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| 2 | STATE OF ALASKA | |
| 3 | | |
| 4 | DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT | |
| 5 | DIVISION OF CORPORATIONS, BUSINESS AND PROFESSIONAL LICENSING | |
| 6 | BOARD OF REGISTRATION FOR ARCHITECTS, ENGINEERS & LAND | |
| 7 | SURVEYORS | |
| 8 | Minutes of Masting | |
| 9 10 | Minutes of Meeting February 10-11, 2016 | |
| 11 | 1 ebidary 10-11, 2010 | |
| 12 | By authority of AS 08.01.070(2) and in compliance with the provisions of AS 44.62, Article 6, the | |
| 13 | Board of Registration for Architects, Engineers and Land Surveyors held a meeting February | |
| 14 | 10-11, 2016 in Juneau, AK. | |
| 15 | | |
| 16 | Wednesday February 10, 2016 | |
| 17 18 | Agenda Item 1 – <u>Call to Order and Roll Call</u> | |
| 10 19 | Agenda item 1 - Can to Order and Kon Can | |
| 20 | 9:00 a.m. The Chair called the meeting to order. Roll call, all present except Kathleen | |
| 21 | Schedler, Keith Walters, and Donald Christensen, who were excused by the Chair. | |
| 22 | | |
| 23 | Members present and constituting a quorum of the Board: | |
| 24 | | |
| 25 | Colin Maynard, Civil Engineer, Structural Engineer, Chair (via phone) Drive Maynard, Civil Engineer, Mining Francisco (via phone) | |
| 26 | Brian Hanson, Civil Engineer, Mining Engineer (via phone) Frie Frikage, Flootring Frances | |
| 27 28 | Eric Eriksen, Electrical Engineer Richard Rearick, Architect | |
| 20 29 | Richard Rearick, Architect Jeffrey Koonce, Architect | |
| 30 | John Kerr, Land Surveyor | |
| 31 | Dave Hale, Land Surveyor | |
| 32 | Dave Flaie, Land Galveyon | |
| 33 | Representing the Division of Corporations, Business and Professional Licensing were: | |
| 34 | | |
| 35 | Martha Hewlett, Administrative Officer II | |
| 36 | Sara Chambers, Operations Manager | |
| 37 | John Savage Investigator | |
| 38 | Vernon Jones, Executive Administrator. | |
| 39 40 | Sarena Hackenmiller, Licensing Examiner. | |
| 40 41 | Members of the Public present for portions of the meeting: | |
| 42 | wembers of the rubile present for portions of the meeting. | |
| 43 | Jesse Escamilla, PE representing himself | |
| 44 | Leslie Daugherty, PE representing herself | |
| 45 | Sara Manning Representing herself | |
| 46 | Catherine Fritz, Architect representing herself | |
| 47 | Richard Pratt, PE representing himself | |
| 48 | Dale Nelson, PE representing APDC | |
| 49 | Amy Mestas, PE representing herself | |

 Jen Gillenwater representing ASCE, YMF • Joseph Notkin, Architect representing APDC, AIA Elizabeth Greer, PE representing APDC, ASCE The following members of the public attended via telephone Chris Miller, representing Design Alaska Nevenka Kitanovski representing herself • George Imbsen, PE representing himself • Steve Lee, PE representing himself Agenda item 2 - review and approve agenda. Rearick: Asks if there are any additions to the agenda? Note: Jones passed our several additions prior to the meeting including an updated copy of the Agenda. On a motion duly made by Koonce, and passed unanimously it was RESOLVED to accept the agenda as amended. Agenda item 3 - ethics reporting. Kerr: Went to a future of surveying task force meeting in January. Rearick: Went to an NCARB education committee meeting about two weeks ago. Maynard: Was scheduled to attend a NCEES UPLG committee meeting in January but did not attend. Hanson: Was at the NCEES EPE committee meeting in January. Note: Committee meetings are fully funded by the respective National organization and the individuals are representing their profession not the Board or State. Agenda item 4 – review and approve the November 2015 minutes. Rearick: Asks if everyone read the minutes and if there are any changes. Kerr: Asks to change page 3 line 42 to "NCEES will be presenting \$10,000 merit based survey awards to up to ten university surveying/geomatics programs annually. The award is funded for 5 years." Kerr: Brings up the language in our applicant file approval and incomplete motions. After discussion it was decided that the language was ok. On a motion duly made by Maynard and passed unanimously it was RESOLVED to approve the November 2015 minutes as Amended. Agenda item 5 – Investigative Report.

John Savage: Gives his report via telephone. He mentions that we will be undergoing an audit and we have one 2013 case that has since been closed and three 2014 cases. He reports that the individual that took over his old boards looks like he is in it for the long haul so that is good news. He is excited to be just working on the AELS issues once more. Other than that things are pretty much business as usual. He asks if there are any questions.

Rearick: Asks if the budget crisis will have any effect on his ability to do his job.

Savage: He says that remains to be seen. He adds that he as requested travel for an upcoming trip and it's been approved so that's a good sign that the powers that be still understand the need for enforcement. He adds that the Fire Marshall and Building Officials refer a lot of things to him. He mentions the upcoming Annual Building Officials Forum that he is always invited too and how important that is as far as reaching out to them. They call with questions or with questions that turn into complaints for unlicensed practice or people working outside their discipline. This has been very helpful. He feels that even with the financial down turn we will still have coverage through other means.

Eriksen: Asks him to provide some historical data to determine if there are trends if violations.

Maynard: Asks if he saw the article out of California about the two guys that have been practicing structural engineering for 11 years without a license, just using programs that they had stolen from their previous employer and using their title block and stamp.

Savage: Responds that it sickened him. He adds that a lot of people in our midst feel that things like enforcement by someone like the AELS Board is unnecessary and this is the perfect example of how much harm can be done. He will check with Labor and the Building Officials to see if either of those names rings any bells.

Agenda item 6 – Regulation update.

Rearick: Notes that there are two items that have been public noticed with the written comment period ending February 15th and the oral comment period ending today. He wants to start by reading through the comments with the subject of each.

Note: At the request of Jones the entire comment will be read for the benefit of anyone on the phone who doesn't have a copy.

Rearick: Reads the title of each regulation in the regulation project.

Hanson: Asks if all the comments were in the board packet and advises that he has read all of them. He advises that he will be off line for about an hour.

Note: The comments, while being read word for word, will be paraphrased in these minutes for brevity.

Rearick: Reads the first comment.

Robin Rader and notes that the points he got from this was he questions why an applicant has to be a PE first, a comity applicants should two years of experience as an SE, and a simplified definition of significant structures.

Short discussion on this comment determined that comity regulations already required the same amount of experience. It was also noted that there are several comments regarding the definition of significant structures and maybe we should look at that further.

Ronald Roberts. He suggests that water and wastewater treatment facilities such as tanks, pump stations and similar structures be added to the definition of significant structures.

Comments from the Board were that it would be a huge environmental event if one broke during a seismic event and that we gather those like this that we feel need some further thought or that we need additional information on.

