

**BOND REIMBURSEMENT & GRANT REVIEW COMMITTEE**

Wednesday, December 4, 2019

8:30 a.m. – 3:38 p.m.

Legislative Information Office Building, Anchorage

**APPROVED MEETING MINUTES**

**Committee Members Present**

Heidi Teshner, chair  
Rep. Tammie Wilson  
Sen. Cathy Giessel  
Randy Williams  
Dale Smythe  
James Estes  
Don Hiley  
David Kingsland

**Staff**

Wayne Marquis  
Tim Mearig  
Larry Morris  
Sharol Roys  
Lori Weed

**Additional Participants**

John Walsh, lobbyist

**December 4, 2019**

**CALL TO ORDER and ROLL CALL at 8:37 a.m.**

Chair Heidi Teshner called the meeting to order at 8:37 a.m. Roll call and introduction of members and guests present; William Glumac, not present.

**CHAIR'S OPENING REMARKS**

Chair Heidi Teshner thanked committee members for participating in the meeting. She also noted that she appreciates all of the subcommittee work performed by committee members, and she looks forward to the day's conversation ahead.

**REVIEW AND APPROVAL OF AGENDA**

Agenda reviewed and approved as amended by unanimous consent.

**REVIEW AND APPROVAL OF PAST MEETING MINUTES**

Lori Weed noted that the meeting minutes are now being prepared by an outside service. Chair Teshner stated that there are some minor amendments to previous minutes she will make with Lori following the meeting. The previous meeting minutes from April 2019, July 2019, and September 2019 were reviewed and approved as amended by unanimous consent.

**PUBLIC COMMENT**

No one appeared before the committee to provide public comment.

**DEPARTMENT BRIEFING**

Chair Teshner referred members of the committee to the department briefing starting on page 29 of their packet.

### ***FY2021 CIP Report***

Larry Morris and Chair Teshner led committee members through a review of the initial CIP lists, six-year plans, initial school construction and major maintenance lists, and points information. Larry noted there was an uptick on both the districts as well as the number of applications. There was a small uptick in the number of projects ruled ineligible for various reasons. Lori referred committee members to the fold-out spreadsheets and noted that the data is compiled from six-year plans that have been submitted to the department through the CIP process. Although it is an incomplete picture, it is the information they are able to obtain through their current processes.

Larry reported that they are in the middle of the reconsideration process, and the department's response date is December 19<sup>th</sup>. Chair Teshner referred committee members to the suggested motion on page 30 of the packet, and summarized that the committee would be approving the final amended list that will come out after reconsideration is completed. Lori commented that new to the CIP process was a teleconference held on the reconsideration process. It was very sparsely attended, but the department plans to hold it again next year and hopes more districts are able to send a representative to attend. Don Hiley and James Estes attended the teleconference and both found it useful. Representative Wilson asked for clarification on what the reconsideration process entailed and if it is possible for projects to move up on the list after the process is completed. Lori confirmed that it is an opportunity for a district to move a project up. Chair Teshner suggested educating about the reconsideration teleconference at the spring CIP workshop

Dale Smythe asked for additional information on the number of applicants that were ineligible for this year. Larry noted that they were for new projects and the reasons included lack of information, the project was not well defined, or the work just wasn't eligible under the statute. Randy Williams asked which projects were being reconsidered on the list, and Lori responded that they are LYSD Nunam Iqua, Kodiak Peterson roof, and Kodiak's security and electrical.

Lori Weed stated that Hollis is their number one rated school construction project. The project was funded last year for design, which boosted its points by having a deliberately phased project. The Nunapitchuk project is still ranked number two on the school construction list. This year's list has newer projects added to it; whereas, last year they only had 11 on this list, one of which was funded.

Dale Smyth **MOVED** that the Bond Reimbursement and Grant Review Committee recommend the State Board of Education and Early Development adopt the department's fiscal year 2021 list of projects eligible for funding under the school construction grant fund and the major maintenance grant fund list, **SECONDED** by David Kingsland. The motion **PASSED** with unanimous consent.

### ***School Capital Project Funding Report***

Larry Morris reported the following:

- FY'20 capital budget appropriated \$7.4 million for major maintenance, and this provided funding for the first project, Barnette Magnet School Renovation Phase 4.

- FY'20 operating budget appropriated \$19.6 million to the REAA fund, which was added to unspent allocations, and they were able to fund the construction portion of Eek K-12 School Renovation/Addition, and the design effort for Hollis K-12 Replacement School.
- After funding these projects, there was not enough funding to fund any other projects on either list.

Lori directed committee members to page 42 of their packet that contains the REAA fund report as well as page 43 that contains the CIP grant request and funding history.

Larry further reported that districts that had excess debt either in funds or debt approval could use those for additional projects if it's allowed by the bond language of the ordinance that provided for the bonding, or they could use it for paying down debt. Mat-Su had been approved by DEED to redirect prior voter-approved funds to new projects in 2018, but the Mat-Su Borough has since decided to withdraw those projects and pay down the bond principle. Lori noted that those projects are now on the grant list.

Lori directed committee members to page 43 of the packet, which denotes historical information of CIP grant requests and funding history from FY'11 to FY'21, and stated that 14 to 15 percent seems like a fairly usual value. Don Hiley commented that 14 percent seems a little bit misleading in that it's 14 percent of the dollar value, not 14 percent of projects. He noted that they had one out of approximately 80 projects on the maintenance list funded last year.

