| | | 2016 Bond Performance Audit Recommendations | | |
|------|-----|---|---------------------|----------|
| Year | # | Abbreviated Recommendation | Response | Status |
| 2016 | 1 | Update monthly project budget projections in timely way and include ROM estimates of potential changes. | Concur | Complete |
| 2016 | 2a | CM/GC contracts to require proactive participation of CM/GC with architect. | Nonconcur | Complete |
| 2016 | 2b | Ensure GMPs are executed at contractually proscribed point in design. | Concur with comment | Complete |
| 2016 | 3 | Ensure GMP amendments are consistent with applicable law and policy. | Completed | Complete |
| 2016 | 4 | Consider increases for general conditions work for change orders only when time is extended. | Concur | Complete |
| 2016 | 5a | Provide a format in e-Builder for processing CM/GC contract changes quickly. | Completed | Complete |
| 2016 | 5b | Ensure that CM/GC change orders and draw downs receive appropriate approvals. | Completed | Complete |
| 2016 | 6 | Provide more information to evaluation committee to help in scoring proposals. | Completed | Complete |
| 2016 | 7 | Complete any VE, scope reductions, budget increases, etc by end of SD. | Completed | Complete |
| 2016 | 8a | Modify SOPs to add more specific project contingency ranges at different design stages. | Nonconcur | Complete |
| 2016 | 8b | Modify SOPs to add more specificity on how program provides project budget oversight. | Nonconcur | Complete |
| 2016 | 8c | Develop comprehensive and detailed PTMP templates for renovation projects, new construction projects, and IP work. | Concur with comment | Complete |
| 2016 | 8d | Hold PMs accountable for creating PTMP prior to beginning SD phase (at latest). | Concur with comment | Working |
| 2016 | 8e | Develop and record lessons learned from completed projects. | Completed | Complete |
| 2016 | 9 | Modify SOPs to add specific guidelines for line item budgeting for master planning. | Nonconcur | Complete |
| 2016 | 10a | Assess reasons for IP projects bidding over budgets. | Completed | Complete |
| 2016 | 10b | Start design of IP projects earlier and issue ITB earlier. | Completed | Complete |
| 2016 | 10c | Add minimum quals for designated systems into bid specs. | Concur | Complete |
| 2016 | 11a | Provide greater oversight of program during transition period. | Completed | Complete |
| 2016 | 11b | Update the PMP/SOP, and train/require staff to use it. | Concur with comment | Working |
| 2016 | 12 | Evaluate effectiveness of CM/GC and consider other delivery models. | Completed | Complete |
| 2016 | 13 | Procure CM/GC by beginning or mid-point of schematic design. | Completed | Complete |
| 2016 | 14 | Complete Ed Specs sufficiently ahead of master planning for projects. | Completed | Complete |
| 2016 | 15 | Allow CM/GC to procure subcontractors by competitive quote up to defined dollar limit without prior approval of district. | Completed | Complete |

YearSummary of Recommendations201624 Recommendations, 22 completed

2016

Percent Completed **92%** Completed

Status Notes on Recommendations Not Completed

Final PTMPs have been completed for Kellogg, Madison, Lincoln and Benson. OSM has published a Standard Operating
Procedure that requires completion of a PTMP before projects can proceed into SD Phase, but is working on how best to ensure compliance.

The PMP/SOPs are reviewed and updated on an annual basis (please see 2017 audit findings for comment on most recent updates). Comprehensive trainings were last provided in 2015. OSM is currently working on an updated PMP and SOPs, and 11b

2016 11b training staff as part of the update process. OSM will be requiring staff to acknowledge receipt and review of the PMP and SOPs as published and on no less than an annual basis.