Doug Siers. He doesn't feel that a comity applicant should have to provide anything but an application. Discussion revealed that comity applicants would not have to provide plans but would have to provide verification of 24 months of responsible charge or, if licensed over five years, two letters of reference from licensed structural engineers the same as any other comity applicant.

Raymond Battalora. Feels that if structural engineers have a special seal then all disciplines should be able to have their discipline on their seal. He provides examples of other states.

Discussion indicated that this regulation addresses the structural engineer's seal and that other branch specific seals would be another topic.

Paul Wallis. He wants the definitions to be more specific and not left to arbitrary or capricious interpretation by a board member or the board as a whole. The use of "pier" is not clear. Is it a bridge support or a marine pier or wharf? He lists common definitions of each as used in marine structures. He also felt that the 10,000 square foot requirement was too restrictive and that the 200 foot span length for bridges needed further clarification.

Rearick noted that these subjects come up in other comments. The Board deferred comment to after all of the written comments had been read.

Eriksen takes over reading.

Karl Schroeder. He is concerned that the way significant structures is defined, it could interfere with those who design components used in significant structures that are not part of the primary building structure. He wants "structural systems" defined.

Rearick: Notes that there is at least one more letter that brings this up.

Todd Burrell. Asks if oil refineries, petrochemical plants, gas plants, paper mills, tank farms, marine loading facilities, pipeline stations, etc. be considered significant structures? He thinks the requirements in 12 AAC 36.108 are too onerous and will preclude many from applying for an SE license.

No board comments.

Jake Horazdovsky. Supports the changes and thinks they will improve life safety in Alaska. He likes the PE plus two years before eligible for an SE and would like to see a clause that would require engineers coming in from other states have the same experience requirements as those

applying in Alaska. Namely an additional two years after the normal 8 years of education and experience.

Hale: There seems to be confusion between grandfathering and comity.

Randy Bohachek. Thinks the two years of structural experience should be part of the original 8 years of education and experience.

There was a short discussion on education and experience requirements in various other states. Some require PE and an additional two years prior to licensure and some don't. Jones doesn't believe we can require a licensed SE to get two more years of experience before we license them. An SE coming in from out of state needs to verify 2 years of responsible charge experience in structural engineering or, if licensed more than 5 years, two letters from licensed structural engineers.

Rearick: Now we are going to get the financial report.

Sara Chambers: Gave the Board an update on the Governor's travel restrictions. In state board meetings have been given sort of a blanket conditional approval with the recognition that board members need to be able to meet your statutory requirements. The division has been tasked with determining whether these meetings are necessary and can they be met telephonically, use of video conferencing etc. An after meeting report is required.

Out of state travel has to go up to the Governor's Office and must be 100% third party reimbursed. Staff has been advised to continue requesting travel for the boards and to provide justification for the travel. She isn't sure if multiple travelers to the same meeting will be approved.

Rearick: Points out that there is a lot of diversity on this board and you may have a meeting that has things for several different professions or disciplines happening at the same time which would make it impossible for one attendee to fully represent the State.

Chambers: Thinks that is a good point and it would be good to identify who is going to fulfil each responsibility, really lay it out so there is less work on the part of the Commissioner and the Governor to analyze it.

Kerr: Doesn't understand why we are having to justify third party funded travel.

Chambers: Explains that the message from the Governor's Office looks at the big picture that we are all in this together and trying to show the public we are trying to reduce costs. She points out that our Division and the boards in the Division are unlike most of the rest of the State and we are working out the details of how are we different and how we can be exempted from what another Divisions may have to follow. She adds that we don't expect third party reimbursed to be denied.

Maynard: Points out that this will not save one dime of oil money which is the problem. All it will do is lower the fees for our licensees and they want us to attend these meetings.

Kerr: Adds that adding administrative overhead to the third party travel process costs the State more money.

Chambers: That message has been filtered up but as staff we probably don't have as much clout as Board members do. She recommends the Board as a whole or as individuals send a letter to the Commissioner or to the Director of Boards and Commissions with their concerns. Director Hovenden has sent the message up. It has been a couple of years since a previous administration worked through the travel restrictions and now there may not be as much depth of knowledge on how our licensing programs work. Your voice may lend some additional credibility.

Jones: Brings up that only one staff member will be allowed to travel to each meeting.

Chambers: She explains that only one member will be allowed to travel to staff a board meeting. Most boards only have one staff member at each meeting.

Koonce: Notes that the tasks are different for Sarena and Vern and that the efficiency of the board is reflected by the staff.

Discussion addresses the loss of efficiency of the board if staff is reduced and various components that each staff member provides and the fact that the board is funded by licensee receipts so there should be any restrictions on number of staff attending. It was recommended that third party reimbursement be taken out of the budget line. Rearick pointed out that the Governor just wants to know what's going on and that while that line item could be taken out it might be best just to write him with our concerns not just with travel but with staff and how important it is to both Vern and Sarena at our meetings. He recommends the board write a letter.

Maynard: will put that on his to-do list.

The Board asked how long it would take to get approval once the request is submitted. Sara explained the steps in the process and that the Commissioner wanted the requests three weeks out.

Martha Hewlett: Joined for the financial report. She went over the 1st quarter report. She walked the Board through the report line by line. She explained the differences between the old system and the new accounting system "Integrated Resource Information System (IRIS).

Jones: Asked if the new accounting system was slowing things down any.

Hewlett: Reports that as with any new system there is a learning curve and things are moving better now than a few weeks ago. In response to a question from the Board she explains that it is purchased software that was customized for the State of Alaska. It's taken a couple of years to build it. It has been purchased by and customized for other States and it has been successful for them.

Rearick: Asks if she has anything further.

She points out that the indirect expense line is just a place holder and contains an estimate based on past years expenses. She explains that the allocation of front desk staff is based on the number of items they process for each board. So in a renewal year the expense will be higher.

Chambers: Acknowledges the efforts of Sarena and Vern to streamline the review process for

the Board and ask for feedback and ideas for improvements. She thanks the board and ends this portion of the meeting.

Rearick: explains that he plans to continue reading the comments and postponing the afternoon file review until 3pm today and agenda item 9 until tomorrow morning so we can hopefully get through all the comments and oral testimony today.

Hanson: Asks about discussing electronic file review.

Jones: Advises that will be covered later when we are ready to review files. Basically they have provided us with a secure webpage and you will be provided a password so you can access the files.

Reading comments continued with Hale reading.

Chris Miller. He disagrees with the proposed approach released for public comment. Believes SE's should be able to test in 4 years like all other disciplines and should have to pass the 16 hour SE exam to raise the bar of their discipline. He doesn't agree with limiting work on significant structures to only SE's. No justification has been given for life safety issues to limit who can work on significant structures. The changes requiring an SE will increase costs to clients. All language pertaining to significant structures should be deleted. He offers his definition of significant structures in the event the board decides to adopt these regulations. He agrees with the sections 12 AAC 36.185 g. and h. that require business names.

