

Audit and Finance Agenda Item

Meeting Date: March 1, 2012

Title of Item:

Measure C Project/Construction Management Review

Background and Analysis:

Information was reported to the committee in March 2011 regarding actions taken to respond to issues that were identified in the MGT/WLC Management Review report where project / construction management practices can be improved.

Over the last year we have monitored these process improvement actions. The attached is an update.

Recommendation: Information Only.

Submitted by:	Charles Allen, Executive Director of Facilities, Operations & Construction Management, ext 6150
Is backup provided?	Yes

Page 1: Actions taken in response to items identified as marginal as compared to best practices.

Item #1 PROMPT training was completed on Sept. 27 & 28, 2010. Electronic workflow for PADs has been implemented.

Deleted: Electronic workflow for PADs will be implemented.

Item #2 PROMPT training was completed on Sept. 27 & 28, 2010. Foothill/District has implemented separate contingencies for design and construction.

Item #3 Pre-qualification process updated and we are continuing to update/streamline the pre-qualification process.

Item #4 3rd Party estimates are performed on selected projects.

Item #5 No additional action required.

Item #6 District has hired a project manager to assist with management of small projects. District to monitor performance. Project approval document (PAD) procedures streamlined. PADs have been developed and approved for Scheduled Maintenance projects.

Deleted: Scheduled Maintenance projects will have one PAD for each 5-year increment of projects.

Item #8 Quarterly G_M performance reviews will be conducted. Quantitative metrics established.

Item #9 See item #8

Item #10 No additional action required. Consultant will maintain up to date and accurate information.

Item #11 Action to be deferred. No adjustment required at this time.

Deleted: A decision to adjust delegation of authority will be reviewed in 2011.

Item #12 Coordination of meetings have been conducted to clarify communications channels. Updates to the communication plan will be completed in 2012.

Deleted: 2011

Item #16 No action required.

Item #20 Meetings have been held to clarify procedures. An update of Section 3 of the Policy & Procedures Manual will be prepared in 2012.

Deleted: 2011

Item #22 Lessons learned meetings have been and will continue to be scheduled on Measure C projects that have been completed. A database for tracking the issues has been developed.

MGT/WLC Report – Status Update;

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Deleted: February 15, 2011

Item #24 Pre-Qualification process updated. A review of Project Stabilization Agreement effectiveness is scheduled for completion in 2011. Draft performance evaluation report on the PSA has been prepared and will go to the Board of Trustees at the April 2nd, 2012 Board meeting.

Item #28 Change orders are presented to the Board, and when approved are entered into PROMPT.

Item #29 PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.

Item #30 Design teams are required to address all constructability review comments.

Item #34 Electronic workflow for purchase orders has been implemented in Banner. Electronic workflow for invoices has been implemented.

Deleted: Electronic workflow for invoices will be implements as time and resources permit.

Item #35 No action required.

Item #36 Timeliness and accuracy of accounting data is electronically transferred from Banner to PROMPT via a “data warehouse” that is adequate for reporting and management needs of the Measure C projects. Revisions to Banner to further enhance the transfer of data is in process and will be accomplished as time and resources permit.

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Page 2; Actions taken in response to items identified as weak as compared to best practices.

Item #7 PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.

Item #13 A CM/DM fees status report has been created to track and report by project and for the Measure C program. Project schedules are updated monthly. Resource loading is updated quarterly. Section 3 of the Policy & Procedures Manual will be updated as time and resources permit.

Item #19 Streamlined format and content for Project Approval Documents (PAD) has been standardized.

Item #31 Specific projects have been identified to post bid documents online.

Deleted: The District has initiated plans to post bid documents online

Item #32 An electronic link has been re-established between Banner and PROMPT. Additional functionality between Banner and PROMPT is in process and will be implemented as time and resources permit.

Item #33 PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.

Executive Summary

The Foothill De Anza Community College District (District) hired MGT of America, Inc. (MGT) and WLC Architects and Construction Services, Inc. (WLC) to conduct a performance review of the District's Measure C bond-funded projects. Specifically, the review team was to examine the District's project and construction management processes, and financial management processes. The team began its review in June 2009 and completed the final report in November 2009.

In June 2006, the District went to voters to request bond financing. The voters approved a \$490.8 million bond (Measure C). This bond measure was designed to allow the District to upgrade electrical, heating, ventilation systems, fire, and seismic safety; repair leaky roofs; improve disabled access; repair and expand classrooms for nurses and paramedics; upgrade technology; and repair, construct, acquire, equip buildings, classrooms, libraries, sites, and science and computer labs.

