

STATUS AND RESPONSE TO ARTHUR ANDERSEN'S STUDY OF

CONSTRUCTION MANAGEMENT PRACTICES – ANCHORAGE SCHOOL DISTRICT Revised 8/7/00

The Arthur Andersen study of construction management practices of the Anchorage School District, submitted to the Anchorage Assembly in February, 1999, identified a number of issues with current construction practices. The following is the current status and response to these issues.

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| 1 | Nine elementary and middle school construction projects funded by '93 and '94 bond issues and legislative grants in the amount of \$186,453,00 were completed with a balance remaining of \$15,703,000. | ASD prepare a benchmarking study to evaluate the reasonableness of budgets for proposed capital projects and should better refine its budgets prior to public votes on bond propositions. | AGREE | ASD is regularly reviewing prior construction costs of entities' projects to develop a benchmark for various components of the work, such as design services. For professional estimators figures, if the projects have been selected. ASD agrees that benchmarking is valuable for The Alaska Department of Education and Early Development. ASD is developing a standard cost estimating system, in conjunction with I estimating firm. The DEED cost models cover new school renovation and remodels. This cost format and used in all capital improvement projects that are utilized or debt reimbursement. This applies to nearly all of the projects to the DEED model, ASD uses professional cost estimators to determine the project cost to include on the bond issue from prior projects to validate cost estimates. |
| 2 | Some projects were awarded prior to all permits being in place. Also, incomplete or inaccurate plans have led to change orders and claims that could have been avoided. | ASD improve its planning process to avoid downstream negative effects on design and construction and should establish more realistic time lines leading to the release of documents for bidding construction work. | AGREE | ASD is addressing this problem by incorporating increased planning and design in current bond issues. An example is the high schools in the 1997 bond issue, and planning after 1997. Also, all major projects are now scheduled to plan, design, obtain School Board and Assembly approval, and occupy. On the Dimond High project, an expert was hired to develop a design and pre-bid time schedule. The architectural services requires the project architect to develop a Schedule, which includes all phases of design, permit and occupancy. This schedule must be updated with changes to improve the quality of plans and specifications. Facilities hire an experienced construction inspector to do comprehensive coordination, completeness and adequacy. Facilities hire a cost estimator to do constructability and value engineering reviews, both of which are included in the design of plans for construction. With the recent updating of specifications, architects are receiving more information during the design process to design to a consistent standard for school construction. |

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| 3 | There were instances during construction of the Mirror Lake and Goldenview Middle Schools where charges in excess of \$100,000 were added to existing contracts. | ASD should closely review its procurement practices and modify its policies and procedures to avoid additions of out of scope work. In addition, ASD should conduct further study to determine if instances of “out of scope” work” added to contracts was isolated to those encountered or if there is a more pervasive pattern of not following ASD’s procurement policies and procedures. | PARTIALLY AGREE | The School Board has completed its review and updated the Board Policy relating to Procurement. <u>Extensive</u> initiated by the District Administration and School Board <u>changes</u> . These changes help to clarify and codify the <u>procures services</u> . The change orders on the Middle School \$100,000 were not out of scope, but dealt with complex road work. <u>All other major projects</u> have been reviewed ASD policies being circumvented. |
| 4 | The ASD Purchasing Department is responsible for preparing, advertising, and recommending award of construction contracts. Procurement decisions are being made by ASD Facilities without the authorization of the Purchasing Department, especially with respect to change orders. | ASD should review its policies and procedures to insure that : -Purchasing, not Facilities, should not be responsible for contract or change order signature authority. -Advance written approval for any change orders over \$250,000 -Purchasing needs to be involved in any change order, and should approve change orders over \$50,000. | PARTIALLY AGREE | The School Board has modified section 700 of Board approval of change orders greater than \$250,000. Also requires that the Purchasing Contracting Officer be <u>decision making on any change orders</u> to verify that they identified in the Policy. |
| 5 | ASD has used the design/build procurement process for some school construction projects, with no reference to it in the Project Administration Manual <u>or School Board Policy.</u> | ASD should update its existing Project Administration Manual to incorporate design/build method of procurement. | AGREE | The School Board has modified section 700 of Board design/build as an alternative procurement method. <u>Being refined in the current revisions to the Project Administration Manual are currently underway.</u> |
| 6 | The Auditors found it difficult to track the progress of each project through uniform schedules, updates, budget comparisons, forecasts, and status reports. | ASD should incorporate budget monitoring and status reporting by the project manager into the Project Administration Manual. Budget reports should be reviewed and kept in project files. ASD should incorporate mandatory status reporting by the project manager to the Director of Facilities or others, including schedule updates, budget status and construction progress as percent complete. | AGREE | Facilities has added a project support/accounting position control expenses, and to report regularly to the project Real time financial reports are regularly produced for the <u>necessary are immediately available.</u> Also, Facilities has “Expedition” project management software on all major maintains design clarifications, RFP’s and change order construction status schedules. This software and train project management staff. <u>Status reporting on all major monthly basis. More frequent reports are submitted on of established financial or time limits.</u> |