### ***Preventive Maintenance (PM) Update***

Larry Morris referred committee members to page 44 of their packet, which contains a report of maintenance assessments and their related data. He noted on page 30, the summary of districts not currently certified and ineligible to submit applications as well as districts granted provisional certification. James Estes asked if it is realistic or feasible for any of the six ineligible districts to return to acceptable status. Wayne Marquis stated that it varies from district to district. To be certified requires quite a bit of work for each district, regardless of size, and some districts fall shy of that for a variety of reasons including interest and resources. James commented his concern is that if a district is interested but doesn't have the resources, it should be looked at that harder because typically those are the ones who need to apply the most.

Dale Smythe opened up a discussion on districts' utilization of maintenance management programs. Wayne Marquis noted that because the department has to standardize their evaluation of PM programs, although a school may have a very adept and dedicated maintenance staff person, if the PM program isn't utilized, then PM cannot be established. The department makes every effort possible accommodate the variety of districts.

Larry Morris noted that site visits for FY'20 are scheduled to take place between November and April. Randy Williams asked if PM certification and site visits were related. Lori responded that a site visit is the primary method of determining whether a district should not be certified; there is a mechanism for a district to obtain certification in between site visits.

Randy Williams asked for additional information on problem areas in addition to tracking and reporting energy consumption. Wayne Marquis stated that the big problem areas are PM management because people have to spend time behind a computer to report what they are doing throughout the year. Another issue that has been big in recent years is tracking energy. These

issues can be challenging because districts don't always understand why it is necessary or how useful it can be in detecting problems. PM programs vary greatly from one district to the other, and the department is realistic in that not all districts have the same PM program, and allows leeway to try to make it fair. Sometimes training is an issue, and the department gives districts leeway to find methods that work for them.

Don Hiley commented that his office operates a maintenance management system, and there are 25 districts contracting with them for that. In terms of energy, a number of districts have heat recovery, and some don't pay anything or pay a fixed rate for energy. To try to get those districts to care about tracking energy and putting effort into that when it has no effect on their bottom line is a tough sell. Districts are doing it because DEED requires it, but they're doing it reluctantly. Another issue he sees is that there are districts that have central bulk fuel tank for all of their buildings, that can make it difficult to track energy usage by building. Larry noted tracking energy is required by statute, not by DEED. Lori stated she is hopeful that the new requirement for retro-commissioning will assist districts in understanding why tracking energy consumption is useful. The department will reinforce that by encouraging people to engage and understand how much value they can add to their district and to their bottom line.

### ***DEED Facilities Book***

Lori Weed directed members of the committee to page 45 of the packet to review the Facilities Book table of contents. It is the hope of the department to eventually put the resource online as reference material. Chair Teshner stated that the department is working on web accessibility ADA compliance for its online materials.

### ***Regulations Update***

Lori Weed reported the commissioning and 4 AAC 31 regulation packages were approved and signed, taking effect last week. The committee recommended changes to the department-adopted ASHRAE 90.1 energy standards, see a later briefing to go over the draft language. Don Hiley asked if this committee can be e-mailed a summary of regulation changes or if it can be posted to the website because it's hard to keep track of the changes. Lori stated they can do that.

### ***Cost Model Update***

Larry Morris stated that annually in December a proposal request is issued to HMS, Inc. to do an update of the cost model. The upcoming 19<sup>th</sup> Edition will reflect the geographic cost update. The department is still considering best practices regarding the use of the cost model tool as a component of the Model Alaskan School and construction standards. The draft cost model update will be at the April meeting with a review and presentation by HMS, Inc. Lori added that there was a previous discussion about when the committee should bring forth its suggestions to make changes to the Escalation Model School and if those changes get incorporated in the task order or earlier in the process. The Escalation Model School went for years with tweaks largely driven by HMS. There hasn't been a lot of input from the department and this committee now that they are developing that as a standards source.

Don Hiley stated that it's disconcerting to use the cost model and then have a project budget amended because the cost model number was considered not valid. Larry Morris stated the cost model was only used if a district didn't have a developed concept of what they were going to do where they could have used a professional estimate. Don continued on to note his concern that

there has been a lot of discussion about whether the cost model should be used not only as an estimating tool but also as a cost limiting tool. It's very easy to give back money on a project, but it's very difficult to complete a project without the money. If the department starts chipping away at some of these added costs that HMS feels like they should be in there, in the end projects will come up short, and that's a problem.

Dale Smythe wondered if they could incorporate this review as part of the meeting where they review with HMS also. Lori stated that it might be too late in the process if they wait until that time. Don stated that they have had discussions in the Model School Subcommittee about potentially having a consultant come in and periodically run through what systems are practical and in use, basically a review and consensus of changes that should be implemented into the Model School and the standards, which then gets passed along to HMS to update the cost model based upon recommendations being driven by the committee and the department.

Chair Teshner suggested they talk about this further at their next meeting. Committee members will also be provided with a copy of the RFP to review. They could also put in the task order that there will be another meeting beyond just the April meeting to provide more direction to HMS regarding changes to the Model School.

### ***Publications Update***

Larry Morris reviewed the list of publications currently managed by the department along with an estimated revision priority and the year of publication or latest draft. Lori Weed noted that the department has tried to put a system in place to review publications on a five-year cycle .

### **BRIEFING PAPER – FY'21 CIP ISSUES AND CLARIFICATIONS**

Larry Morris referred committee members to page 64 of the packet and noted that FY'21 total CIP grant applications trended upwards. He stated that the May CIP workshop was well received; the districts that attended the workshop had measurably better applications. He stated that it is important for the department and the BR&GR to get a clear picture of each project submitted so that the list of priorities equals what the true priority scale is. The top project should be the project that needs it the most due to the conditions on the ground. The department strongly encourages districts to send representatives to attend the next workshop May 7<sup>th</sup> and 8<sup>th</sup>. The second day of hands-on work using the tools and going through best practices was very useful at the previous workshop.