Overall, the review team found that the District has a number of opportunities to make improvements to streamline practices, better use existing technology, and increase the effectiveness and efficiency of its management of projects completed with bond funds. The District's processes are not so weak that it is unable to deliver any projects or that those projects are failing to meeting quality standards and District expectations. However, the review team found that the District has opportunities to improve and adjust current practices, and to adopt others, to improve the effectiveness and efficiency of operations and better optimize the use of limited bond proceeds.

In conducting the performance review, MGT looked for best practices promulgated by a number of sources, including industry leaders, construction or community college associations, and through the District's policies and procedures. For each item, the review team compared District performance against the expected practices derived from industry or recognized best management practices or from requirements in bond documents, state laws, regulations, and District policies. The team gave a color ranking to describe, in general, how the District had performed against the practice, to indicate whether the District is performing:

- Strongly in comparison to expected practices (● buttons)—generally these areas have commendations on the District's performance.
- Marginally in comparison to expected practices, with issues that prevent the District from operating as effectively or efficiently as possible (● buttons)—these areas have recommendations for improvement.
- Weakly in comparison to expected practices, with issues or performance that could hamper the District's ability to deliver projects timely and well (● buttons)—these areas have recommendations for improvement.

The review team notes that this project was not an audit. The issues and recommendations presented were developed based on high-level reviews of data and documents, interviews with staff and consultants, and observations by the review team.

September 1, 2010 update: Current status of the Plan of Action are included for each yellow and red item noted below. Shaded items are considered complete.

November 22, 2010 update: Current status of the Plan of Action are included for each yellow and red item noted below. Shaded items are considered complete.

MGT found that the District had some areas where it was performing strongly in comparison to best practices. A number of these areas fell within the project planning and delivery methods functional areas. Specific areas that the team reviewed that showed examples of strong practices were as follows.

Item Number	Functional Area	Best Practice Description	Team's Evaluation of District Performance
14	Project Planning	Complete feasibility studies prior to defining budget and scope.	●
15	Project Planning	Utilize a project prioritization process.	●
17	Project Planning	Complete environmental assessment and permitting process timely.	●
18	Project Planning	Adapt successful designs to project sites when possible.	●
21	Delivery Methods	Perform a value engineering study for projects larger than \$1 million.	●
23	Delivery Methods	Include a formal dispute resolution procedure in all contract documents.	●
25	Delivery Methods	Assign a client or user representative to every project.	●
27	Project Packaging	Bundle small projects together whenever possible.	●
37	Financial Management— Integration with Project Management and Reporting	Present summary bid reports in presenting the results of formal bidding.	●

In the majority of functional areas, MGT found that there were areas where the District was not performing as strongly as it could, or where it had opportunities to make improvements to the effectiveness or efficiency of how it delivers projects. These areas were not so weak as to prevent the District from delivering any projects timely or within user's expectations. Rather, these are areas where, for the most part, it was noted that the District could "fine tune" existing processes or better use existing systems to remove obstacles to project delivery and management. The areas that fell within this category were as follows.

Item	Functional Area	Best Practice Description	Eval.	Issue Affecting Operational Efficiency	MGT Recommendation	District Response	District Plan of Action	Lead	Action
1	Project Cost Control	Create and update a clear, precise scope, schedule, and budget.		The District has procedures to help control costs...the District's ability to effectively and efficiently control project costs is hampered by reporting and tracking mechanisms for projects that do not currently meet staff's needs.	Recommendation 1: The District should work with its consultant to determine whether required information is adequately tracked in the systems available. To the extent that information is not available, the District should determine the modifications or reporting systems needed to collect and report data. To the extent that data is available but not reported in a fashion that meets users' needs, the District should work with the consultant to obtain customized reports that allow bond managers to quickly obtain information without going to multiple sources. Recommendation 2: In making changes to projects, the District should ensure that it is tracking and documenting its deliberation of alternatives considered, the value added, or costs avoided as a result of the decisions.	Agree - Action Implemented	District Bond team currently utilizes information available in the Program Management reporting program (Prompt) and the financial reporting program (Prompt). The information is gathered and reviewed by the Consultant's project managers along with their accounting staff to validate up-to-date financial information as it relates to the spending plans developed with the Bond Managers, the Project Sponsors, and the user group representatives. 1) Since the District has a report that shows existing budgets, the suggested action plan is to have the Consultant provide the District with a "refresher" training course in Prompt to be able to more readily locate reports and identify the need for any custom reports. The Prompt budget tracking sheets now show all updates and indicate what changes were made on which date. 2) Project Approval Documents (PADs) have been used for changes in scope, schedule, or budgets. These will now be added to the electronic work flow system. Funds moving between object codes within a project will be approved via emails to the Bond Directors. By actively tracking progress based on the project planning, the team can make judgments on whether or not to allocate expenses to items not in the current plan or to re-allocate funds from other projects to augment or offset shortfalls.	Consultant's Senior Project Managers.	PROMPT training was completed on Sept. 27 & 28, 2010. Electronic workflow for PADs has been implemented.
2	Project Cost Control	Establish and track contingency line items by major phase.		Contingencies for project budgets should be set up and tracked by major phase (design and construction)	Recommendation 3: The District should modify its project documentation requirements to ensure that it has an adequate way to evaluate the history of the project, including changes to scope, schedule, or budget as well as the use of contingency funds. Recommendation 4: The District needs to conduct periodic analyses of its completed phases and projects in more detail to identify any causes of changes in cost. This will help the District to determine if it should expect similar changes in other bond-funded projects (and thus, should modify contingency funds for these projects as well). Recommendation 5: The District should document and clearly track contingencies related to soft costs (design) separately from hard costs (construction) to improve its ability to forecast costs for future projects. Recommendation 6: The District should work with its consultant to determine how to produce reports that	Agree in Part	3) Answered in Item #1.1 above. Money moves in a budget line with PAD, money moves in 'Estimate at Completion' when reviewed and authorized by Bond Director's and Consultant's Project Manager and authorization of the Budgeteer. 4) Cost evaluation efforts to actively manage budgets include the periodic review of project's variance analysis report for start to finish project reporting. Future forecasting of project budgeting starts at the inception of a project to align budget with scope. Historical data helps define proposed budget needs. 5) Suggested action plan is to create design and construction contingencies by using separate object codes. De Arza already implemented separate contingencies for design and construction. Foothill will implement.	Consultant's Senior Project Managers.	PROMPT training was completed on Sept. 27 & 28, 2010. Foothill/District has implemented separate contingencies for design and construction.