Board decides to discuss later as he makes many good points.

Stanley Crawforth. Wants to make sure that mechanically stabilized earth (MSE) walls are excluded from the structural regulations as structural engineers are not generally familiar with them.

William Wysuph. Is a mechanical engineer that works on communication towers and wants them excluded as they are designed in accordance with Telecommunications Industry Standard TIA-222-G addendum 2.

Andrew Bibb. Is interested in taking advantage of this once adopted but questions the requirement for a typewritten application, submission of plans and thinks the letter requirements are a bit ambiguous. He doesn't see how one engineer can attest to another's competence.

Mike Quimby: He doesn't feel the board has provided sufficient justification for the proposed changes. He is not aware of any problems in Alaska that would necessitate the proposed changes. He doesn't feel that an individual should have to pay for two licenses. He thinks engineers should be able to keep both licenses while paying one fee. He doesn't see how the requirement to have reference letters signed by an SE is going to be met. He points out that when SE was added it was clear that it would not be required for a PE to do structural engineering. He thinks that plans on remodels and upgrading should be sufficient to comply with 12 AAC 36.108. He attached his comments submitted for the first public notice and asks that they be considered as well.

Koonce: Thinks he has a good point.

Rob Madsen. Wants structural systems defined and specialty structural work such as exterior

cladding and interior partition and ceiling framing design excluded from the regulations.

Rearick: this is similar to Karl Schroeder's comments.

Mike Tauriainen. Addresses 12 AAC 36.185 (g). He thinks having the information on the first page of the drawing should suffice not on each stamped page. (h). He doesn't believe the intent is clear. 12 AAC 36.990 (f) Pier needs to be clarified so it's not interpreted to be a plie or bridge pier.

Rearick: Comments that on the first one not every set of drawings has a cover and thinks it should be on each drawing. The regulations say for any document requiring a stamp. (h) Makes it clear which company the engineer is working for.

Richard Pratt. Thinks the definitions concerning bridges are ambiguous and arbitrary. He thinks pier should be better defined so it can be determined if it is a bridge support or a dock or wharf. He feels that all references to bridges should be removed. They potentially limit and restrict his ability to continue the pursuit of his profession and will not improve bridge safety.

Kerr: When he talks about shouldn't the complexity of the structure and the complexity of the engineering be the real criteria. I wonder if he would provide us with the language that would do that.

Jesse Escamilla. He is opposed to the regulations for bridges and feels that the Board shows a fundamental lack of comprehension of engineering principals by putting forward the proposed SE regulations. Engineering of bridge structures is his area of expertise and it's apparent that no one in his field was consulted when these were drafted. The Board has not properly explained justification for these regulations. He feels the proposed 12 AAC 990 (f) is ambiguous, poorly written and lacks engineering justification. He requests that the bridge section of the regulation changes be removed and if in the future the Board deems SE licensure for bridges necessary maybe they could consult with the DOT & PF Bridge Section to better cater language that completes the objectives of the Board.

Board discussion shows a consensus to compile all these points for further discussion.

Rearick: We will break for lunch now and be back at 1:05 then we'll launch right into public comment at 1:15 after that we will postpone our executive session until 3pm unless we are able to get through these.

12:02 pm break for lunch.

1:10 pm back on record.

Roll call all present except Schedler, Walters, Christensen and Eriksen.

Rearick: We will go down through the list.

Note: Comments will be verbatim as much as possible.

Jesse Escamilla. My name is Jesse Escamilla. I met a lot of you guys the last time I was here. I've been doing bridge design for 12 years, that's my focus, mostly out of State; I worked on the private side doing everything from small pedestrian bridges to largescale cable stay bridges

internationally and in the U.S. I've been here for two years so I'm going to ask guestions. I don't know how this thing payed out to get to this point and to that point one thing I'm frustrated with is I have yet to see background on why we're actually changing this. There was some discussion and some questions in the last Board meeting that came up and nothing really got addressed. I think I remember at one point Colin said something was supposed to get mailed out with a packet two iterations ago but did not get mailed out so to my knowledge it still hasn't gotten addressed. I think I said in the letter that just got read that on the Board website there is a frequently asked question and the question states where is the justification, where there is a statement was not issued by the Board. It seem like we're making changes to something that I have yet to see reasoning for, there's no documented reason to what we're doing. That being said maybe there is actual reasoning. I mentioned it in my letter I'd be curious if you consulted with DOT or other municipalities who own bridges? So maybe they could shed some light on, is this needed and why we feel it's needed, what's our goal? The DOT a State entity, you guys work for the State and there should be some kind of commonality, I think, between what you guys want what DOT wants and municipalities need. Surely they have data and if this is coming from a national level or some other States, how I look at it is this is the Alaska State Board of Engineers not the Washington State Board. So unless there is something internally for bridges specifically I don't know why we are doing this. So that's my one point. And if you have any reasoning, tell me, I'd appreciate some back and forth. If not I'll just continue on.

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Rearick: Explains that typically the Board just listen's and then will have a discussion among the Board in a Public Forum about the regulation change so the points you want us to consider I would say just go ahead and bring out.

Mr. Escamilla. Ok and I think they are mostly highlighted in my letter. As I read the verbiage being put in, you know there's one line about bridges and that's my specialty, that's what I do for a living so that affects me and that's what I'm talking about, nothing else. So bridges having a total span of more than 200 feet and piers having a surface area greater than 10,000 square feet. I put it in the letter but there's really three points in that sentence that I can pick apart. For one you're defining a bridge by its span. Well in bridge terms a span is something between two supports you know an abutment and a pier, a pier and a pier, a pier and an abutment so a bridge can have three spans. I don't know what you're defining here. Are you actually trying to say total bridge length or are you trying to say span? So, you're kind of contradicting yourself in that one sentence using the term span. And additionally right after that and I think it was touched on in multiple letters, the word piers which I think is referring to marine structures is being used. So, again, in bridge terms a pier is an intermediate support, so we're defining a marine structure right after we talk about bridges. This confuses both bridge people and marine people and I think that was highlighted by a couple of letters. So then we get to the 200 feet, well, that's pretty arbitrary and I don't know whether that 200 feet is actually a span or the total bridge length. You can have a bridge of 400 feet that has four 100 foot spans. Anytime you get above 145 feet for most concrete pre-stressed girder bridges you're going to have to add another span, you're going to have to add a pier. So two spans of 150 feet, 145 feet gives you a 300 foot bridge that's not anything more complicated than a 150 foot bridge where you had to put a pier anyway. I'm not trying to talk down, I know this language that is common to me and not to you guys there are different trades here architects, surveyors and what-not so I have a picture of what a span is verses total bridge length and if you're goal is to define total bridge length it's bridge verbiage to say total bridge length, total structure length, just bridge length in general and distinguish that differently from span. I'm not saying that I condone it, I don't really want this because I don't think it's necessary but if you do, do it right. Again this language is kind of taken from, I think, Washington State and I'm pretty sure it's verbatim. I don't know how they came about it but if you're going to use it I think it should be refined. And I think you should

probably get some input from people who do bridges for a living so that we can achieve the same goal.

