0 HR
Test	100213-03-04		0.00	USD	0.00	USD					
Deploy	100213-03-05		0.00	USD	0.00	USD					
Engineering Design	100213-04		0.00	USD	0.00	USD					
Basis of Design	100213-04-01		0.00	USD	0.00	USD					
Preliminary Design	100213-04-02		0.00	USD	0.00	USD					
Intermediate Design	100213-04-03		0.00	USD	0.00	USD					
Final Design	100213-04-04		0.00	USD	0.00	USD					
Construction	100213-05		0.00	USD	0.00	USD					
Contracts	100213-05-01		0.00	USD	0.00	USD					
Commissioning	100213-05-02		0.00	USD	0.00	USD					
Closeout	100213-06		1,523.20	USD	398.28	USD	01/25/2010	03/31/2010	01/25/2010	03/09/2010	40.0 HR
Customer Acceptance	100213-06-01		0.00	USD	0.00	USD					
Procurement Activities	100213-06-02		0.00	USD	0.00	USD					
Documentation	100213-06-03		1,523.20	USD	398.28	USD	01/25/2010	03/31/2010	01/25/2010	03/09/2010	40.0 HR
Documentation	4111873		1,523.20	USD	398.28	USD	01/25/2010	03/31/2010	01/25/2010	03/09/2010	40.0 HR
Close Project - S. Ollis	4111873	0010	1,523.20	USD	398.28	USD	01/25/2010	03/31/2010	01/25/2010	03/09/2010	40.0 HR

GANTT CHART (BY WBS THROUGH ACTIVITY LEVEL)

Project object	Project object	Start (	Finish (	Start (a
2010 SFER Production	**100213**	**03/02/2**	**04/06/2**	**03/02/2**
2010 SFER Production	100213	03/02/20	04/06/20	03/02/20
Initiation	100213-01	03/02/20	03/31/20	03/02/20
Project Identification	100213-01-01			
Risk Assessment	100213-01-02			
Project Charter	100213-01-03	03/02/20	03/31/20	03/02/20
Project Charter	4111862	03/02/20	03/31/20	03/02/20
Create Project Charter	4111862 0010	03/03/20	03/31/20	03/02/20
Planning	100213-02	03/03/20	06/30/20	03/24/20
PMP	100213-02-01	03/03/20	06/30/20	03/24/20
PMP	4111864	03/03/20	06/30/20	03/24/20
Create PMP	4111864 0010	03/03/20	05/29/20	03/24/20
MS - Hold Project Kick-Off Meeting	4111864 0020		04/15/20	04/15/20
MS - Finalize SOW for Editing Contract	4111864 0030		06/30/20	06/26/20
MS - Finalize SOW for Peer Review Pa	4111864 0040		06/30/20	06/26/20
Prioritization	100213-02-02			
Preliminary Analysis	100213-02-03			
Execution	100213-03	03/03/20	04/06/20	03/03/20
Analysis	100213-03-01			
Design	100213-03-02			
Development	100213-03-03	03/03/20	04/06/20	03/03/20
FY2009 Draft Volume I	100213-03-03-01	03/03/20	10/07/20	03/03/20
FY2009 Draft Volume I	4111867	03/03/20	10/07/20	03/03/20
Produce Draft Volume I (WQAD Staff)	4111867 0010	03/03/20	09/30/20	03/03/20
Internal Labor - S. Ollis	4111867 0010 0020			03/03/200
Internal Labor - T. Stein	4111867 0010 0050			03/03/200
Internal Labor - N. Yates	4111867 0010 0060			03/03/200
MS - Web-Post Draft & Activate WebBo	4111867 0070		08/28/20	08/28/20
Produce Draft Volume I (ERA Staff)	4111867 0090	03/03/20	09/30/20	03/03/20
Internal Labor - G. Redfield	4111867 0090 0110			03/03/200
Internal Labor - L. Davis	4111867 0090 0120			03/03/200
MS - Start Peer Review Process	4111867 0140	08/31/20		08/28/20
FY2010 Final Volume I	100213-03-03-02	10/01/20	03/01/20	10/01/20
FY2010 Final Volume I	4111868	10/01/20	03/01/20	10/01/20
Produce Final Volume I (CSI Staff)	4111868 0010	10/01/20	03/01/20	10/01/20
Internal Labor - S. Ollis	4111868 0010 0020			10/01/200
Internal Labor - T. Stein	4111868 0010 0050			10/01/200
Internal Labor - N. Yates	4111868 0010 0060			10/01/200
MS - Complete Peer Review Process	4111868 0070		11/13/20	11/12/20
MS - Complete Final Vol. I Deliverable	4111868 0080		03/01/20	02/23/20
Produce Final Volume I (RS Staff)	4111868 0090	10/01/20	03/01/20	10/01/20
Internal Labor - G. Redfield	4111868 0090 0110			10/01/200