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					meet the needs of bond managers and that will allow them to adequately evaluate the use of bond funds.		6) Answered in Item #1.1 above.		
3	Project Cost Control	Create accurate, independent, and complete cost estimates and bid documents.	●	District had to cancel two pre-qualifications due to issues with pre-qualification requirements	Recommendation 7: The District bond staff should work with the Purchasing Services Division to determine if there are ways to streamline the pre-qualification and bidding process to improve outcomes and avoid having to restart the prequalification process. Recommendation 8: The District should incorporate requirements related to the documentation and tracking of estimate reviews and comments, including changes requested. Recommendation 9: The District should ensure that it is consistently taking into account the special nature of projects and using cost-estimating tables that are valid for the construction type and environment in the District. The District should also ensure that detailed furniture and equipment lists by line item are included in the estimates. Recommendation 10: The District should ensure that it is consistently and completely reconciling architect-provided estimates to in-house or third-party estimates.	Already implemented	7) District has continued to actively cooperate and collaborate on finding methods to streamline the pre-qualification process and for providing accurate valuations of current probable costs from the Program Management and architectural teams to support values established for the bid documentation. No additional action required.	District Bond Directors	Pre-qualification process updated and we are continuing to update/streamline the pre-qualification process.
4	Project Cost Control	Review and fine tune cost estimates with key staff and/or trade contractors.	●	District has opportunities to improve its review and reconciliation of construction estimates to ensure the estimates are complete	Recommendation 11: The District should consider expanding the use of 3-D drawings, modeling programs, and perspectives for a clear description of the spaces and materials designed for acceptance by user groups. 3-D modeling can be considered during the design development phase only for critical educational and user-requested spaces in the program. The use of full BIM modeling can be considered on a risk or cost-benefit basis that includes consideration of the complexity or cost of the project. Recommendation 12: The District could consider modifying its Building Component Summary documents to break down the components by room rather than in total. Recommendation 13: The District should establish protocols for minimizing scope creep related to user group's comments. This would include the increased leadership role of project sponsors or bond managers and increased authority to make final decisions based on cost-benefit analyses related to the college, District, or projects. Recommendation 14: The District should ensure that scope changes are approved only after carefully considering both the benefits and costs (including costs of projects that must be foregone) due to the changes. Recommendation 15: The District should consider	Already implemented	8, 9, 10) Project teams are currently identifying the needs for third-party independent evaluations or for third-party estimates in addition to the Architect's estimates currently provided.	District Bond Directors	3 rd Party estimates are performed on selected projects.
5	Project Cost Control	Clearly communicate project vision and expectations to users.	●	District has experienced increased costs near the end of construction when user groups request changes because users did not fully understand information and/or drawings provided to them early in the project lifecycle.	Recommendation 11: The District should consider expanding the use of 3-D drawings, modeling programs, and perspectives for a clear description of the spaces and materials designed for acceptance by user groups. 3-D modeling can be considered during the design development phase only for critical educational and user-requested spaces in the program. The use of full BIM modeling can be considered on a risk or cost-benefit basis that includes consideration of the complexity or cost of the project. Recommendation 12: The District could consider modifying its Building Component Summary documents to break down the components by room rather than in total. Recommendation 13: The District should establish protocols for minimizing scope creep related to user group's comments. This would include the increased leadership role of project sponsors or bond managers and increased authority to make final decisions based on cost-benefit analyses related to the college, District, or projects. Recommendation 14: The District should ensure that scope changes are approved only after carefully considering both the benefits and costs (including costs of projects that must be foregone) due to the changes. Recommendation 15: The District should consider	Agree in part	11) Already implemented for large projects, smaller projects may not be cost effective 12) Not cost effective nor will it address the User group 'perspective' problem. Typically, users are not familiar with correlating the two dimensional drawings and the actual built 3D product. 13) Agreed, Already implemented. 14) Agreed, Already implemented. 15) Agreed, Already implemented.	District Bond Directors	No additional action required.