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Leslie Daugherty. My name is Leslie Daugherty; I'm a civil, structural bridge engineer. (Interruption from someone calling in.) I have been a bridge engineer for 15 years. I do have the SE license I got through grandfathering. The main reason for my testimony is that I do not agree with or back the argument that there is justification for the need for SE to design bridges that civil PE's are qualified to do and here are my reasons. Bridges in the U.S., at least the ones open to the public on our highway systems are for the most part funded by and regulated by the Federal Government so the Code of Federal Regulations define how you do things and define the bridging process. Unlike buildings where you only have one local inspector we have a pretty rigorous process throughout design and construction to make sure everyone is safe and addition to that unlike buildings every bridge in the United States is inspected every years if it's open to the public. So that means that every bridge in Alaska is inspected at least every two years. With bridges you can see what's going on because they are out in the open with buildings you put sheetrock up and you might not know what's going on inside. The owner might not know what to look for, maybe they got some cracks after an earthquake and they think it's no big deal. Well after the earthquake we had just last week, I think it was, we had people out within a week looking at those bridges. So as far as long term safety even if something maybe gets by in the design that's not so great we are going to catch it and the public is not in jeopardy with bridges. Maybe that's different from the building community. If the Board is set on instituting some requirements bridges to be designed by SE's I think my first recommendation would be to get rid of the 200 foot requirement it's completely arbitrary. I can tell you that a 199 foot bridge is no different than a 201 foot bridge. In our first year studies we could draw out different kinds of bridges that length doesn't really have to do with complexity. I think that's what you're getting at. You're looking for a more complex, difficult bridge to have a higher level of design effort and if that's what you want then it's what probably needs to be said. I think one of the problems you're going to find and the reason no one has given you a definition is that there is no good definition. I'm the primary editor of our bridge design manual that is used by our drafting team and we don't differentiate between complex bridges in our manual and simple bridges. We don't have any separate requirements at the State level we're all bridge engineers, that's all we do. Maybe you could break it down by bridge types such as (unintelligible) cable stay or suspension bridges but again even ASHTO, and their the code that is mandated by Federal Highways and subsequently the State for most bridge design situations, ASHTO as far as I know, and my boss who is here is the chairman of one of the ASHTO bridge committees and they do mention long span and complex bridges but do not define them. You're going to have a hard time defining what that is because our industry doesn't define it.

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Koonce asks what ASHTO stands for.

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Daugherty: ASHTO is the American Association of State Highway Transportation Officials and they are the governing body for roadway design, bridge design and we do high towers like lighting towers. So my recommendation would be if you are set on getting language in there you need to form an ad hoc committee of some sort because asking for comments is not going to get you the detail you want. (unintelligible) and by the way three miles from here you have some of the authors of the seismic ASHTO design specs for the entire country so when it comes to seismic you have experts right here at your backdoor so you should take advantage of that. Thank you for reading all the comments.

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Sara Manning. No comments.

1 Rich Pratt. Good afternoon, as I think the Board may remember I was here last year. I'm very 2 interested in this issue on the structural engineering regulations. I would have been here this 3 morning but I was moderating a National webinar related to seismic isolation design of bridges. I 4 feel sort of uncomfortable talking to you about this but I want you to understand what my 5 background is and who I am. So first off I'm the Chief Bridge Engineer for the Alaska Department of Transportation. I've worked as a bridge engineer for over 32 years, I'm in my 33rd 6 7 year. I've done everything from planning, pre-design, construction, inspection and maintenance 8 of bridges. There is probably no one in the State who has the experience and responsibility 9 lever for the State's bridges that I do. On the National level I chair the ASHTO Seismic 10 Technical Committee. So I'm considered one of the country's leading experts on seismic bridge 11 design and seismic bridge design specifications specifically. I also sit on the Technical 12 Committee on Sub-Structures and Retaining Walls and on the Timber Bridge Technical 13 Committee. I'm on the Executive Committee of the ASHTO Sub-Committee on Bridges and 14 Structures. ASHTO specifications are used by all 50 States and throughout the World. I can tell 15 you that I receive questions from overseas regarding our seismic specifications asking for 16 clarification as to what the meaning of the specs are. I can tell you they extend not only to our 17 State and to our Country but internationally as well. As I said, it's not my way to brag about 18 myself or to toot my own horn, I actually feel quite embarrassed to do so but I need you to 19 understand that I am an expert on bridges and there's probably no one else in this State who is 20 at the same level as I am in terms of knowledge, experience and most of all responsibility. I and 21 my staff are responsible for over a thousand publicly owned bridges in this State no one else 22 comes close to what our responsibility level is. As I stated in the email I sent and as stated in 23 the letter that our Chief Engineer submitted that you'll be reading later this afternoon. Our 24 feeling is that the regulation as proposed is ambiguous for much the same reasons as Jesse 25 spoke to earlier regarding the 200 foot total span. Is it total span, is it individual span, what do 26 you mean, that's a relatively easy thing to clarify yet we've never gotten a response. I submitted 27 that question last year and never heard back from the Board with an explanation as to what the 28 meaning was. The 10,000 sq. ft. of pier area. I know several people commented about how 29 ridiculous that number sounds to a bridge engineer. Now if the intent is that it's a marine 30 structure that should be clarified. Further, regulations require that not only plans get sealed but 31 also reports, specifications any number of different type documents. We have any number of 32 different types of projects so certainly the obvious thing is new design where we generate plans 33 and specifications that become pretty obvious those have to be sealed. We also do 34 rehabilitation projects where we'll do quite extensive amounts of engineering. We do seismic 35 retrofit projects where we provide a seismic strengthening of a bridge. We get into even simpler 36 projects, painting, we need to repaint the bridge. We need to replace the asphalt wearing 37 surface or the expansion joint seal. We need to upgrade the railing. Do you need to be a 38 structural engineer for any bridge over 200 feet total span for every one of these types of 39 projects, for every one of these types of documents, is that really the intent? How is the public 40 protected by that? It's not because it's ambiguous language that's provided and doesn't at all 41 address the complexity of the work that we do. The 200 feet as Jesse and Leslie mentioned in 42 arbitrary. I could do a 7 span slab bridge at 30 ft. spans, be at 200 feet and you'd say that's a 43 significant structure. I could do a two span pre-stressed I girder bridge, 200 feet, a significant 44 structure, a one span post tension box girder bridge like the Seward meridian overcrossing in 45 Wasilla that we did. Just a one span bridge, it just happens to be 200 feet long. I could do a 46 one span steel through truss, certainly a lot more complicated than that 7 span slab bridge. So 47 if what we're talking about is complexity of engineering I guess my point is this. Span length is a 48 ridiculous way to measure complexity. It has almost nothing to do with how complex the bridge 49 is. I could show you a 50 foot long truss bridge that's much more complex than a 200 foot long 50 post tension box girder. So as I said our Department is responsible for over a thousand public 51 bridges. We take that responsibility seriously, we work for the public. Our mandate is public