Lori Weed noted that the department has continued to investigate opportunities to create a School Capital Funding Forecast Database. Recently they have engaged with the Department of Transportation to see if a robust forecasting tool for school capital could be created within DOT's new facility management software tool. If successful, the creation of a data-driven capital funding needs assessment could have implications for the department's current CIP process, which currently relies heavily on district participation for understanding statewide capital project and funding needs.

Representative Wilson asked whether the department is keeping track of the past few years of bonding that's happening without any help from the state; and does that help a district's scoring if they are trying to take care of all their issues versus doing no maintenance or capital project except what is paid to these grants? Lori responded that they do not track school districts or

municipalities that are issuing bonds, and it does not directly influence a district's ranking; however, for grant applications submitting for reimbursement, it can potentially be seen in the scoring categories of expenditures for maintenance, planning and design, and cost estimate. It is up to districts to update their six-year plans with DEED.

### ***Rating Issues***

Larry Morris reported that during the FY'21 rating process, a couple of items were flagged as being worthy of a discussion and possible change. In addition, some legacy issues that remain unattended have been reintroduced.

This was the second year of using the new code deficiency, protection of structure, life safety matrix. The matrix includes items that aren't technically life safety, code, or protection of structure, but are included to reflect the R&R schedule systems. A few adjustments were made last year to reflect the R&R schedule system ages. There is a planned review session to go over the matrix. There is a concern over major renovation projects, where a lot of different conditions add together to give a high initial number of points and then is weighted by how much of the project corrects those conditions.

Dale Smythe asked if this would include the elements that seem to be appearing in school projects where there is a protection of structure related to changes in permafrost temperature or erosion, more imminent types of threats that are not earthquake or fire. Larry stated that there is a category in emergency for that. Don Hiley stated that unhoused student points are going to have to start meshing with that as well with schools that are going to wash away within some period of time. Larry remarked that it is difficult to score speculation. Don stated that the timeline for replacing a facility is such that, for some of the impending projects, they have gone beyond the timeline to construct a new school before the current one is almost certain to be gone. Protection of structure points, emergency points, and projected unhoused student points are all going to have to be looked at, because this is getting to be an increasing phenomenon. Lori speculated that one way to address it could be for districts to submit an alternative enrollment projection based on the future square footage difference. Don stated that there are ways to get the needed documentation for such projects, but the timeline is concerning because these can be multi-year processes to get a new facility.

Chair Teshner stated that they will dig deeper into this topic during January's meeting. Lori noted that they can also look at adding this to their work plan, because one of the items on the master work plan list is the issue of projected unhoused. Larry encouraged committee members to put in any requests for data related to this prior to the January meeting.

Lori Weed referred committee members to the worksheets on pages 71 and 72 of the packet as Project LS Mixed Scope Worksheet samples and explained the data contained therein. She stated that the department would like the committee to comment on whether they think that renovation projects can continue stacking points and maxing out; whereas, single-scope projects now are possibly at a little bit of a loss. The example she used was if a district was doing just envelope and roof for the windows, they will max out at 12 points; whereas, a renovation project that incorporates that can get many more code points, but how much of an additional bump should it allow, or is there a way to balance that. David Kingsland asked if this is a bundling

issue, or if it is a way school districts are manipulating the scale. Tim Mearig stated that although he is clearly supportive of scoring and the clarity over which items are being considered by the department, he has seen point values on projects that he would not have expected, in his experience, to have risen to that level. He stated that what was happening was mixed-scope scores were driving into that because of large mixed-scope projects getting the point accumulations up so high. Tim stated that one alternative is tweaking the weighted average analysis or the computation, but they don't know how broadly it would affect all projects. Lori Weed stated that she was talking to one of their former raters about this subject, and they thought another route is to give it a range with specific guidance in that adjustment for severity or lack of severity.

Don Hiley stated that he believes this category should be about what's wrong with the condition of the building and what is going on with the system. From another perspective, if he needs to replace windows in his building and that's worth a certain number of points in the matrix because it's combined with other work, why is that not worth the same number of points that it would be if it was a project only to replace windows? He understands the stacking of points and so forth, but he thinks that somewhere between those two things there needs to be some sort of balance in that. He also recognizes that it doesn't make sense to do all projects as single-scope projects. He stated that he doesn't know the answer to that, but he noted that it has been a struggle as long as he can remember. He stated that whether or not the carpet is more worn than it should be based on the renewal and replacement schedule, the condition of the materials is such that it should warrant replacement.

Randy Williams stated that as far as the weighting and the data that they would like to see, he would like to see how a project could max out the points under these other weighting scenarios or any other possible scenario the committee comes up with. What the committee will need in order to evaluate that is examples of single projects and weighted and combined stacked projects, perhaps just theoretical ones, not necessarily ones that have come in for evaluation. He agrees with Don that the point value should be the same whether it's part of a bigger project or not, but the only way they are going to be able to evaluate whether it makes sense is to have examples of how it might sort out.

Tim Mearig stated that the issue is when elements are mixed with other non-code work. When they implemented a weighting technique, they thought it would be fine, but his perception is that they are now giving a lot of points to projects that they wouldn't have in the past, and they also don't have the option anymore of raters arbitrarily weighting scores. He believes they can try a different mathematical analysis, and it's possible they may need to have a two-tiered mathematical computation. Randy agreed that there is likely a mathematical solution.

Tim went on to address Don's point of, is it responsible for the state to say they are not going to invest in building systems that haven't reached their life expectancy? It's not the state's responsibility to do that, and they don't want to do that. They only want to reward people by putting them high on a list for conditions that are being found on systems that have reached an anticipated life expectancy.