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					expanding its use of construction allowances in project bid documents to cover NIC costs and unforeseen items.				
6	Project Cost Control	Modify procedures for small-dollar projects on a cost-benefit basis.	●	District generally uses the same procedures, including project management, administration, documentation, and reporting for all projects regardless of size. District has opportunities to reduce some of the administrative work for small projects with more streamlined small projects procedures.	Recommendation 16: The District should consider using modified procedures for smaller-dollar or lower-risk projects, especially related to the PAD documentation, to decrease administrative time needed to manage these projects. Recommendation 17: The District should consider adopting the UCCA procedures to give staff increased flexibility in performing smaller dollar projects.	Agree in Part	16) Suggested action would entail Executive Director of Facilities & Construction delegating some additional authority to Bond Directors; set up an in-house small projects team that would include a District Project Manager, reduce the quantity of paperwork required (i.e. - PADs, etc.) on smaller projects. 17) Do not agree with incorporating the UPOCAA. Risk of errors in attempting to provide proper implementation verses the implied savings are not effective. Impacts District accounting.	Executive Director of Facilities & Construction	District has hired a project manager to assist with management of small projects. District to monitor performance. PADs have been developed and approved for Scheduled Maintenance projects.
8	Reporting	Monitor and track consultant and contractor performance.	●	District's performance evaluation process for Program/Project Management consultant is qualitative and does not have specific performance metrics. Creating and using performance metrics that include quantitative metrics would benefit the District by allowing quantification of value received for services rendered.	Recommendation 19: The District needs to consider refining its system of monitoring and reporting on contractor and consultant performance. This system should include quantitative performance metrics as well as qualitative ratings. Recommendation 20: The District should consider tasking the bond managers with developing the metrics in collaboration with the Executive Bond Team.	Agree	19) Agreed. District should continue to conduct performance evaluations quarterly and will now include quantitative metrics. These quantitative metrics will be jointly developed and implemented. There are available software programs capable of supporting this. 20) Agreed. In collaboration with G-M and Bond Managers, Executive Bond Team will work on developing the metrics.	District Bond Directors	Quarterly G-M performance reviews will be conducted. Quantitative metrics established.
9	Reporting	Establish performance metrics tied to bond and project goals and objectives.	●	The District has not established formal performance metrics. Performance metrics would allow easy identification of overall performance in a given timeframe. The metrics could be tied to the District's strategic goals and facilities master plan objectives.	Recommendation 21: The Board and District should work together to identify goals, objectives, and annual targets for reporting purposes. Reports should include data and charts to demonstrate changes (negative or positive) in performance through the year, and future plans to correct past or current deficiencies. Recommendation 22: The District and its consultant should create performance metrics aligned with bond and District strategic plans and goals that could incorporate elements or data from Measure E projects. Metrics could include the following: percentage of direct cost; percentage of indirect costs; percentage of projects in compliance with established schedules or cost; number and dollar amount of change requests by type; and average expenditures by major cost category.	Agree	21) Currently, cash commitment flow reports, project schedules, other reports are generated per project to track progress every quarter for CBOC and A&F. District and Consultant will develop a quarterly Executive Summary Report to present status of key metrics (i.e. - budget/cost, schedule, quality, sustainability, safety, etc.). The goals are to target Consultant performance - what work was projected for last quarter vs. what was completed last quarter vs. current budget/costs exposure vs. future projected exposure. 22) Action plan to be developed. See Item #21 above.	Consultant's Senior Project Managers	See Item #8.
10	Reporting	Track and report costs by project phase or category.	●	Costs are tracked and reported by category. Sometimes the data is found to be outdated or inaccurate. District should ensure that data is updated and accurate.	Recommendation 23: The District should ensure that the data in the primary tracking and reporting systems, whether entered by District staff, vendors, or consultant, is kept updated and contains accurate information to assist bond managers, the Board, and key stakeholders in overseeing project work.	Do not agree	23) No additional action required. Consultant will maintain up-to-date and accurate information.	Consultant's Senior Project Managers	No additional action required. Consultant will maintain up to date and accurate information.
11	General Project Management Governance,	Set approval authorizations at an appropriate level.	●	The process for obtaining approvals on various types of	Recommendation 24: The District should clearly define approval requirements and work flows to	Agree	24, 25) Have Senior Staff review revising limits on approval levels of delegation of authority. Revise based on annual Board allocations. Perhaps raise approvals	Bond Executive Team	No adjustment required at this time.