| 2017 Bond Performance Audit Recommendations | | | | |
|---|-----|--|---------------------|----------|
| Year | # | Abbreviated Recommendation | Response | Status |
| 2017 | 1 | Utilities for unoccupied sites should be paid for by the contractor. | Concur with comment | Complete |
| 2017 | 2 | Provide contingency in bond program budget for unforeseen scope changes. | Concur with comment | Complete |
| 2017 | 3a | Do outreach to contractors. | Concur with comment | Complete |
| 2017 | 3b | Research why contractors don't want to bid on PPS projects. | Concur with comment | Complete |
| 2017 | 4 | Develop a BIM model that works for both OSM and FAM. | Completed | Complete |
| 2017 | 5 | P&C and legal counsel to review all proposed contract changes. | Concur with comment | Complete |
| 2017 | 6 | Reduce profit and overhead percentages for change orders. | Concur with comment | Complete |
| 2017 | 7a | Additional GMP contingency only allowed for scope increases. | Concur | Complete |
| 2017 | 7b | Notify contractors of personnel's limits of authority. | Concur | Complete |
| 2017 | 8 | Start projects earlier and allow more time contingency in project schedules. | Concur with comment | Complete |
| 2017 | 9 | Hold CM/GC accountable for GMP. Identify what changes must be covered in the GMP. | Concur with comment | Complete |
| 2017 | 10 | At time of GMP amendment, identify alternates that could be added back later at the same price. | Concur | Complete |
| 2017 | 11 | Audit FHS and RHS CM/GC monthly billings. For GHS, evaluate benefit of monthly audit of billings against a schedule of values vs billings of actual costs. | Concur with comment | Complete |
| 2017 | 12 | Amend Heery contract to reflect levels of financial authority for Heery personnel. | Concur | Complete |
| 2017 | 13a | Reduce employee turnover. | Concur with comment | Complete |
| 2017 | 13b | Provide promotional opportunities when vacancies occur. | Concur with comment | Complete |
| 2017 | 14a | P&C should stop scoring cost of work in CM/GC proposals and only score proposed fees. | Concur | Complete |
| 2017 | 14b | Review and negotiate profit and overhead rates to ensure they are industry-standard. | Concur | Complete |
| 2017 | 15 | Update the PMP/SOP, and add a template for the PTMP. | Concur | Working |

Year Summary of Recommendations

2017 **19** Recommendations, **18** completed

Percent Completed **95%** Completed

Status Notes on Recommendations Not Completed

Preliminary draft of the October 2019 PMP update has been distributed to operational staff for review. A template for the
 PTMP was previously provided as part of the PMP; it has now been revised to better address project needs. SOPs are being developed on prioritized basis and rolled out bi-weekly at PM/CM dept meeting.

Recommendations Marked as Complete Since Last Reporting

The FHS and RHS closeout audits are complete. Work to evaluate benefit of monthly audits of billings against schedule of

2017 11 values indicated that it would be beneficial to proceed with monthly audits. Such audits took place with Grant and have since been implemented for all CM/GC projects.

| 2018: FHS/RHS Construction Audits Controls Recommendations | | | | |
|--|----|---|---------------------|----------|
| Year | # | Abbreviated Recommendation | Response | Status |
| 2018 | 1 | Require documented review and approval of all agreed upon self-performed work cost and pricing. Where insufficient competitive bidding is available for establishment of self-performed subcontract price: a) obtain independent cost analysis to support self- performed work pricing and negotiate a fair and reasonable price and/or b) price lump- sum work on a not-to-exceed cost reimbursable basis on future projects. Obtain self- performed work subcontracts to better establish self-performed work scope, pricing and payment terms. [FHS #12] | Completed | Complete |
| 2018 | 2 | Require visibility and reconciliation of project management systems and accounting systems of record utilized for project cost accounting and subcontractor payments. [FHS #13] | Concur with comment | Complete |
| 2018 | 3a | Perform quarterly review of project change order files for application of expected cost analysis and related approval requirements. [FHS #14] | Concur with comment | Working |
| 2018 | 3b | Add approval controls designed to prevent proceeding with work prior to full vetting of project design along with related budget. Verify architect progress against key milestones to help ensure timely and complete project work scope inclusion in plans. To prevent untimely and expensive owner-directed changes, require further approval controls for work scope modification. [FHS #14] | Completed | Complete |
| 2018 | 4 | To strengthen existing District controls over system information integrity and consistent with good payment application approval control practices, prior to each payment require eBuilder to include monthly secondary review of the reconciliation between District electronic records to Contractor cumulative payment application contract totals, commitments and costs incurred. [FHS #15, RHS #12] | Concur | Complete |
| 2018 | 5 | Require consistent and compliant application of contract rates to deduct change orders. [FHS #16] | Concur | Working |
| 2018 | 6 | On future projects, require contractors to identify and account for changes by contract line item and in compliance with contract requirements. Require maintenance of an allowance log that specifies budget as included under the GMP schedule of values, cost support for proposed uses of allowance amounts, approved allowance amounts used along with approval documentation by project allowance item. [FHS #17, RHS #13] | Concur | Working |
| 2018 | 7 | Verify application of the contractual requirement for fixed fee calculation. [FHS #18] | Concur | Working |
| 2018 | 8 | For future projects, add approval controls designed to prevent proceeding with work prior to full vetting of project design, along with related budget and to reduce owner- directed changes, where possible. [RHS #10] | Completed | Complete |
| 2018 | 9 | Implement construction program oversight controls to document verification of independent cost analysis performed on self-performed work procurements, when District competitive bidding procedures are not applied. [RHS #11] | Completed | Complete |
| 2018 | 10 | District project management personnel should require visibility, timely access and sign- off on work cost application applied by the Contractor. [RHS #14] | Concur with comment | Complete |