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| 7 | ASD has a well developed set of written policies and procedures, though some of them need change. For example, Section 1/1 of the Project Administration Manual states that “These standards may be modified as needed to meet unique requirements of the project”. This allows too much discretion to vary from the policies and procedures. | ASD should perform a comprehensive review of its policies and procedures to determine areas that should be changed or updated. | AGREE | The School Board has made significant changes to Bo changes will be used are being used as a the basis for u Administration Manual. The <u>final</u> revision of this ma receiving the revised General Conditions that are curre outside contract management exper t consultant. |
| 8 | The Audit found numerous instances where contractor generated questions were not addressed in a timely manner and other instances where numerous contract modifications were allowed to build up before a change order was issued. | ASD should improve its responsiveness to change order requests and construction problems raised by contractors. | AGREE | Q Questions related to contract payments are being ans made on a timely basis, with the addition of a project <u>Large contract modifications or RFP’s are now proces small Contract contract modifications are now being a month before processing of combined as a combined ct promotes better tracking of RFP’s and combination of final version of the Project Administration Manual wi of project managers for managing the change order prc change order approval. The newly established Constr overseeing the adherence to the established timelines t project managers, as well as assisting in any problems</u> |
| 9 | Field office reviews of six ongoing projects found little consistency in documentation of change orders, pay applications, meeting minutes, daily construction reports and claims. Meeting minutes were not always prepared by the Project Manager. | ASD should modify project documentation to require: -meeting minutes produced by ASD representative and signed by Project Manager, with columns for Due Date and Description. -change order logs be consistent on all ASD projects, with change orders having written backup -documentation of clear contractual entitlement and written justification for each change order -daily report that identifies date, weather, equipment used, # of workers, subcontractors, work being performed by each trade, visitor names and any field directives -monthly report prepared by the project manager and distributed to the School Board and Assembly, including status of budget, schedule, and any anticipated problems with the project. | PARTIALLY AGREE | Facilities has established a project file index list to sta created assigned a full time position committed to mai Facilities has adopted the use of “Expedition” project 1 major projects. This software maintains design clarifi order status, meeting minutes and daily reports. This expanded to all project management staff. ASD contin minutes to be developed according to the requirements <u>prescribes the format and content of meeting minutes, orders, daily construction reports.</u> The decision of how be recorded is a part of the pre-construction process. It the responsibility to record meeting minutes to be dete project basis. Many contractors, for example, insist or because the meetings may include sub-contractors and contract. Project managers are responsible for insurin minutes, regardless of the party recording them. includ party responsible for resolution, and the expected date |