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	and Oversight			documents is not clear and causes inefficiencies	ensure that approvals are set at levels low enough to keep project delivery work to continue unhindered, but high enough to ensure compliance with the District's risk assessments and internal controls over expenditures. Recommendation 25: In defining approval requirements and work flows, the District should consider whether the current authority levels for bond managers are set too low to allow effective project delivery. For example, the District could consider allowing bond managers to have a higher dollar value for approving contracts on smaller projects. This could be supplemented with authority provided under the UCCA methodology as well. The additional authority to provide to bond managers would have to be established through discussions with the Board, the executive director, and the vice chancellor of Business Services based on the level of risk weighed against the expected benefits in operating efficiency to be gained.		for Executive Facilities Director to \$50K and Bond Managers to \$20K. Not recommend to adopt the UPCCAA.		
12	General Project Management, Governance, and Oversight	Coordinate information and data requests.		The District lacks consistency and well defined communication channels which increases costs related to program/project administration.	Recommendation 26: The District should continue its efforts to create and update regularly, a communication matrix that clearly identifies roles and contacts. To the extent that users or staff are not following the communication matrix once it is approved, executive management should follow up with these staff to ensure they understand the need to follow protocols. Recommendation 27: The District should consider using online bulletin boards for project stakeholders either in ProLog or through commercially available collaboration tools such as Microsoft SharePoint or BaseCamp®.	Agree in Part	26) Review and update Communication matrix in Policy and Procedures manual. 27) Review potential options and discuss need to implement vs. benefit to information transfer site.	Consultant's Senior Project Managers	Coordination of meetings has been conducted to clarify communications channels. Updates to the communication plan will be completed in 2012.
16	Project Planning	Identify project resource (funding) needs in a Capital Improvement Plan.		The District has a facilities master plan but does not have a Capital Improvement Plan which provides the needed project specific actions needed to implement the master plan.	Recommendation 31: The District should create a CIP that is linked to its facilities master plan in accordance with best practices. This CIP should be used in developing budget forecasts and identifying funding and future needs.	Do not agree	31) None required at this time.	Executive Director of Facilities & Construction	No action required.

