



DEPARTMENT OF WATERSHED MANAGEMENT CAPITAL PROJECTS CONTRACT MANAGEMENT AUDIT JANUARY 26, 2021

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OBJECTIVES

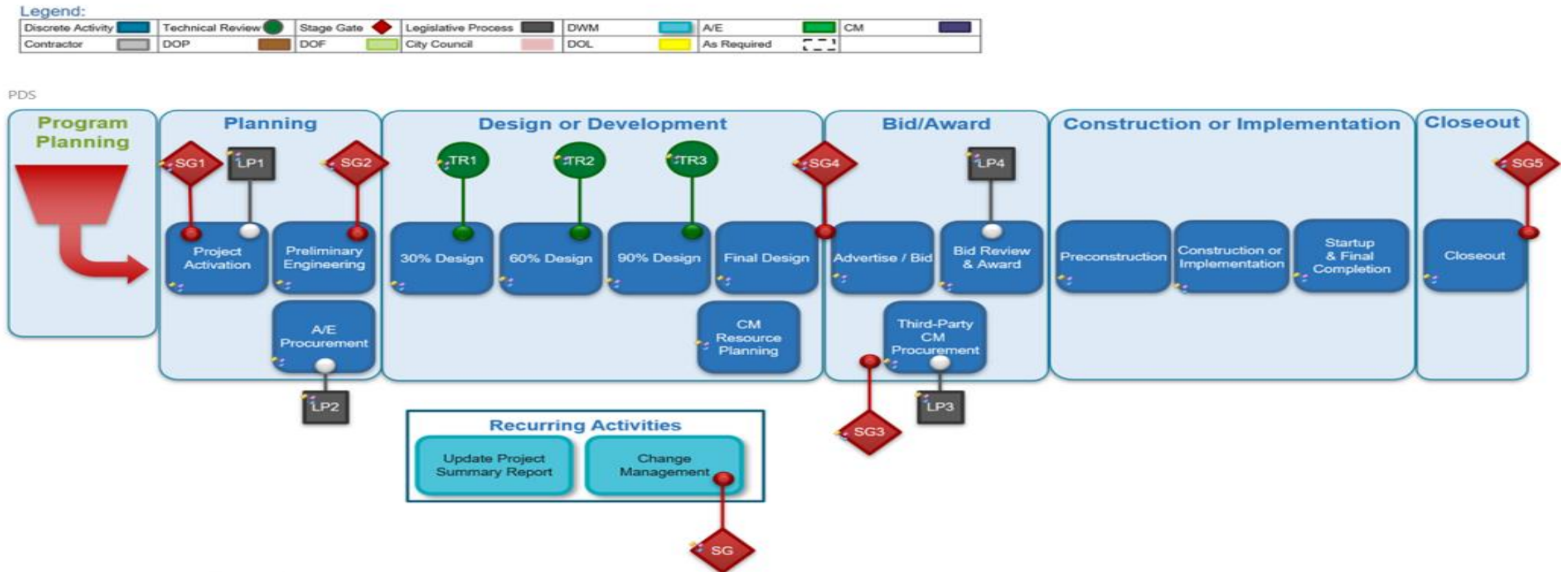
- Is the design of the capital projects system of internal control consistent with industry best practices?
- Do key internal controls exist and have they been placed into operation?
- Were existing internal controls used appropriately on a sample of projects?

FINDINGS OVERVIEW

- DWM developed a mature PDS (project delivery system) that follows best practice
- Minor gaps in controls
- Portions of PDS inconsistent with current practice
- Most key controls implemented; some inconsistencies
- Eight-month lapse in e-Builder access weakened controls; staff developed plan to mitigate effects

DESIGN BID BUILD PROJECT DELIVERY SYSTEM COVERS ALL PHASES OF PROJECT LIFECYCLE

Design Bid Build (Conventional)



PDS ACTIVITIES DESIGNATE RACI ROLES AND LINK TO GUIDANCE

Prepare Updated PMP			
Summary:	During this sub-activity, the Project Manager works with other Project Team members to prepare the updated Project Management Plan which includes all items which can be developed at this stage of project delivery.		
<u>RACI</u>			
Responsible:	Project Manager	Consult:	Program Manager
Accountable:	Project Manager	Inform:	OES CIP Director
Inputs:		Outputs:	Updated Project Management Plan
Template Guides:	PMP Outline Risk Register Template		