Dale Smythe stated that it would help him if during the spring meeting they could compare this section to the others and an overall and the potential points along with some other explanation of

the percent results in red. He stated that this sounds like a pretty complicated situation, and he is not familiar with it.

Don Hiley went on to further comment that the reality of the situation is that there are very few things that are being funded, and last year they had one maintenance project that was funded. If a district is not number one on the list, they're last; and what they are going to end up with is many single-scope, tiny projects with an application for each one of them. He noted that he is advising people as such by letting them know they won't get a project funded, and he is advising them to pick the one thing that is the worst to apply for, because this is ultimately a competitive process. Randy Williams asked if Don thinks that's mostly driven by the fact that there is not much getting funded, and Don said absolutely. Randy noted that it probably doesn't make a lot of sense to dangle huge amounts of points out there, which would incentivize districts to apply for tiny projects to get points. Lori stated that she was thinking that they were showing that these were very in-depth renovations that are garnering the most points in this particular matrix, but it appears to be the opposite problem. Randy stated that they need to look at the data.

Chair Teshner stated that they will dig further into this issue in January.

### ***Emergency***

Larry Morris stated that emergency scoring continues to have minor issues. Districts continue to check "yes" if it's an emergency, and they mark "no" if they filed insurance. When the department looks at it, they don't necessarily agree that the issue is an actual emergency. A lot of it is evaluating what the potential for loss is. There are five different categories for emergencies, and they are seeing discrepancies in the spread between raters because the category is somewhat subjective.

### ***District PM and Facility Management***

Larry Morris reported that it is now in statute that districts have to have PM programs. The department has noticed big percentages of swings between raters for the narrative on this topic, so this was shored up to have a matrix system.

### ***Formula-Driven Scoring***

Larry Morris stated that formula-driven scoring on the FY'21 CIP cycle did not result in any significant issues. But one issue that came up was regarding the weighted average of the facility. If there is a facility that was built in 1950, for example, that remains a building from 1950 no matter whether or not it's been completely renovated. Don Hiley commented that this is an issue, but the devil is in the details in trying to keep up with what has been updated over time.

### ***Condition and Component Survey***

Larry Morris stated that this cycle saw many more surveys than in prior years, which is good; however, too many refer to the component age as approaching the end of life without listing the actual age. They have also seen some condition surveys where everything is at the end of its life no matter how old it is. One thing that the condition surveys are showing is a Christmas treeing effect where the application is for a regular project to take care of a condition, and then the

applicant adds things to it that would technically be considered maintenance issues rather than an actual condition.

Don Hiley commented that what concerns him is that if something is at or approaching its end of life based on whoever fills out the condition survey, how old something is doesn't matter. What matters is the condition. He gets a little concerned about too much reliance on the renewal and replacement schedules and a number that has been chosen for those, because the condition may be deteriorated for a variety of reasons. Larry noted that what they are seeing a lot, though, is that it tends to be issues that are more mechanical that are young and should not be approaching end of life, but they have been stacked onto the application. Don noted that as they are pushed more towards the R&R schedule, somehow there is an assumption made that if something is not old enough, then somebody is at fault because they didn't take care of it. But things fail, and there doesn't necessarily need to be a long history of repairs to document the failure. He stated that what they are talking about is the actual condition of the material or a system or whatever they are measuring, and they are measuring if it's working or not working. If it's not working, they can't just say, well, wait for ten more years until it's old enough that you'll receive points for it. It just needs to be fixed no matter what the reason is for the failure. Larry noted that the maintenance statute has been in place for 21 years, and it was developed because the state was paying a lot of money to replace or renovate buildings that were prematurely aging out.

Chair Teshner stated that this might be a topic for further discussion in April, and Lori suggested that they could also further address it at the January meeting.

### ***Planning and Design***

Lori Weed reported that this is regarding when a consultant needs to be selected for a project. There are some projects that can perhaps get conceptual points and don't need a consultant selected at that stage, but it may need one when it gets schematic or design development. There is language in the appendix that if a consultant is needed, then it needs to be there; but if the project doesn't require a consultant, then the department can waive that criteria for getting concept design points. The department is thinking that some language can be added similarly to the condition survey, where the condition survey can be waived or postponed from concept design to a later stage. This is a proposal the committee will most likely see in April.

### ***Use of Prior School Design; Use of Building System Design Standard***

Lori Weed stated that no school construction applications requested evaluation of use of prior design points. Eight major maintenance applications requested evaluation of district standards; however, no points were awarded in this element. To receive points, the department is looking for published board-approved or municipality-approved construction standard documentation to be submitted.

Dale Smythe stated that he was considering some of the districts that he's worked with, and sometimes they just have a bunch of Word files that have been collected over the years. Lori stated that it should be something that has been thought out and has gone through an approval process as something the district is going to use. Don Hiley stated that makes sense for a large district that has a number of facilities that are doing things, but why would a single-site district consume what little resources they have to publish a building standard? He is afraid they are

moving back into the haves and have nots when they are looking at some of the scoring this year. Chair Teshner noted that there is nothing stopping a smaller district from adopting something that has been created by a larger district that they could then adapt to meet their needs. Don emphasized that no one is going to want to do that in a single-site district that has one or no maintenance staff, there is no reason to do it except for this process. Randy wondered if these districts would even be going after those points then, and Don reiterated that this is a competitive process, and so those points would be available to the larger districts that have standards. Randy agreed with that but added that the whole point of the prior school design and design standards was really geared toward larger districts anyway.

### ***Average Expenditure for Maintenance***

Larry Morris stated that this scoring category is based on the amount of money spent on maintenance as a percentage of the insurance replacement value of facilities. If the replacement value is understated on the insurance policy, that would raise the percentage and the score. Two of Alaska's largest three districts have the same insurance group, and they all have the same issue. The statute requires evidence that the district has secured and will maintain adequate property loss insurance for the replacement cost of all facilities for which state funds are available. The committee may need to revisit this subject and possibly require some trueing of the replacement values or assign a value based on the cost model for the district.