1 safety, that's who we work for. It's not uncommon in my office when an issue arises I'll turn to 2 Leslie or Jesse and ask what's in it for the tax payers? That's who we work for, we represent 3 the tax payers, we represent the people, that's what a good engineer does and we take that 4 responsibility quite seriously. We have rigorous process we follow. We do a full independent 5 design check on every design we do. All of our inspection reports give quality control review. We meet all the Federal Regulations we're required to meet. It's pretty burdensome in fact our 6 7 life has been pretty miserable the last few years since the Federal Highway Administration 8 tightened the regulations and they're monitoring those regulations on a, we've got a guy 9 spending something like five months out of the year just trying to dot i's and cross t's to keep the 10 Federal Government happy. The threat they impose on us is if we're out of compliance on one 11 thing it's that they'll cut off all Federal funds to the Department of Transportation. We did 12 receive that threat two years ago from them. They were going to cut off all Federal funds. This 13 would have a huge impact on the State's economy. So finally I guess to get the point out is that 14 the regulations that are being proposed due to their ambiguous nature and the complexity of 15 what we do are burdensome to us, will be burdensome to us and they really don't offer much 16 help with anything. And I think personally what's frustrating about all of this is there hasn't been 17 any justification we've seen for any of this. Just as an individual I can't figure out why are we 18 doing this? The standard question I ask is what problem are we trying to solve here? Because 19 it doesn't seem like a problem exists. The biggest problem we have is having to respond to the 20 proposed regulation. I'll stay around for a while if you guys have questions nor or if you want to 21 ask questions later.

Rearick: Asks him to talk a little bit about the process to become an engineer that does bridge design and about the limitations this would put on the State.

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Mr. Pratt. First off I think a typical bridge engineer career starts with a civil engineering degree with probably some type of an emphasis in structures. So in my case I took some extra courses in foundation design extra courses in pre-stressed concrete design and then I got hired by the bridge department at Cal Trans as I said over 30 years ago. Cal Trans actually had a formal training class we had to go through. It was a correspondence class where they sent you a book and you worked through it and sent in your answers and your homework was graded and I'll be honest with you my first homework was rejected. They sent it back and said you've done it wrong and they made me redo it. The majority of bridge engineers, you learn on the job so you need to have this fundamental knowledge of ACI codes and AISC steel codes, things like that. But bridges are so unique that it's unusual for someone to have more than even one course in bridge design as part of their college curriculum. My college at the time did not offer bridge engineering code, it was one of the University of California campuses. So a pretty big school, pretty well known and they didn't offer a bridge engineering course. You had to learn it on the job. So by working under an experienced engineer, by actually doing the job you're learning on the job and you develop this proficiency, you learn what's in the ASHTO Code and then you need to go further still and know why is it in the code and the level we really want to be at is why is it there. Not just, it's important to know that it's there but it's also better still you know why it's there. So the typical engineer gets into bridge engineering mostly by learning on the job, that's the fundamentals of bridge engineering. The second item you mentioned was the letter that was submitted and I wrote part of that letter and the boss, Roger Healy, the Chief Engineer wrote the rest and he added those parts about recruitment difficulties but I fully agree with them. He pointed out that the two University of Alaska schools that offer engineering degrees do not offer structural engineering degrees. They only offer civil engineering degrees. He points out, and it's the same evidence that I've found, currently there are only three states in the country that require a structural engineering license to design bridges. Those three states are Illinois, Hawaii and Washington. So part of the problem we have when it comes to recruitment is, if only three states are requiring structural engineers the recruitment pool for us to find new engineers to come in who meet that requirement is really limited. There just aren't structural engineers out there who do bridges. Most structural engineers do building work around the country if they have that recognition. So we already have a problem recruiting. Jesse was the first licensed engineer we recruited in our office in something like ten years and Leslie was maybe five years before that and I was probably ten years before that. What we end up having to do is hire people at the entry level and train them up. It's a real concern to us especially right now. There was a comment made at last year's meeting that a bunch of the people in the bridge office took advantage of the grandfathering clause to get their SE license so they could take advantage of that. Well I counted up out of our staff of 23, five people are registered structural engineers. Of those five, two have told us they're retiring effective May 1st a third one only works part time and all likelihood will resign within the next year. So all of a sudden we're down to two structural engineers on my staff. And what I know is going to happen, I've referred to the issues with the regulations we deal with from the Federal Highway Administration oversight. With only two licensed structural engineers in our office it's only a matter of time before something falls through the cracks and we miss a deadline. We don't cross a t or dot an i because we don't have the right person to do it. As I said the ambiguity and the types of projects we work on, design, inspection, retrofit, rehabilitation, repaving, rail replacement. If we need to have a structural engineer do all of those and we've only got two of our staff, we're in a pretty tough spot. Quite honestly for the majority of this work there's really no need for someone to be an SE to oversee this work, a repaying job, a painting job, why do you need to be an SE to do a painting job? I don't know why but according to the regulations we would need to. We would generate engineering documents that the engineering regulations say we would have to stamp and seal. Does that help you enough?

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Rearick: Yes it does and I appreciate the bridge group continuing to provide comment on our regulation projects and to come and give oral testimony. That's very helpful.

Hale: Asks if there are any bridges that he thinks are complex enough that might need an SE.

Mr. Pratt: I honestly don't know what that means and I don't know who the SE would be who would do them. I can tell you this. One of my predecessors as Chief Bridge Engineer of Alaska named Carl Milke. Carl retired back in 1980 and he submitted a letter to the Board last year pointing out that he and his colleagues at the Bridge Office designed the Sitka Harbor Bridge the first cable stay bridge in North America. They designed the Gastineau Channel Bridge out here one of the first segmental concrete box girder bridges in the country. They designed the Yukon River Bridge an orthotropic steel box girder bridge and these are pretty complicated structures and Carl pointed out, we were civil engineers. We were good enough to do this work, why are we not now good enough to do the work? There really is no justification for it. So I think that what I actually hang my hat on is something that's in our regulations that makes all the sense in the world, and that is, you don't do work outside your area of expertise. It's the obligation we have as licensed engineer to only do work in areas we are qualified to work in. I think that protects the public more than anything else. I don't know if you'll ever have enough enforcement people to be out there challenging everyone to make sure they are not working outside their area of expertise. It's really sort of a moral imperative to follow this obligation to only do what you know how to do. I've met engineers who don't even have an engineering license at all who are very good bridge designers and I've worked with bridge engineers who have advanced degrees and structural license whose work is horrible, I wouldn't hire them to wash my car. So, I recognize the need for licensure, I recognize the need for regulation but it's at best a sort of a stop gap or a bar set. I know we need some kind of a bar I just don't think the bar can be as well defined as you would like.

Koonce: Didn't know we were allowed to ask questions.