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20	Delivery Methods	Develop and use a standardized project delivery manual.	●	The District project procedures manual is not up to date.	Recommendation 37: The District needs to continue working with its consultant to refine and finalize policy and procedure documents and expectations. The District in reviewing the procedures should ensure that these are specific both as to the expectation, and as to who is to perform the required activity. Recommendation 38: Once these policies and procedure documents have been reviewed and approved by the Board, the District should ensure that District staff or consultants comply with the requirements identified in the policies.	Agree	37, 38) Complete and update Section 3 of Policy & Procedure manual	Consultant's Senior Project Managers	Meetings have been held to clarify procedures. An update of Section 3 of the Policy & Procedures Manual will be prepared in 2012.
22	Delivery Methods	Perform and use post-project reviews and document lessons learned.	●	The District does not have a lessons learned policy that clearly defines what is required in a lessons learned document. Once prepared, lessons learned should be maintained and stored on the web based information management system so that it is readily accessible.	Recommendation 40: The District should work with its consultant to develop a robust lessons learned policy that stipulates what is required in the lessons learned document. For instance, lessons learned would include key findings for each construction phase, and what the project manager would do again in a similar situation. Recommendation 41: The District should ensure that once the lessons-learned document is created, this is maintained and stored on the Web-based systems used to track projects so that it is readily accessible to both District and consultant staff.	Agree	40, 41) Suggested action plan is to formally conduct lessons learned meetings for each project and store data in Prompt (in District attachments - Lessons Learned folder - by project). Bond Directors & G-M will develop format. Use small and large project templates.	Consultant's Senior Project Managers	Lessons learned meetings have been and will continue to be scheduled on Measure C projects that have been completed. A database for tracking the issues has been developed.
24	Delivery Methods	Use a contractor prequalification process on large or complex projects.	●	Steps should be taken to avoid any other "cancelled pre-qualifications". The District should periodically evaluate the effectiveness of the Project Stabilization Agreement to ensure its benefit to the District.	Recommendation 42: The District should continue to work with the purchasing department to identify lessons learned from the two failed prequalification efforts to avoid future issues. Recommendation 43: The District should evaluate the use of PSA's periodically to ensure that the contracts are working as designed to provide benefits to the District's project management processes.	Agree in part	42) No action required. Actions / plans are in place to accomplish this item. Bond Directors and Purchasing are working collaboratively to establish 'strict but achievable' project-specific requirements in pre-qualification requests for projects that require specialized previous experience by contractors. 43) District is periodically reviewing the effectiveness and utilization of the PSA and the Construction Careers Program (CCP). Currently updating the District's means and methods of applying the CCP to Contractors in a manner acceptable to all parties in the PSA.	For item 42, District Bond Directors. For item 43, Executive Director of Facilities & Construction.	Pre-qualification process updated. A review of Project Stabilization Agreement effectiveness is scheduled for completion in 2011. Draft performance evaluation report on the PSA has been prepared and will go to the Board of Trustees at the April 2 nd 2012 Board meeting.
28	Change Order Management and Controls	Submit requests for changes to scope, schedule, or budget to the Board.	●	Maintenance of Board approvals on contracts and change orders in records contained in the program/project documentation control system is poor and needs to be better maintained.	Recommendation 47: The District and its consultant should ensure that all change requests approved by the board are properly logged into the system. Recommendation 48: The District should consider adopting the provisions of UCCA to enhance staff's ability to deliver smaller projects quickly.	Agree in part. Findings for #47 are not accurate.	47) Change orders are presented to the Board, and when approved by the Board, they are entered into Prompt. 48) Disagree. See item #6, recommendation #17.	Consultant's Senior Project Managers	Change orders are presented to the Board, and when approved are entered into PROMPT.
29	Change Order Management and Controls	Maintain a potential change order log tracked by change order category.	●	The District has opportunities to improve its use of available information in Prolog and Prompt to better forecast and track "estimates at completion". The District should evaluate options to	Recommendation 49: The District should work with its consultant to gain an understanding of the report functionality contained in the ProLog system and to determine if there is a way to transfer information between the ProLog and Prompt systems to improve reporting capabilities related to anticipated funding	Agree in part	49) The suggested action plan is to have the Consultant provide the District with a "refresher" training course in ProLog and Prompt to be able to more readily locate reports and identify the need to improve reporting capabilities. The Prompt budget tracking sheets now show all updates and indicate what changes were made on which date. Consultant could look into the possibility	Consultant's Senior Project Managers	PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.

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				improve the reporting of project cost forecast compared to the current data being provided / tracked by combining data from Prolog and Prompt.	needs and change orders.		of including ProLog on the Prompt dashboard.		
30	Constructability Reviews	Use a formal quality management system.	●	Constructability reviews are not being done effectively. Typical problems with the reviews include lack of adequate evaluation of conflicts between disciplines, lack of addressing of all comments by the design team, and lack of adherence to industry best practices by conducting constructability reviews during early stages of design on selected projects.	Recommendation 50: The District should consider obtaining input from local "trade" contractors as needed to assist in the constructability reviews of higher-risk or more complex projects and at 100 percent DD and architectural milestones in CD. Recommendation 51: The District should require that architects of engineers fully respond to all comments for the construction manager to verify that these are complete and allow them to determine how they will affect the project's budget or scope. If the time provided for response is insufficient, the District should allow more response time for these consultants to fully and completely address all items and obtain approvals by users. Recommendation 52: The District should consider requiring more in-depth and frequent reviews by its consultant of projects based on the risk or complexity associated with these projects.	Agree in part	50) May be difficult to implement. Specialty contractors would likely be disallowed from bidding and restrict their ability to participate. May also be seen by industry as receiving unfair advantages. Liability of contractors may limit their desire. 51, 52) District already requires architects to address all comments. Perhaps include costs in new contracts to require this effort by independent third party and assign a dollar value to that effort. Note: For the Large Capital Projects, the Lease Leaseback contractors will perform constructability reviews for completeness, clarity, consistency and coordination of the documents. After performing these constructability reviews, the Lease Leaseback contractors are ensuring that the construction documents are as free as possible of ambiguities, conflicts, or omissions in the documents such that the Lease Leaseback contractor can provide a guaranteed maximum price for construction with a minimal allowance.	Consultant's Senior Project Managers	Design teams are required to address all constructability review comments.
34	Financial Management—Integration with District's Accounting and Purchasing System	Implement an electronic progress payment system.	●	Implement electronic workflows for purchase orders and payment requests.	Recommendation 60: The District should continue working with its software implementation team to restore the electronic work-flow process that existed with the prior accounting system.	Agree	60) Suggest utilizing former system of electronic flow of purchase orders and invoices. District is still working with Banner to try and implement Banner work flow system by August 2010.	Consultant's Accountants	Electronic workflow for purchase orders has been implemented in Banner. Electronic workflow for invoices has been implemented.
35	Financial Management—Integration with Project Management and Reporting	Implement a work breakdown structure to measure project deliverable progress.	●	Difficulties have been encountered when trying to use Project Approval Documents or Prolog systems to obtain current Work Breakdown Structure budgets and costs. Information is often out of date.	Recommendation 61: The District should work with its consultant to identify ways to improve the frequency with which the WBS information is updated and stored electronically.	Do not Agree	61) Projects are already broken into phases that are sufficient for the size and scope of the type of projects in the Measure C program.	N/A	No action required.
36	Financial Management—Integration with Project Management and Reporting	Adhere to the established and Board-approved budget.	●	Difficulties with obtaining updated financial information in Prompt.	Recommendation 62: The District needs to work with its consultant and accounting staff to determine if there are ways to improve the timeliness and accuracy of information and reports in the Prompt system.	Agree in part	62) Current Banner system requires a "work around" to allow two log-in's and the use of a "data warehouse" while an electronic link with Banner allows for data transfer. Work is underway and should be completed by end of Aug.	Consultant's Accountants	Timeliness and accuracy of accounting data is electronically transferred from Banner to PROMPT via a "data warehouse" that is adequate for reporting and management needs of the Measure C projects. Revisions to Banner to further enhance the transfer of data is in process and will be accomplished as time and resources permit.