Don Hiley agreed because he has seen some replacement values for rural sites that equal \$157 per square foot, and it is probably more like five times that amount. He stated that unfortunately the incentive is not to have it because the insurance company doesn't want to pay out, the districts don't want to pay the higher premiums for the higher costs, and the district actually gets more points if they don't have the insurance.

### ***Energy Consumption Reports***

Larry Morris stated that this was the first year of the five-year requirement, and they had some issues and this will most likely be a point of emphasis at the CIP workshop. Dale Smythe asked if there is a plan to actually get a chance to look at this data to compare or track it. Larry stated that they have all of what has been submitted and those are available to review. Lori stated that the energy consumption reports are something they ask for during their site visits. Hopefully as they develop the additional retro-commissioning and get that implemented, this will be a good component for building on. But the department is not currently tracking it because it is only tools for the districts in the hope they are using it to maximize their maintenance program.

Don Hiley stated that it's been a real problem with a lot of districts for him. One of his staff has spent the majority of their time since last spring working on energy with districts. He reiterated that it's been a real problem in smaller districts that have multiple buildings pulling off of single tanks, and they've been told there really isn't a very good solution for fuel meters right now. Randy Williams stated ACEP has a new program where they have small fuel meters they are actually measuring for Toyo stove size. Don remarked that making that information available to small districts would be exceedingly helpful. Larry Morris commented that another thing he has seen in reviewing a lot of drawings where there are centralized fuel tanks is a lot of them go to secondary tanks, and the meter could actually go to that secondary tank. Don noted that measuring the fuel that's actually going into the boiler would be ideal, because then they could

identify how much is actually being burned and could also identify fuel theft. Larry noted that he would love to have information on some of these micro meters that could help signify a problem with a piece of equipment, and he could be a clearinghouse for districts to get this information.

### ***Eligibility***

Larry Morris stated that they still have a few issues with some districts using alternative delivery without getting prior approval. They started getting a little firmer on this a couple of years ago, and it tends to show up in recovery of funds projects more than others. He stated that the department is here to help with this issue, and they also discussed this in the CIP workshop.

### ***Potential FY'22 Application Changes***

Lori Weed directed committee members to the potential changes and stated that the committee should see these topics appearing on the agenda for the April meeting. If there are any other topics committee members would like to add, they should forward that information before March. They are in the process of finalizing the draft that they will bring to the April meeting. One of the changes will be to the rater's guidelines, adding a matrix for the district preventive maintenance and facility management evaluation. She directed committee members to page 73 of their packet to the attachment with a drafted PM raters guide matrix.

Chair Teshner asked for additional comments. Larry Morris noted that with the department's PM book still under construction, this can be used as a guideline for districts regarding the PM program. He also noted that under energy the first sentence states, "EUI by facility over the prior five years," but it should say, "EUI or another measurement per energy type." Randy Williams commented that in the structure of how these different point categories are written, it's sometimes easier to start with zero points as the baseline, and as more features are added, they get more points. Lori noted that this was set up because the rest of the rater's guidelines start at the top and work their way down to zero or 1.

Chair Teshner stated that these changes will not officially go out for public comment, but committee members can incorporate anything they hear. Lori noted that all of the committee meetings also have an opportunity for public comment.

### **BRIEFING PAPER – HB 213 Implementation Status**

Chair Teshner directed committee members to page 79 of their packet. Larry Morris stated that HB 212 had some stipulations in it of the committee and the department to provide a report to the legislature outlining ten criteria for achieving cost-effective school construction in Alaska. The discussion contained in the briefing paper addresses those criteria as well as lists elements that have been put in place to encourage the use of prior design; Model School construction standards, which is still a work in process; cost-effective school construction through building systems; design ratios; and consider major maintenance projects when making grants on the REAA fund, which is in place. The recommendations are to continue working on the elements.

### **BRIEFING PAPER – 4 AAC 31.013 Retro-Commissioning Regulation Implementation**

Wayne Marquis reported that the State Board of Education and Early Development approved regulations proposed by the department relating to the commissioning of school facilities. The

regulation amends 4 AAC 31.013(a) to add a new energy management modification to the regulation. It will involve a regular evaluation of the effectiveness and the need for commissioning existing buildings. He stated that to get this work off the ground, they wanted to utilize some of the tools they already had in place such as the collection of energy data. He noted that the interest being placed on energy came about with the 2012 energy audits that were conducted by AHFC. At that time they came to realize that many of Alaska's schools were not operating in an optimal fashion, and there was a lot of energy that was going to waste.

Wayne stated that the department for the last couple of years has had a subcommittee that looked into the analysis of commissioning, and as the regulation was implemented a few weeks ago, they have had to come up with ideas to get this underway. In recent weeks since this briefing paper was written, he has discovered that AHFC had a database created for anyone that had a commercial or institutional facility to enter their data into. The Cold Climate Housing Resource Center maintained that database, but due to budget cuts, they are no longer able to do that on behalf of AHFC. He understands that the database is still in use, and he will continue to follow up on that.

A summary of the three options for the committee to consider is as follows:

1. Option: Develop a simple tool, possibly a spreadsheet, that is energy consumption centric, which districts can utilize to determine the frequency in which individual systems need to be retro-commissioned.
2. Option: Establish the EUI as the approved metric for measuring the overall energy efficiency of school facilities based on site energy consumption.
3. Option: Require school energy policy that establishes that retro-commissioning be performed when cost of energy use exceeds a percentage.