Year Summary of Recommendations

2018

Percent Completed

11 Recommendations, 7 completed

64% Completed

Status Notes on Recommendations Not Completed

2018 3a OSM is developing a Standard Operating Procedure for internal audits of change order files. This audit observation noted change order mark-ups had not been applied consistently to deductive changes. OSM is 2018 5 reviewing the Standard Operating Procedure for change requests to ensure that this issue is addressed as part of project staff

review of change orders.

Status Notes on Recommendations Not Completed

| 2018 | 6 | OSM is reviewing whether allowance-tracking systems implemented in eBuilder after this audit finding address the concerns noted in the report. |
|------|----|---|
| 2018 | 7 | The audit observed the potential for fee calculations to become inaccurate over time as change orders are processed. OSM is working on modifying template contract language to require updated fee calculations based upon final cost of the work. |
| | | Recommendations Marked as Complete Since Last Reporting |
| 2018 | 1 | The District's contract terms identify how both competitive and non-competitive self-performed work shall be specifically procured, including the use of an independent cost estimate to verify appropriate pricing. Since this audit was completed, OSM now also requires project staff to utilize third-party cost estimates for reconciliation against GC estimates at all major design phases and GMP. |
| 2018 | 2 | The District's contract terms and conditions now include clauses to ensure visibility of and access to GC accounting system and contract records by the District. |
| 2018 | 3b | Early projects proceeded through design phases without a proscribed process for reconciling project design and budget. OSM has implemented a Design Phase Approval process that requires reconciliation of the project design, schedule, cost estimate, budget and stakeholder engagement prior to approval to proceed into the next phase of design. This process compels the project team to fully address all known design / budget inconsistencies, and does not allow for unresolved issues to progress through design phases. |
| 2018 | 4 | OSM developed a proscriptive monthly pay application review process for all GMP contracts that requires reconciliation of pay apps on a monthly basis, streamlines and organizes pay application materials into an easily auditable format, and reduces confusion on allowable costs. This pay application review is performed by a new Project Accountant, who also ensures reconciliation of project encumbrances to expenditures, as well as ensuring that the software systems eBuilder and PeopleSoft are up-to-date. |
| 2018 | 8 | Similar to Recommendation #3b above, the audit observed a high percentage of change orders were design related. Though there are multiple causes for this, a significant driver was due to late design changes in order to reduce costs. OSM implemented a Design Phase Approval process as noted above to help control this risk and reduce design related change orders. |
| 2018 | 9 | Similar to Recommendation #1 above, OSM has implemented contract changes and third-party cost estimating to comply with this recommendation. |
| 2018 | 10 | The audit observed a lack of transparency of categorization of some general conditions expenditures between reimbursable or lump sum categories. As recent projects have moved away from lump sum general conditions this is less of a concern, however the pay application review process that was developed after this audit and is undertaken by the Project Accountant provides the necessary scrutiny and sign-off on work cost applications. |