Finally, in some areas, the team found that the District had areas of weakness that were creating obstacles to successful, efficient, or effective project delivery. Resolving these issues first should be a priority based on the team's assessment. These areas were as follows.

Item	Functional Area	Best Practice Description	Eval.	Issue Affecting Operational Efficiency	MGT Recommendation	District Response	District Plan of Action	Lead	Action
7	Technology Exploitation	Provide bond oversight and managers with timely, accurate, and detailed reports.	●	Accurate and updated reports are not available to managers because available systems (Prompt and Prolog) are not being used to the fullest extent possible.	Recommendation 18: The District needs to work together with its consultant to identify ways to improve the reporting process and use of key systems to identify goals, objectives, and annual targets for reporting purposes. Reports should include data and charts to demonstrate changes (negative or positive) in performance through the year, and future plans to correct past or current deficiencies.	Agree	18) Consultant to provide the District with a "refresher" training course in ProLog and Prompt to be able to more readily locate reports and identify the need for any custom reports.	Consultant's Senior Project Managers	PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.
13	General Project Management and Governance, Oversight	Create and update a resource-loaded master schedule.	●	Multiple issues identified: 1) The District lacks a means of tracking consultant staff assigned to projects. 2) Tracking systems do not allow measurement of value added by consultant staff nor is there a metric regarding staffing workloads. 3) Although a master schedule is maintained, resources assigned to the master schedule are not kept current. 4) There is lack of clarity regarding project sponsors. The organization chart which describes the role of the project sponsors is not on the web site or in the policy and procedures documents.	Recommendation 28: The District should direct its consultant to provide and maintain a matrix that clearly identifies staff assignments and level of effort expected from consulting staff by reporting periods (quarter and year). The District can then use this matrix to assess staff assignments and performance, to compare against benchmarks or prior performance. Recommendation 29: The District should ensure that it clearly identifies the roles, responsibilities, and duties of project sponsors and bond-staff in its policy documents. It should update this document as changes occur to roles or positions. Recommendation 30: The District should ensure that its master schedule is updated for all key elements, including resources as scope, budget, or schedule changes occur.	Agree on Items #1, #2, #3 Agree in part on Item #4	28) G-M staffing plan is an exhibit to the contract. The District currently monitors performance on a monthly basis to track progress. Resource-loaded schedules are prepared annually. 29) Complete and update Section 3 of Policy & Procedure manual 30) Project master schedules are updated monthly. Resource loading does not adjust monthly, solely the tracking of resources utilized vs. the yearly resource established by contract.	Consultant's Senior Project Managers	A CWDW fees status report has been created to track and report by project and for the Measure C program. Project schedules are updated monthly. Resource loading is updated quarterly. Section 3 of the Policy & Procedures Manual will be updated as time and resources permit.
19	Delivery Methods	Define construction requirements and project roles prior to project initiation.	●	The Project Approval Document (PAD) that is currently used by the District to define project objectives at initiation of the project has the potential to represent a good and strong practice. However, in its current form, it tries to incorporate too much information and requires too many sign-offs to be an effective document.	Recommendation 32: For smaller or medium-sized projects, the District may wish to consider modifying the PAD requirements so that only one iteration of the document is required, rather than requiring approval at each phase, or to limit the number of staff who review and approve PAD documents for smaller projects. Recommendation 33: The District may wish to delegate approval for PAD changes to the bond managers or facility director, so that if changes to scope, schedule, or budget are required, the consultant will only have to route the document to a sole point of contact for one signature. Recommendation 34: The District should determine if there are options to route the PADs electronically (for example, by creating a document warehouse for these documents that appropriate staff has access to). Recommendation 35: The District should ensure that it tracks changes on PAD documents so that the documents reflect current as well as historical information and are concurrent with design phases.	Agree	32, 33, 34, 35 & 36) Update the Policy & Procedures Manual to delegate approval of changes to the PAD document for scope, schedule, or budget to the Bond Directors up to some agreed-upon dollar limit. Include PADs in the electronic workflow.	District Bond Directors	Streamlined format and content for Project Approval Documents (PAD) has been standardized.