Recommendation(s): Develop a synthesis of the three options so that relevant elements become part of a new managerial tool, and the new tool can be used by districts in order to fulfill the new regulatory mandate.

Wayne Marquis noted that they will address this topic in future meetings, and there will be additional materials for the committee to consider when addressing the options.

Randy Williams stated that a couple of important points he wanted to make is that in looking at payback and the cost of retro-commissioning, that is the cost of a commissioning agent; it's not the cost of the work that might need to be done. He believes that cost should be included in the payback or at least be part of the conversation. He also noted that retro-commissioning is commissioning it after it was built and operated, and it was never commissioned in the first place, so what is the baseline? Is it the baseline of this building that is not operating correctly, or is it the baseline of where it should have been in the first place? He believes that what has been laid out is more of an analysis of how to tell when they recommission something that's already been commissioned. Retro-commissioning would be a slightly different take on that. They would have to figure out what the baseline should have been, and there is not really a way to measure what it is doing now and figure out what it should have been. He stated one way to potentially look at when to retro-commission is to look at the EUI base and compare it to an average EUI.

Don Hiley commented that there is going to have to be some kind of allowance for geographic factors on this because the cost differential to fly someone out to rural Alaska versus a commissioning agent driving across town in Anchorage will be vastly different. The payback will be substantially different. He stated that this is definitely needed, and he shared an experience about staying in a school last spring where the ambient temperature in every room was 90 degrees, and they had to open the doors to cool the building down. He also noted that there is certainly the case that these improvements will pay back, but the same argument can be made for a lot of the maintenance projects on the CIP list. It would probably be cheaper for the state to fund those immediately and get them out of the way over the long haul, but the money is not there immediately to do that. He wants to encourage that this be done, but the reality is, how is it going to happen? Who is going to pick up the tab for that if the district doesn't have the money? They can identify the work, but they can't afford to do the work.

Lori Weed stated that the regulation just calls for the regular evaluation of the effectiveness and need for. She believes there is a revolving loan fund that school districts are eligible for that has never been used, and if the department can provide a tool that helps districts evaluate and see the potential cost savings, then maybe that will be enough to at least start inching away at some of those things. Don Hiley noted that a tool would be very helpful for smaller districts with limited resources. Lori noted that it is very important to the department not to implement this regulation until there is a tool available.

Don Hiley asked if this is going to be an eligibility requirement for this year's coming CIP, and Lori stated that it would not be enforced this year.

Chair Teshner stated that there will be an opportunity for public comment on this topic before it would be fully implemented.

## **SUBCOMMITTEE REPORTS**

### ***Commissioning***

Randy Williams reported that the subcommittee talked about developing outline-level standards for approval by the BR&GR Committee. They met in October to review these again, and he referred committee members to pages 92 through 96. He noted that the different sections were organized differently, so they reorganized and clarified things and removed items that weren't really criteria but were more like guidelines. They also tried to sort them by cost format codes. He incorporated additional comments from members of the subcommittee and submitted them to Tim Mearig, who added additional comments, and what is presented before the committee today is a result of that work, and they are asking for final approval.

Dale Smythe asked if it made sense that this subcommittee carry on with the retro-commissioning stuff. Randy noted that if not, then the subcommittee will disband because their work has been completed.

Lori Weed had a question regarding the building envelope commissioning. She stated that when a previous participant was on this project, he had been very adamant that thermal imaging should

occur to identify leakage areas. Randy stated that the challenge is that thermal imaging is not part of any of the standard commissioning requirements. It's very useful and highly recommended, but it is not consistent with the requirements of ASHRAE and others.

Randy Williams **MOVED** that the committee approve the scope documents as published in the packet, **SECONDED** by James Estes. Hearing no opposition, the motion **PASSED** by unanimous consent.

### ***Design Ratios***

Dale Smythe stated that this subcommittee took a brief hiatus over the summer. They were able to get the BEES climate zones established and accepted. They issued the RFP and had the report done. A lot of interesting information came out of it, and then the next steps were to have that information influence the three ratios presented for study. Since then a recommendation was made to focus on the wall to opening ratio (O:EW) and present a recommendation sooner than they do the other two ratios with the potential of taking the other two ratios that are more about building compactness and consider combining those two into one instead of having them separated.

Dale reported that this subcommittee will have a workshop at the A4LE, and they will get more input from that. The subcommittee has developed a schedule to move forward, and they want to get more involvement from subcommittee members who have been absent as well as additional organizational input from such groups as AHFC and A4LE, which has indicated interest in this. He stated that December 7<sup>th</sup> is the workshop where they will start to release some additional effort to record ratios on existing facilities. They had an earlier effort that was done off the cost estimates. His firm has volunteered and done some previous schools on PDF and Revit, and they have those results to look at.

Dale reviewed the timeline schedule he has developed for the subcommittee from December 2019 monthly through July 2020. Dale Kingsland asked if the schedule will give the subcommittee enough time to identify the fuel usage in May, June, and July when there is no school and the usage might be different. Dale noted that the schools they select will already have relevant energy usage data.

### ***Model School***

Don Hiley reported that the subcommittee has been looking at what the Model School Standards would look like. He stated that Tim Mearig noted that there appears to be some funding available for some initial development of the standards with a paid consultant working with them in the process. The ideas they discussed were that the standards would be somewhat created by DEED staff in conjunction with the subcommittee, and that information would be sent to the consultant for further review and analysis and to fill in some of the details. The finished product would then get reviewed by the public and be peer reviewed, and then annual and period updates would be based on user feedback and review. At each step along the way, the Model School would be updated, and the cost model tool would then be updated along that to reflect changes that were made to the standards.