Source: DWM Project Delivery System

PROJECT DELIVERY SYSTEM ADDRESSES RELEVANT RISKS

		Project Lifecycle					
		Planning	Design	Execution	Testing	Turn-over	Operations/ Maintenance
Project Elements	Organization Framework	Project resource plan, organization, roles and responsibilities		Mobilize and manage labor	Demobilization	Operations staff planning	Ongoing requirements/skills review
	Procurement and Contract Management	Contract strategy	Contractor qualification and evaluation	Contractor selection and negotiation	Contract compliance review	Trouble-shoot and punch list	Vendor qualification and selection
	Scope and Change Management	Project objectives and scope definition	Detailed project design and scope freeze	Change control		Owner acceptance	Asset change management
	Cost/Financial Management	Project estimate	Project cost baseline	Cost control		Final payment/retention release	Operations & maintenance budgeting
	Schedule Management	Project schedule requirements	Project schedule baseline	Schedule management		Completion checklist	Ongoing Maintenance Schedule
	Systems and Tools	Project systems strategy	Implement project systems	System support and maintenance		Transition to enterprise asset management	
	Risk and Issue Management	Risk and issue management planning	Risk and issue tracking and resolution			Confirm issue resolution	Ongoing issue management
	Communication and Reporting	Assess stakeholder requirements	Project status and regulatory filings	Project performance	Asset performance	Project close-out	Operations and financial reporting
	Quality Management	Quality plan	Specs. Compliance criteria	Quality assurance and control		Transition as-built specifications to operations	
	Safety Management	Safety plan Safety training program		Safety trend tracking and incident investigations		Commissioning interface plan	Operation safety program

RECOMMENDATIONS TO FILL MINOR GAPS IN CONTROLS

Recommendations:

- Incorporate safety plan elements into the project management plan template.
- Establish project cost threshold over which a value engineering workshop is required.
- Develop and document process to compare design costs to construction costs.
- Add an item to closeout checklists to ensure reporting requirements for grantors and bond covenants are addressed.
- Develop formal warranty inspection and post-occupancy evaluation⁷ procedures.

RECOMMENDATIONS TO UPDATE PDS TO REFLECT CURRENT PRACTICES

Recommendations:

- Regularly review and update the PDS.
- Incorporate supplemental guides in PDS.
- Add activity to process consultant invoices.
- Ensure backup manual processes document established workflows.
- Update Inspection Daily Report process in e-Builder to include safety issues.
- Update change document workflow in e-Builder to include routing step for review consistent with PDS guidance.

KEY CONTROLS IMPLEMENTED WITH SOME INCONSISTENCIES

- e-Builder provides important tool for project oversight
- Most key project management controls implemented
- Some inconsistencies and opportunities for improvement remain

RECOMMENDATIONS FOR CONSISTENT IMPLEMENTATION OF CONTROLS IN E-BUILDER

■ **Recommendations:**

- Follow procedures for developing and updating project management documents.
- Create and maintain technical review meeting summaries in e-Builder.
- Ensure all construction oversight documentation is maintained in e-Builder.
- Ensure punch lists are generated according to PDS procedures.
- Maintain review comments and approvals of safety plans and related submittals in e-Builder.
- Consistently use pay application checklists and maintain within e-Builder.

EIGHT-MONTH LAPSE IN E-BUILDER ACCESS WEAKENED CONTROLS

- Watershed Management staff lost access to e-Builder from January - August 2020
 - e-Builder system originally procured by former contractor team
 - Program management contract expired in 2017
 - Vendor terminated access due to lack of current agreement and outstanding invoice payment
 - Staff lost access to automated workflows, dashboard generation, submittal processing, and other relevant e-Builder controls
 - Access was restored in August 2020 after contract execution and payment of outstanding invoice
- **Recommendation:**
 - Procure any systems directly from vendors through the city's usual procurement process

STAFF DEVELOPED PLAN TO MITIGATE EFFECTS OF E-BUILDER LAPSE

- Plan included backup manual controls to work around lack of e-Builder access
- Staff loading project data from 2020 into e-Builder
- **Recommendation:**
 - Continue to upload remaining data from during the e-Builder outage to e-Builder

QUESTIONS?

We appreciate the courtesy and cooperation of city staff throughout the audit.

Thank you for your time!