Item	Functional Area	Best Practice Description	Eval.	Issue Affecting Operational Efficiency	MGT Recommendation	District Response	District Plan of Action	Lead	Action
					Recommendation 36: The District should consider implementing procedures to limit the amount of changes that end users can make to this document once all parties have signed off and approved the document.				
31	Financial Management—Technology Exploitation	Make bid documents available online.	●	The District currently uses the Bay Area Purchasing System to publish bid documents. This system is on-line, however, the system publishes only the announcement of the bid and not the bid documents. Commercial software is available to facilitate publishing bid documents online to reduce the administrative burden and cost of copying hard copy documents to mail to prospective bidders.	Recommendation 53: The District should explore options, including looking at purchasing software or subscriptions to online services, to publish bid documents online and help reduce administrative costs and to expand the pool of potential bidders and subcontractors.	Agree	53) Consultant and Bond Directors to meet with Purchasing to review commercial software or on-line services to better distribute bid documents. District Purchasing will initiate a Pilot study utilizing the Bay Area Purchasing System (BAPS) to post construction documentation and plan holder lists. Develop procedures and include them in the Policy and Procedures Manual	District Bond Directors	Specific projects have been identified to post bid documents online.
32	Financial Management—Technology Exploitation	Board and Committee should monitor all direct and indirect costs.	●	Tracking indirect and soft costs, including overhead and staff allocations has been hampered while implementing the new banner accounting system. Until an electronic link is established between Banner and Prompt, delays in reporting and tracking direct and indirect costs have been experienced. Additionally, Plant Services "charge backs" for direct labor performed by craft personnel has been delayed due to recording and reporting difficulties.	Recommendation 54: The District and consultant staff should work with the District's Accounting and Plant Services departments to identify ways to streamline the collection and reporting of District staff charge-backs to projects. Recommendation 55: The District should provide sufficient information to project managers to allow them to reasonably account for anticipated charges, while still meeting the District's requirements for employee confidentiality related to salary data (for example, the District could consider using a standard hourly rate for all charges). Recommendation 56: The District should explore options in its new accounting software to determine if more timely information related to charge-backs can be provided for staff and consultants managing bond projects.	Agree	54, 55, 56) Re-establishing the electronic link between Prompt and the District's accounting system is a 3 step process: 1) the link was broken with the old system, 2) an electronic "work-around" was to be established while Banner stabilized, and 3) the direct electronic link would be reestablished. Steps 1 and 2 are complete and work on step 3 is currently scheduled to begin in late July/August 2010. By completing step 2, the access to data within 48 hours of posting was re-established. This provides a more timely view and reporting on labor charges, legal charges and other indirect costs of the program.	Consultant's Accountants	An electronic link has been re-established between Banner and PROMPT. Additional functionality between Banner and PROMPT is in process and will be implemented as time and resources permit.
33	Financial Management—Technology Exploitation	Adopt and use a project control system on all projects.	●	Two systems are used to track project related information, Prompt and Prolog. The systems are not always current and up to date and sometimes have conflicting information. Improvements are needed in the consistency and reliability of the data in the two systems and in the effectiveness of reports provided to managers from the systems.	Recommendation 57: The District needs to work with its consultant to identify ways to improve processes for updating documents in the Prompt and Prolog systems. Recommendation 58: To the extent that data is already in the system, but in separate reports and not in the format needed by District staff, the District should work with its consultant to design usable reports that meet bond managers and stakeholder needs. Recommendation 59: The District should task a staff member with reviewing a sample of projects in Prolog each month to ensure compliance with the above.	Agree	57,58,59) See responses to items 7 and 32	Consultant's Senior Project Managers	PROMPT training was completed on Sept. 27 & 28, 2010. Prolog training is provided on each project at the start of construction.