Don stated that as a part of their work, DEED staff provided the subcommittee with several examples of facility design and construction standards from agencies in Alberta, Arkansas, Florida, Maine, New Jersey, and New Mexico. After reviewing these examples, the subcommittee thought a manual in the 50 to 100-page realm would be realistic. They also feel the manual should mirror the layout of the typical project manual as far as the design community being able to follow along with it as they are working through a project. He stated that they are looking at a timeline of 2021 before this project is completed.

Dale Smythe asked if in their research of the other states they had learned of any downsides of their standards such as pitfalls or lessons learned. Don stated that they didn't receive feedback from the entities as much as they just looked at their examples. He noted that there were some obvious downsides to some of them, because some had not been updated for a long time and the manuals languished. Some of the manuals were simple, and some of them were as long as 500 pages. The subcommittee determined that they would like to keep Alaska's standards more policy based and to ensure things meet a minimum standard.

### ***School Space***

Dale Smythe stated that this subcommittee is just forming and they had one meeting. The result of that meeting was the definition of the possible formula anomaly, which was different than he had expected from their earlier discussions, and it may be something that is quite simply taken off the list. He believes the bigger focus will be on getting input from the industry on adequacy and accuracy as well as what the appetite is for modifications to that as it relates to potential cost. They plan to get more input at the A4LE and also recruit new members and take this subcommittee in a new direction. He stated that the subcommittee would also like to come up with a better name.

### **CONSTRUCTION STANDARDS FOR COST-EFFECTIVE SCHOOL CONSTRUCTION**

Lori Weed stated that this item is on the agenda as a time for committee members to further discuss what needs to happen going forward and make recommendations, if there are any.

Dale Smythe asked if HB 212 had official deadlines tied to that work. Larry Morris stated that the legislation reads, "shall establish." Lori noted that they don't want to wait too long and have people question why it has taken them a lengthy amount of time to get it accomplished.

### **PUBLICATIONS UPDATE**

#### ***Guide for School Facility Condition Surveys***

Tim Mearig stated that he identified what he considered to be ten goals for what the document would need to do to be effective for the work of the department. He also detailed the two options as follows:

1. Option: Focus on Standards and Policy Development: Prioritize the development of guidance and policy related to condition surveys as it aligns with the DEED CIP process. This would be led by the department and reviewed and refined at the committee. When development was complete, a follow-on analysis would be made with regard to placing

the approved guidance in existing publications or to centralize it in an updated and revised stand-alone publication.

2. Option: Focus on the Tool/Template Development: Prioritize the development of a tool or template for condition surveys as they would best support the DEED CIP process. It would acknowledge that while there is no shortage of survey outlines, templates, and formats, establishing a format customized to the DEED CIP process and to other DEED publications and tools would be the highest immediate benefit. Standards and policies could be developed at a later time and published in support of the tool.

Recommendation: The Facilities section proposes moving forward under Option 1 as described above or may be altered by committee action. The basis for the recommendation is that the current guideline is nearly exclusively tool based and has not been an unqualified success. There also doesn't appear to be a shortage of tool alternatives. Assembling disparate guidance to meet the goals outlined in this paper, and others as may be added, seems like the more appropriate starting point in updating the current publication.

Dale Smythe asked if in either of the options or the recommendation, is there any change from having it as a guideline document only and not a requirement? Tim responded that a majority of the narrative discussion about what a condition survey is would be more along the lines of encouragement, guidance, and helpful clarifications regarding the subject as a whole. He stated that he would like the committee to focus on providing the department input on whether or not it needs to produce something that is helpful to districts in the way of a tool in case the district cannot accomplish something on their own. He asked the committee whether or not they should consider developing a tool for districts for school facility condition surveys. Dale Smythe noted that what he appreciates about the condition survey handbook now is that it gives the districts and consultants their own freedom in developing it. He agrees with the recommendation to go with option 1.

Randy Williams supports the recommendation as written. He stated that it's not worth the department's effort to focus on a tool development until they have a clear policy in place.

Wayne Marquis reviewed the proposed publication schedule for the *Guide for School Facilities Condition Survey*, which would have a published final in June 2020. Tim Mearig stated that this is a fairly aggressive schedule that would depend on the department's ability to propose a complete repository of guidance for the initial draft in March.

### ***Cost Format***

Tim Mearig noted that this particular tool of the department was never really established as a traditional publication, and he is excited to be working on it. He reviewed the options with the committee as follows:

1. Option: The DEED Cost Format, with the exception of providing a general uniformity to estimates received and reviewed by the department as part of project delivery, is not used. It is useful, but not used for any particular purpose. If the department had no need for additional costing information in the development of cost-effective school construction

standards beyond what is currently available, there would be no particular need to update this standard.

2. Option: This option acknowledges the original full purpose and intent of the Cost Format and proposes to reintroduce the estimate format identified in the 2000 version. The format would also be updated with any needed revisions in specific building elements to best conform to current systems and construction used in 2020. A benefit of this option would be the alignment with existing ProjectCost database and the possibility of adding data to that database for use in cost control and cost analysis.
3. Option: The Cost Format has become a reference point in much of the department's work in areas of construction standards, design ratios, and commissioning, all under the mandate of AS 14.11.017(d). This option would initiate a review of elemental classifications and determine whether the department should keep its custom format or adopt, more holistically, an industry standard. Depending on the outcome, the department would move to either option 2 or pursue the option of a significant update along with any updated needed to its ProjectCost database.

Recommendation(s): The Facilities Section proposes moving through each of these options as needed in the following sequence:

Option 1 – Evaluate the option as part of this December 4<sup>th</sup> meeting. If option 1 is not recommended by the committee, move to option 3.