Rearick: Well there were certain things I wanted to know about the process not about his comments so if you have those types of questions.....

Koonce: Asks about the Federal Regulatory process.

Mr. Pratt: So you want to what the Federal Regulations are and how it works. As Leslie mentioned the Federal Highway Administration something like, well at this point 100% of our funding for projects and part of the obligation that goes with that is to report to them so we submit our bridge inspection results once every year. It's a big computer data base file that gets sent to them. They go and analyze them, they scrutinize all that data submitted and make sure that it met all the requirements. So bridge inspections need to be done once every 24 months. If a bridge gets pushed into the 25th month something happened that something that triggers, they come back to us and say you're out of compliance you had this one in the 25th month instead of the 24th month, what's going on? That's just a simple thing. They've also issued guidance on designs, seismic and after the collapse of the bridge in Minneapolis in 2007, there were some design errors that were discovered that caused the bridge failure. They came back and said we really need to have better quality control in the design so we've had to document what our quality control process is. So if Jesse designs a bridge he has a drafter draft up the plans, we hand those plans to Leslie checks the design without ever looking at Jesse's computations. Her work is doing two things, one is assuring the completeness of the design that all the details are there that need to be there for someone to bid on the job and probably more importantly she's checking the structural adequacy of the design. She's assuring herself and it's very simple when you take someone else's computations and go through the computations to fall into the same trap they got into but by just working thorough the plans on your own you are much more likely to catch mistakes. So that's another part of the Federal requirements is that we have to have that process where we're performing quality control on all of our designs.

Koonce: Asks if they obtain a permit from the Federal Agency who approves your design?

Mr. Pratt: There is no permit process, I can tell you that. As I mentioned the data gets submitted to Federal Highways, they go through the data we've submitted and they scrutinize it for errors. They also go out in the field and do some of their own inspections for quality control and we try to adjudicate any concerns they have with that. But basically if we're out of compliance they notify us in writing that we're out of compliance and we need to do something about it. We either need to show why we don't think we're out of compliance or we submit a corrective action plan to get back into compliance which is what we had to do the first couple years of this process.

Koonce: So a new bridge that you seal put out for bids doesn't have a regulatory permit?

Mr. Pratt: It's covered by what they call the oversight agreement between Federal Highways and the State of Alaska. So we have an oversight agreement where they've delegated the authority and the responsibility to us based on our explaining our procedures and what our standards are so Leslie mentioned the bridge manual we're writing and part of that bridge manual is to be able to hand to Federal Highways and we have handed it to them and our last step is to adjudicate their comments on that manual that document our policies.

Kerr: Asks if there are a lot of private road bridges in their inventory.

Mr. Pratt: We have no authority or responsibility for private road bridges. I honestly don't know how many are privately owned in the State. Usually when we become aware of them we create a file where we just sort of keep track of them but we don't have any authority over those at this point. Federal Highways has talked about implementing that in Federal Regulations that they would hold the States accountable for private bridges. To me that would be a nightmare. I don't know how to tell someone that they can't go on their own driveway. But we occasionally, as a matter of fact Leslie inspected a private bridge a number of years ago at my direction. It was something that came out in the Homer newspaper that there was a bridge into a private subdivision that had a big hole in the deck and Leslie happened to be there on an inspection so we asked her to go by and look at it. Her phone call to me is if it were a public bridge I would close it immediately which is an authority we have, all our bridge inspectors have the authority to close any public bridge anytime they deem it necessary. We don't take responsibility lightly. Once Leslie told me I wrote a letter to the Kenai Borough and told them that I thought they needed to close that bridge immediately the mayor and their attorney called me back and said it's not our bridge that it was a private bridge but it was a bridge that was in bad enough shape that if you didn't drive exactly in the wheel line you were going to fall thirty feet into a creek. So there are private bridges. So the bridges that we are responsible for are the ones that DOT own, the State owns DOT bridges. We inspect municipally owned and village owned bridges under the Federal Highway Regulations. We inspect bridges owned by other State agencies so DNR Department of Forestry has a bunch of bridges 50 or 60 around the State, we inspect those as well. The ones we don't inspect and are not responsible for are privately owned bridges, military bridges, they're owned by the Federal Government, U.S. Forest Service bridges as they're owned by the Federal Government and Alaska Railroad bridges. The Alaska Railroad takes care of their own bridges. Where they cross a highway we may be measuring clearances and the lower parts of them right adjacent to the road but for the most part we stay off the railroad bridges at their request.

Rearick: Asks if there is another entity within DOT that does wharf and pier design in a marine sense not a bridge sense.

Mr. Pratt: Yes, there is, their office is out here at the 7 mile DOT building. I'm not sure what their exact title is, I always call them marine structures is sort of a term I use for them. They design all of the docks and piers for the Alaska Marine Highway System. So the ferry transfer bridges which by the way are considered bridges under Federal requirements so those get inspected, again, by us. But that's their area, I know their looking at the Tenakee dock right now. I was in a meeting yesterday where they were working on that particular structure. They did the one over in Gustavus a few years ago. I'm trying to remember if it's Sand Point or King Cove or some other place they have another dock they're working on. But anywhere that the Marine Highway Ferries tie up they pretty much get involved in the shore side facilities.

The Board thanks him for his testimony.

George Imbsen and Steve Lee phoned in during Mr. Pratt's testimony to listen.

Dale Nelson: For all those that don't know me my name is Dale Nelson. I'm Chair of the Alaska Professional Design Council Legislative Committee. Since the last time I was here I obtained another title, I'm Director of ASCE Region Nine which covers nine states. Let me get to my report. He reports on HB24 which is the QBS bill which may not go anywhere this year but they will keep it out there it has to do with bidding of engineering, architectural and land surveying

services. Another item on their list is the Alaska University Engineering Facility building. UAA has been funded and completed and being used. The last one to get started is UAF and there is a request in for 34.8 million dollars to complete that. Another thing is funding for deferred maintenance of Alaska Public Infrastructure. And of course the UAA/UAF facilities and programs that involve STEM. He explains the programs. One other thing that came in is the landscape architect seat on this Board. He's looking for something from the Board to give their support some weight. He mentions the number of comments on the structural engineering regulation proposal and if the Board needs anything from APDC or ASCE to let him know. He talks about the fly-in where ASCE provides a report card to all the State Representatives in Washington on a nationwide survey of water, wastewater, railroads, solid waste, bridges, ports and harbors etc.

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Chris Miller: Chris Miller, President of Design Alaska and I'm just commenting today on, I missed part of the testimony this morning and don't know if you've gotten to my testimony yet.

Rearick: yes, we did, we read it into the record.