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| 10 | ASD has not held regular project evaluations to document “lessons learned” | Project management personnel should update a project management checklist to incorporate lessons learned in the management of future projects. | AGREE | Facilities has instituted the policy of holding post-oc constructed or renovated schools. The high school de weekly to collaborate on design issues and solutions projects. Facilities project staff meet with upper ma project status and knowledge gained from the various Facilities staff meet monthly to share project-related scheduling a Project Managers’ meeting in Septembe and intends to make this an annual meeting for review lessons learned from during the prior year. Facilities’ meeting. The lessons learned are captured in revision specifications, the design standards, the standard spec conditions and the Project Administration Manual. |
| 11 | The Audit found that responsibilities of project management staff should be more clearly defined with individual duties. Jobs did not have staffing lists with job descriptions. | ASD mandate the use of a staffing list for every project that lists each employee, by name, title, and detailed responsibilities. This list should be introduced and discussed at an in-house “kick-off” meeting prior to the start of any work. | AGREE | For every active project, Facilities designates respons These assignments are recorded on a master list of pr projects; additional staff, such as construction inspect the project manager- For the Dimond High project, beis -compiled, with assigned responsibilities. This completion of the Barba/Arkhn, Inc. update of the g procedures. Prior to commencement of each capital p construction “kick-off” meeting, in which the groun project are established and agreed to between ASD pe One of the agenda items in this meeting is the design each of the personnel on the project. The relationship management staff will be clarified in the work current Arkhn, Inc. The Dimond High project will be the f chart. |
| 12 | The Audit found that critical tasks such as obtaining necessary permits were not completed on either the Mirror Lake or and Goldenview Middle School Projects., utilities and infrastructure were not in place at the time of school construction. Sites should have utilities in place. | ASD should prepare a more flexible project schedule to allow interaction with other agencies, delays in permitting, changes in design, etc. ASD should allow for thorough site investigation before initiating any design work for utilities or infrastructure. ASD should work more closely with AWWU on utility construction. | DISAGREE | Facilities had already implemented a checklist proces The permitting issues at the two middle schools relat were resolved in a timely manner for work on the uti planning where possible to avoid other types of desig issues. The ASD site selection process favors sites th roads. In the absence of such a site, Facilities recogni with Municipal and utility agencies for timely install infrastructure.-An example is the South Anchorage A committee, which includes agency representatives fro departments, utility companies, and community cour successful in bringing the parties together to develop providing roads and utilities to this site. Facilities w committee approach to use on all future projects requi |

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| 13 | Some of the project managers have limited experience working for ASD and are unfamiliar with the procedures. There are no actual training requirements for employees. | Facilities Department employees should receive training on ASD's policies and procedures, particularly regarding procurement processes. | AGREE | For the past two years Facilities has held 2-day training administration for all project management staff. Once Project Administrative Administration Manual are re an additional training session will be held. <u>Staff will Barba/Arkton, Inc. in the new procedures for contract included in the updated General Conditions. For new provides an orientation in such matters as budgets, co structure, etc. Refresher training on policies and proc annual basis.</u> |
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| 14 | Facilities staff are not regularly evaluated. | ASD should implement a performance evaluation process of all construction management personnel to increase performance of individuals and add more accountability for project management decisions. | AGREE | Facilities staff have been directed to evaluate project 1. The Assistant Superintendent for Support Services will conduct evaluations in August, 2000. He will report his findings. In addition, Facilities will be soliciting evaluations of Facilities by individual construction project teams (architects/engineers) following this summer's construction season. |
| 15 | The audit determined that some architectural and engineering firms had to spend a great deal of time educating ASD construction managers on design issues because they were not involved in the design development. | ASD should establish closer communication and coordination between design management and construction management. | PARTIALLY AGREE | Prior to starting the design of a project, ASD manages to other agencies responsible for both large and small projects determines how the project will be managed. The decision process to use is predicated on the expertise of the project manager, with the goal being to produce the best overall project. Project managers are responsible for projects from "cradle to grave" and maintain responsibility throughout the design but have another construction project manager for completion. The professional staff of Facilities is now doing more "cradle to grave" management, particularly in the larger, high school projects. The employment of project managers with excellent skills during the construction phases of the projects. |