Option 3 – Evaluate the need for a revised/updated elemental classification structure. This will include a future briefing paper with recommendations regarding an appropriate elemental classification for use not only in the Cost Format, but in other department guidance and standards. If after further analysis a customized structure remains most beneficial, move to option 2.

Option 2 – Prepare an updated publication, seek committee and public comment, finalize document and publish.

Dale Smythe stated his feeling of a missed opportunity somewhat in the results that the state has access to from the districts on actual bid projects and the ability to go back and compare the cost model, if relevant, cost estimates, and then actual bid results. The schedule of values are not all perfect, but it is the most accurate representation of distribution of costs for a project there is. If there is a way to match the format from the beginning, it would be a measurement of apples to apples at the end. Tim replied that there are some tools that can try to align the costing formats, but the elemental cost structure is more focused on building systems versus building trades, so he's not positive they can make the correlation. Tim also noted that he isn't sure that even the contractors know exactly how much every system in the building cost. Dale stated that one thing in the past he's tried to do for owners on school projects is require the schedule of values breakdown on bid day, and he has talked to general contractors who have told him that is impossible when they are putting the bids together. He suggested that with the winning contractor, prior to any payment, the contractor be required to submit the schedule of values broken down into a prescribed industry-accepted format. Don Hiley felt that it would be more

useful at the end of the project to account for change orders, to be able to compare the total cost of the project to what the cost estimate was. Dale Smythe noted that the idea is to look for something more accurate than the final bid number and final cost estimate, and this would bridge the difference. Tim noted that it would have to be written somewhere that it would be a requirement of the contractor's work to produce this cost information.

Randy Williams commented that he doesn't believe option 1 should be considered, because there is a lot of value to updating the Cost Format. Based on the recommendations, that moves to option 3 ; would any existing data be lost or can it be converted into the industry standard format? Tim stated that because they only have a small amount of data, tweaking the format and putting the old data into a new structure would not be insurmountable. Tim felt the broader question that he would have to research is if all of the estimates that they might have a repository of that they might want to use that happened between 2001 and 2008 and they had an opportunity to go to legacy material and pull it in and do an analysis on it, would all those printed estimates or PDF estimates be useful if the format changed? The same would be true for 2008. Tim felt that they would have to run some tests and maybe come back with option 3 work to see how much was lost or what would be required if the format was changed yet again. Randy noted that he believes there are a lot of benefits to going to the industry standard, but he wants to be sure they don't lose access to the repository of data that's out there.

Tim Mearig asked committee members for their experience with the elemental classifications that are running behind the scenes. Dale Smythe stated that they have been providing the Revit model in the last three or four years, but he has been surprised how little the Revit models are used by both the estimating industry and contractors. Randy Williams agreed completely. He stated that the BIM models have immense capability, but about 10 percent of it is used. None of the cost estimators he is familiar with use it at all.

Tim Mearig asked Randy Williams if anything caused him to need to verify assignments and tagging when they put a component in. Randy stated no, and there is no industry demand for that to happen. He stated that Navisworks is an amazing tool for more of those purposes for contractors, but not at the design level.

Tim Mearig asked Larry Morris for his sense of the value of these estimates and the ability to be able to grab them and use the data in a structured way. Larry stated that the biggest thing he can use the estimates for is that an estimate can give him insight as to what the consultant is trying to do in terms of quality control. He also uses it a lot to determine if there are items that are beyond normal as far as costs or quantities. Larry stated that in response to option 1, having formatted estimates is definitely better. A lot can get lost in estimates that are more freeform. Tim added that there is a validity when they are trying to use cost information to compare across projects.

After discussion, Tim stated that he is getting a pretty good sense of direction. The department will need to do further research on how much time would be spent updating the document, and what they would be gaining and what they would be losing. The department will move toward option 3, and can decide on the most useful tool once there has been a chance to do some analysis.

## REGULATIONS UPDATE

### *ASHRAE Standard 90.1 Update*

Lori Weed reminded committee members that the BR&GR had met and recommended that, instead of moving from 2010 to 2013, ASHRAE 90.1 2016 edition was adopted. There weren't very many changes, so the anticipated timeline is to bring it before the State Board of Education and Early Development at their March quarterly meeting. It is anticipated that they will then put it out for public comment, and it will be ready for adoption at the board's June quarterly meeting. After that it will go to Department of Law and the Lt. Governor for signature. Larry Morris will come up with a new modified checklist, or they will use the one that's currently available.

## BR&GR WORK PLAN REVIEW

Lori Weed led committee members through a review of their current work plan items as well as the master list that was originally compiled two years ago and hasn't been updated by the committee since. She noted that the master list does include a new line item regarding projected unhoused, those students that might become unhoused due to environmental erosion, permafrost melt, and other factors.

Committee members offered suggestions for updates to the work plan. Randy Williams volunteered to take on the retro-commissioning implementation project.

## SET DATE FOR NEXT MEETING

- January 23<sup>rd</sup>, 2020 – teleconference on the life safety scoring matrix
- April 14<sup>th</sup> – 15<sup>th</sup> or April 15<sup>th</sup> – 16<sup>th</sup> – face-to-face meeting in Juneau

## COMMITTEE MEMBER COMMENTS

Committee members shared their final comments. Highlights included:

- Good session.
- Thanks to the work the department has done to prepare for this meeting.
- Thanks to Larry and staff for touching earlier on reviewing projects before the districts put them out to bid. Also been really impressed on the speed of turnaround in plan reviews.

Chair Teshner thanked committee members for all of their hard work on the subcommittees, and she wished everyone happy holidays since they won't talk again until next year.

## MEETING ADJOURNED

Randy Williams **MOVED** to adjourn, **SECONDED** by Don Hiley. Hearing no opposition, the motion **PASSED**, and the meeting adjourned at 3:38 p.m.