| | 2019 Phase 1 Bond Performance Audit Recommendations | | | |
|-----------|---|---|----------|----------|
| Year | # | Abbreviated Recommendation | Response | Status |
| 2019 Ph I | 1 | Develop and consistently apply a formal cost estimation methodology across projects regardless if developed in-house or by external consultants, including documentation of the reasons for any deviations from the established methodology. | Concur | Complete |
| 2019 Ph I | 2 | Compare and analyze cost estimate assumptions and factors with historic practices and other comparable bonds or districts to determine whether adjustments to estimation methodology seem warranted. | Concur | Working |
| 2019 Ph I | 3 | Establish a central location to retain final estimates at each project phase (master planning, schematic design, design document, construction documents), including any supporting documentation used to develop each estimate. | Concur | Complete |
| 2019 Ph I | 4 | Discuss comparison of cost estimation methodology used with past PPS experiences, current market conditions, and estimates developed by peer districts when presenting cost estimates to the Board and public stakeholders. | Concur | Working |
| 2019 Ph I | 5 | Categorize the reasons for variances in project costs, and aggregate those changes to the program-level to provide information on why costs varied from original bond, as well as report this information to the Board and public stakeholders. | Concur | Complete |
| 2019 Ph I | 6 | Conduct an analysis to determine to what degree various factors, especially scope changes and changes in construction costs, caused an increase in construction costs for the 2017 Bond projects. This could include comparing assumptions used across various project milestone reports and/or reconciling line items amounts to subcontractor bids. | Concur | Complete |
| 2019 Ph I | 7 | Analyze results of variances to make adjustments to future estimation models and methodology as well as to analyze whether changes are needed in the delivery of projects to ensure stronger cost containment. | Concur | Complete |
| 2019 Ph I | 8 | Ensure project milestone reports use consistent data across all projects and clearly identify deviations. | Concur | Complete |

Year Summary of Recommendations

2019 Ph I 8 Recommendations, 6 completed

Status Notes on Recommendations Not Completed

2020 Bond planning efforts for modernization projects (as seen in the 2020 Conceptual Master Plan projects for Jefferson HS, Wilson HS and Cleveland HS) have utilized professional cost estimators for hard costs. These professional cost estimators also provided recommendations for escalation and soft costs. Soft costs have been reviewed against the cost estimating 2019 Ph I 2 methodology already established by OSM, and have been reviewed against historic performance. Escalation and soft cost assumptions are being reviewed with the Bond Accountability Committee per their revised charter, prior to use for bond planning. Once 2020 Bond planning efforts are complete, this recommendation will be marked as complete. Ongoing discussion of cost estimation methodology using past PPS experiences, current market conditions and professional 4

2019 Ph I

cost estimators is occurring with the Bond Accountability Committee and Board members as part of 2020 Bond planning efforts. Once 2020 Bond planning efforts are complete, this recommendation will be marked as complete.