Mr. Miller: Thank you very much. I just wanted to speak verbally to it but I will be short. In general I support allowing structural engineers to have a license that says structural engineering on it. The vertical industry in deference to the bridge industry has separated structural and civil for many years. All the structures are done by people who are structural engineers, structural engineering departments but they all have civil engineering licenses. So, I think we can kind of get the best of both worlds and create the opportunity, as we have now, in the licensure for structural engineer. Allow them to be civil engineering graduates, take the 16 hour exam, if the structural engineer would like to take that as a higher level of testing and they can be structural engineers after 4 years, the typical 4 years that entry level people can do. I would not recommend trying to parse what's a significant structure. Just remove that in its entirety, let the limits we've been working of practicing in our area of expertise continue to serve us well as they have for decades before this. I think that would be a win-win and we can move forward and continue to work. That's all I have today.

Board thanks Chris for his testimony.

Hackenmiller: Nevenka it's your turn. Nevenka are you on the line. Let's go on.

Amy Mestas: I'm Amy Mestas, I'm a structural engineer working in Anchorage and I wanted to talk to the structural engineer license as well. I am a part of the Structural Engineering Association of Alaska but I have a little bit of a different opinion from them which I did not put myself down as representing them. I firmly believe in the structural license but I don't believe it needs to be in addition to the civil license. Why I say that is having taken both the civil and the structural licensing exams I don't believe the civil engineering licensing exam adequately tests structures, vertical or bridges. The civil engineering licensing exam does address bridges which why I do feel that our bridge department should take the structural exam to prove their competency in bridge design a well as those doing important vertical structures. We've got our three legged stool of education, testing and experience. It will be difficult at the start to have enough people to get grandfathered in to be working under a structural engineer but I believe it's in the best interest of the public safety to have structural engineers that have taken the appropriate test.

Board thanks her for her testimony.

Hackenmiller: Nevenka are you on the line? Is there anyone else who would like to speak?

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I'll go ahead and speak. This is Steve Lee with bridge designs. I'm one of the engineers that Rich mentioned that will be retiring May 1. I've been working in bridge design for 35 years and I have my bachelor's degree in civil engineering. Most of my bridge experience has been on the job training and I had 3 years before that in the DOT EIT program then the rest of it's been on the job training with bridges. I got my CE license in 1982 and then the structural engineer license grandfathered in, in 2013. I realized that a lot of my work, you know I'm the Bridge Division paint technical expert. I could be painting a bridge like the Sitka Harbor Bridge which is a Cable Stay Bridge and I stamp plans for the paint and you know there is structural there because when you design the containment system or check the containment system you have to know the complexities of a Cable Stayed Bridge even though it's just a paint job. Also as the Division expert in bridge rail retrofitting and that could be anywhere from a twenty foot long bridge to a thousand foot long bridge and it requires a stamp and if it's over a thousand feet I suppose I would have to use my structural engineering license. I think we just need to be practical about this regulation and make it so that it doesn't inhibit or restrict the work flow coming out of our Section. I think that's what Rich has addressed pretty eloquently. We have a heavy oversight by FHWA. They have a bridge engineer stationed right here in Juneau and if we have a flair up in deck rehab, poor deck finish he'll be out there. He'll be out there critiquing construction critiquing bridge design and we'll get a letter summarizing his findings and looking for improvement. So we have a lot of self-policing with FHWA and I think you have to recognize that with this new regulation that's coming out. Right now I kind of lean toward staying a civil and not going the significant structure and go ahead and keep the SE. Anyway that's all I've

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Hackenmiller: Who joined on the phone?

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This is George Imbsen, I didn't know there was going to be additional testimony. I thought it was pretty much over for bridges, but I think I really wasn't ready to testify and I hadn't really thought about it that much but I just wanted to tell you that I testified before and I agreed that judging a bridge by the number of spans or total area doesn't mean anything. It has nothing to do with the complexity just like Rich said and many years ago I testified in front of the Board. I was actually on the other side at one time and it was all about money. We wanted to increase our pay here at State of Alaska. And that's what somebody wants to do, it's all about getting more money and dividing up and getting part of the turf for your own self and I don't think that is really what people really want to show responsibility for a structure that they designed. And I think the board has probably taken the easy way out and I would suggest that you do what California did and just remove bridges from the structural license. You don't really have to have that much, ah you need the experience and as Rich said you really get that from on the job and there are no good classes on it out there in the Universities. I know my University had one and I took it many years ago but on the job training is really what is necessary and I've checked things on bridges from other structural engineers from other states they missed the point. The SE license doesn't protect the public any more than your own conscience. Thank you.

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Hackenmiller: Is anyone else on the phone? Nevenka are you on the line or did you hang up?

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Nevenka Kitanovski: Good afternoon everybody. My name is Nevenka Kitanovski I am State Parks Planner for Department of Natural Resources, State of Alaska. I have recently submitted my application to the Board to be approved to test for section 3 of the LARE exam and I'm learning that my application is incomplete even though the CLARB faxed over my records that clearly show and prove that I have all the education and work experience required to sit for the

exam. So my question here is the CLARB record good enough for myself to be approved to sit for section 3 of the LARE exam. I was under impression for all these years since I've been paying for my record to be kept at CLARB that CLARB is ligament institution that is in charge of keeping our records together to be transmitted as requested to the State Boards to be approved for testing and further down approved for the license. Thank you.

Rearick: I think we would need to review your application, find out what the specific deficiencies are if there are some and let you know about those specific deficiencies. We can't really say right what may or may not be the case but we can do that.

Ms. Kitanovski: Ok I would appreciate it. I am in process of studying for those exams and your response in a timely manner would be appreciated if I'm supposed to register and pay \$550 to be able to set for section 3 of the LARE exam and the deadline is approaching. So thank you again.

Hackenmiller: Thank you Nevenka Vern and I will get back to you with the Board's decision.

Joseph Notkin: My name is Joseph Notkin, I'm a professional architect, my address is P. O. Box 72158 Fairbanks and I'm just here to tell the Board I really appreciate the work that has gone into updating the website. Communications are good and I'm able to find all the information that I need there and your Licensing Examiner has been great to let us know when we have new registered architects so we can post it and congratulate them. So is there anything that the Board could use in terms of the landscape architecture position and getting that to a permanent and voting seat?

Rearick: Any kind of support would be helpful and you might want to coordinate with Dale. He thanks Mr. Notkin for his remarks and asks Vern what our options are re the regulation.

Jones: Advises that the Board can adopt as they are, change them and adopt them. Any major changes will require that they be re-public noticed. You can send them back to the committee or take no action at all.

Rearick asks if we need a motion.

Kerr: Asks if we are going to read the rest of the comments.

Rearick: Yes and he reiterates his plan for the rest of the day. He asks Koonce to read.

Michael Dean: Supports the regulation. He thinks the extra couple of years of experience is needed for an engineer to make competent decisions on higher-risk structures. He notes that the PE exam has become a test based on academia rather than experience and notes that some states allow the exam upon graduation instead of at the end of 4 years of experience. He believes that this attitude supports the need for experience beyond the first professional license. He states that it is an unwritten rule that companies automatically recommend individuals for the exam after 4 years because failure to do so indicates a failure in their training and mentoring.