GANTT CHART (BY WBS THROUGH ACTIVITY LEVEL) – CONTINUED

MS - Web-Post Draft Ch. 6A	4111871	0020		10/15/20	10/15/20	
MS - Receive GB Approval for Ch. 3	4111871	0030		10/15/20	10/15/20	
MS - Receive GB Approval for Ch. 5A	4111871	0040		11/13/20	12/10/20	
MS - Receive GB Approval for Ch. 6A	4111871	0050		12/10/20	12/10/20	
MS - Complete Final Vol. II Deliverable	4111871	0060		03/01/20	02/23/20	
MS - Receive GB Approval for Ch. 4 &	4111871	0070	01/14/20	01/14/20	01/13/20	
FY2010 Final Executive Summary	100213-03-03-04		10/01/20	03/01/20	10/01/20	
FY2010 Final Executive Summary	4111872		10/01/20	03/01/20	10/01/20	
Produce Final Ex-S - S. Ollis	4111872	0010	10/01/20	03/01/20	10/01/20	
MS - Finalize SOW for Graphic Design	4111872	0020		10/16/20	10/13/20	
MS - Submit Final Ex-S to Printer	4111872	0030		01/25/20	01/25/20	
MS - Complete Final Ex-S Deliverable	4111872	0040		03/01/20	02/23/20	
FY2009 & FY2010 Contracts	100213-03-03-05		06/01/20	04/06/20	06/26/20	
GSA Technical Editing Services	4111875		07/20/20	01/13/20	07/20/20	
FY2009 GSA Contract (Jul-Sep)	4111875	0070	07/20/20	09/30/20	07/20/20	
FY2010 GSA Contract (Oct-Jan)	4111875	0080	10/01/20	01/13/20	10/01/20	
Peer Review Services (FY2010)	5000149		10/26/20	11/13/20	10/26/20	
FY2010 GB Presentation - Dr. Burkhold	5000149	0010	10/26/20	11/13/20	10/26/20	
Ex-S Graphic Design Services	5000150		10/12/20	02/12/20	10/12/20	
FY2010 Ex-S Graphic Design	5000150	0010	10/12/20	02/12/20	10/12/20	
Ex-S Printing Services	5000151		01/25/20	02/26/20	01/25/20	
FY2010 Ex-S Printing	5000151	0010	01/25/20	02/26/20	01/25/20	
Peer Review Services (FY2009)	5000172		08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. Armstrong	5000172	0200	08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. Burger	5000172	0210	08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. Burkholder	5000172	0220	08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. Stein	5000172	0230	08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. van Donk	5000172	0240	08/31/20	10/23/20	08/31/20	
FY2009 Peer Review - Dr. Ward	5000172	0250	08/31/20	10/23/20	08/31/20	
PM Contract Oversight	5000173		06/01/20	04/06/20	06/26/20	
Execute Contracts - S. Ollis	5000173	0010	06/01/20	04/06/20	06/26/20	
Test	100213-03-04					
Deploy	100213-03-05					
Engineering Design	100213-04					
Basis of Design	100213-04-01					
Preliminary Design	100213-04-02					
Intermediate Design	100213-04-03					
Final Design	100213-04-04					
Construction	100213-05					
Contracts	100213-05-01					
Commissioning	100213-05-02					
Closeout	100213-06		01/25/20	03/31/20	01/25/20	
Customer Acceptance	100213-06-01					
Procurement Activities	100213-06-02					
Documentation	100213-06-03		01/25/20	03/31/20	01/25/20	
Documentation	4111873		01/25/20	03/31/20	01/25/20	
Close Project - S. Ollis	4111873	0010	01/25/20	03/31/20	01/25/20	
Personnel Actions	100213-06-04