Percent Completed

75% Completed

| Year | # | 2019 Phase 2 Bond Performance Audit Recommendations Abbreviated Recommendation | Response | Status |
|----------------------|----|---|----------------------------|--------------|
| Tear | π | | пезропзе | Status |
| 2019 Ph 2 | 1 | Develop a written plan for establishing and prioritizing corrective actions needed to | Canaur | Complete |
| | 1 | address project delivery issues related to change orders, contractor invoices, and other | Concur | Complete |
| | | recommendation noted in prior audits of 2012 Bond projects. | | |
| | | Develop a written plan or strategy for identifying and incorporating additional funding | | |
| 2019 Ph 2 | 2 | options if future bond funds are not available and regularly communicate and discuss | Complete | Complete |
| | | progress with the Board and Bond Accountability Committee | | |
| | | Ensure cost estimates are fully documented with underlying support and rationale used | | |
| 2019 Ph 2 | 3 | for soft costs and FF&E - in addition to other cost components - including variations or | Concur | Working |
| | | deviations from stated methodology. | | |
| 2019 Ph 2 | 4 | Implement the new cash flow planning process as intended at the start of the Fiscal | Concur w/ comment | Working |
| 2019 PH 2 | 4 | Year 2019-2020, and update cash flows regularly. | concur w/ comment | Working |
| | | Immediately allocate and concentrate efforts on completing the overdue Fiscal Year | | |
| | _ | 2018-2019 reconciliations between e-Builder construction management system and the | | Working |
| 019 Ph 2 | 5 | PeopleSoft financial system, as well as ensure future reconciliations are regularly | Concur | |
| | | performed in a timely manner | | |
| | | Update and re-issue the PMP, in addition to individual school PTMPs, as well as | | |
| 2019 Ph 2 | 6 | consider developing quick tools, guides, and checklists to help project teams implement | Concur | Working |
| .0131112 | Ū | the protocols identified in the PMP and PTMPs. | concur | WORKING |
| | | Formally communicate, clarify and train OSM project teams and individuals involved | | + |
| 2019 Ph 2 | 7 | | Concur | Working |
| 2019 Ph 2 | 7 | with project delivery on existing document management protocols including | Concur | |
| | | requirements and expectations for usage. | | |
| 019 Ph 2 | 8 | Standardize design deviation logs by identifying consistent information to be | Concur w/ comment | Complete |
| | _ | maintained for each project and ensure approvals are documented | , | |
| 019 Ph 2 | 9 | Establish a tracking mechanism to store proposed changes to Ed Specs and Design | Concur w/ comment | Working |
| 0151112 | , | Standards in an accessible location | | working |
| | | Supplement the "Decision Making Hierarchy" process with written guidance on what | | Working |
| 019 Ph 2 | 10 | decisions to bring forward and elevate beyond the project team as well as train project | Community and the second | |
| 019 PH 2 | 10 | teams on standard practice for value engineering deviations - as well as Ed Spec and | Concur w/ comment | |
| | | Design Standard deviations | | |
| | | Better document lessons learned by: categorizing lessons learned log items into | | |
| | | separate subcategory section allowing project managers to more easily identify relevant | | |
| 2019 Ph 2 | 11 | items; and summarizing lessons learned and regularly distribute or discuss items with | Concur | Working |
| | | project teams. | | |
| | | | | |
| Year | | Summary of Recommendations | Percent Completed | |
| 2019 Ph 2 | | 11 Recommendations, 3 completed | | |
| 019 PH 2 | | 11 Recommendations, 5 completed | 27% Completed | |
| | | | | |
| | | Status Notes on Recommendations Not Completed | | |
| | | OSM is working on revising its Standard Operating Procedure (SOP) on cost estimating to | o specifically require wri | tten |
| 2019 Ph 2 | 3 | documentation supporting cost estimates, in addition to continuing to direct project ma | nagement staff in best p | oractices. O |
| | | the SOP has been finalized, this recommendation will be marked as complete. | | |
| | | | | |
| | | OSM has completed implementation of a standardized, monthly, project cash flow plann | | |
| | | projects using e-Builder. Implementation is in progress with Health and Safety projects. | | |
| 2019 Ph 2 | 4 | occur in a month's span, program management cash flow planning has historically been | performed on a quarter | ly basis, an |
| | | will remain on that timeline. Once all H&S projects are regularly completing monthly case | h flow plans, this recom | mendatior |
| | | will be marked as complete. | | |
| | | OSM hired an additional financial analyst in 2010. Personalitations are now consistently a | ompleted within 20 day | s of prior |
| | 5 | OSM hired an additional financial analyst in 2019. Reconciliations are now consistently c | • | • |
| 2019 Ph 2 | | month closing. Outliers found through these reconciliations are addressed in a timely m | | |
| 019 Ph 2 | | the initial backlog of reconciliations, some outliers from prior fiscal years were discovered | d. OSM is waiting until t | hese outlie |
| 019 Ph 2 | | | | |
| 2019 Ph 2 | | have been addressed before marking this recommendation as complete. | | |
| 2019 Ph 2 | | | taff for review. Once thi | s issuance |
| 019 Ph 2 019 Ph 2 | 6 | Preliminary draft of the October 2019 PMP update has been distributed to operational s | | |
| | 6 | | | |

Status Notes on Recommendations Not Completed

This recommendation is under review by the AIT. OSM has also ordered and is in the process of distributing PPS computer

- 2019 Ph 2 7 equipment for all non-PPS staff; OSM will then require that all PPS-related work be performed on PPS equipment utilizing PPS document management systems.
- 2019 Ph 2 9 This recommendation is under review by the AIT.
- 2019 Ph 2 10 This recommendation is under review by the AIT. OSM is developing decision examples and working with project staff to identify inconsistencies or questions that will need to be addressed by the guidance.
- 2019 Ph 2 11 This recommendation is under review by the AIT. OSM has met with project staff to discuss preferred format/structure of a lessons-learned document to ensure best usability. Program staff are reviewing options for development.

Recommendations Marked as Complete Since Last Reporting

2019 Ph 2 8 A Standard Operating Procedure (SOP) for Design Phase Approvals has been published to staff that includes an approved template for design deviation logs.