Roger Healy: Writes in opposition to the regulations for DOT & PF. He asks that bridges and piers be deleted from the regulation as this will unreasonable limit their ability to design, construct, inspect and maintain bridges and marine structures across the State. He further states there have been no demonstrated risks to the public safety from Alaska's current practice of allowing civil engineers design bridges. He notes that there are over 1000 public bridges in

Alaska and the proposed regulations will unnecessarily complicate and restrict DOT & PF's ability to accomplish their engineering responsibilities and increase the cost to administer the bridge program. He notes that building design and construction is governed by the IBC while bridges are governed by AASHTO. He points out that only 3 states, Hawaii, Illinois, and Washington require structural engineers to design bridges while the overwhelming national practice to allow civil engineers to design them. He points out that the pool of qualified structural engineers available would be greatly reduced. He also notes that the University of Alaska does not have a structural degree program. Additionally the extra cost and effort associated with the proposed regulations offer no benefit to the public and will result in added costs to the State of Alaska and unnecessarily complicate the administration of Alaska's bridge program. The proposed regulations in respect to bridges are ambiguous and arbitrary and all reference to bridges should be deleted specifically the proposed 12 AAC 36.990 (a)(43)(F).

M. Gavin: Is opposed to the regulation changes as they are ambiguous, unnecessary and appear as an effort to further dissect the civil engineering profession. He doesn't see a need for these regulations and asks if he has missed some significant failures in Alaska lately. The changes benefit out of state engineers and schools of higher learning that have structural degree programs. He feels the rhyme or reason of the parameters in 12 AAC 36.990(a) are questionable at best. He questions the 10,000 sq. ft. pier statement. He believes all currently registered civil engineers should be grandfathered. He believes the regulations are in effect stealing something he has earned almost 40 years ago and damaging civil engineers.

Rearick: reads the questions and answers that were posted on the web. He recaps the options available to the Board.

Jones: Points out that it is almost 3 p.m.

Rearick: Decides to take this up tomorrow morning at 10a.m.

On a motion duly made by Eriksen and passed unanimously it was RESOLVED to go into Executive Session in accordance with AS 44.62.310 (c)(3) to review applicant files.

3:28 p.m. Went into executive session Sarena Hackenmiller and Vernon Jones remained in the room for applicant file review.

5:50 p.m. recessed for the day.

Thursday February 11, 2016

8:00 a.m. reconvened in Executive Session to complete applicant file review. Hackenmiller and Jones present with the Board.

9:55 a.m. out of Executive Session. Roll Call all present except Schedler, Walters and Christensen.

Rearick: Asks the Chair if he would like to put Board elections off until the next meeting. He responds in the affirmative.

On a motion duly made by Maynard and passed unanimously it was RESOLVED to postpone the Board Elections until the May meeting.

Returned to agenda item 6 which is the regulation update.

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On a motion made by Kerr and seconded by Koonce it was RESOLVED to adopt the regulations changes to 12 AAC 36.063, 12 AAC 36.108, 12 AAC 36.180, 12 AAC 36.185 and 12 AAC 36.990 as public noticed.

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Rearick: Ok is there discussion?

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There was short back and forth on the grey area issue.

Koonce: Wants the notice to contain a statement of purpose to help clarify the licensure path and the reason and thought behind the whole document. He thinks we need to revisit the

Rearick: Notes that after reading through all the comments there are some fundamental issues that need to be addressed.

Eriksen: Doesn't think that something has to be broken to be improved. He feels that this will bring more opportunity and expertise to the State.

Eriksen: suggests that we go around the table and see where everyone is at.

Kerr: Believes that the complexity of structures is increasing and that requires a higher level of skill and notes that a structural engineer related to him that architects have software now that designs structures that are more difficult to engineer.

Rearick: His take on this is really the complexity of the rules they have to design by. Building codes in the last 20 years have gotten guite complex. He acknowledges that there were certainly very complex structures 20 years ago but keeping up with rules and regulations and the different materials available. His understanding of why we are pursuing this regulation project is really just safety, health, safety and welfare. Whether it has a financial impact to the State one way or another is certainly a concern. We don't want to create a situation where we have a deficit of engineers and architects to do the work.

Hanson: Provides some history of this over the last 8 to 10 years. That every time we had a Board Meeting we told everybody that it wasn't going to change, that they could continue to do what they were always doing. It wasn't just for structural and civil it was for everybody. If you were a mechanical that did control systems you didn't have to go out and get a control systems license or if you were a civil you could continue to do structures and that kind of changed as things went on and when it finally passed you could continue to do what you were doing but you couldn't call yourself a structural engineer. We are seeing DOT and other organizations asking for structural engineers. He agrees with Eric that there doesn't have to be a problem to make the system better. A long time ago we said we were not going to change anything but the world is evolving and people need to move along with it. He notes that the engineering fields are getting more specialized. In his opinion structural isn't necessarily a secondary license. He adds that the rest of the country is headed this way. He points out that there were many that don't like this but they aren't providing any solutions to make the regulation better.

definitions. He refers to communication towers and bridges and there seems to be a lot of variance on where the line should be drawn. He suggests that maybe it should be a broader interpretation to allow for the grey areas easier to allow.

Erickson: Supports a path to licensure for structural engineers but is concerned about our

definition of significant structure. We heard a lot of good comments from the bridge group but there are other components in there that need to be looked at as well.

Urfer: Echo's the need for a statement of purpose to help the public understand where the Board is coming from. She thinks a statement of purpose is a critical part of any changes the Board decides to make.

Kerr: Thinks maybe bounding the definition of the different societies and having them contribute to the definition would help.

Eriksen: Thinks that regarding the definition and the statement of purpose, what we are trying to measure is if the regulation hits the mark that the Board wanted or have we overshot or undershot it.

 Rearick: Notes that the Board comes from different but similar licensure standpoint. As an architect he understands the need for structural engineers. He addresses the comments about the comments that this is arbitrary by pointing out that the building code sets certain arbitrary markers throughout it and licensure in general is somewhat arbitrary on what it says regarding the number of years of experience and the number of years education but taken as a whole the education, experience, and exam, it's trying to protect the public. He touches on working within your area of expertise and notes that you get experience in another area of expertise by working with someone that has the expertise. For him to say a structural engineer is needed to do a building design he understands but the bridge group, the marine group, the tank group and all the other groups seem more foreign to him but it seems there is a system in place, basically a mentor type system for bridge engineers to get their experience and become the experts in that. He asks if the structural engineering process of education and exam for licensure would be helpful to those folks? He believes it would. Can it be done without it? He thinks it can as demonstrated by what they're doing. He sees them as a unique group not only in Alaska but across the country. He would hate to put Alaska in a situation where we're totally relying on engineers from outside especially if we have the knowledge here that can do it. He adds that in the engineering world they do not necessarily practicing in a broad sense but in a specialized sense and he would hate to limit that. Not to say in the future it might make sense to have some sort of licensing or testing requirements for a specific group. He continues by paraphrasing some of the comments received, specifically, Chris Miller and Roger Healy and believes that we should pause and do outreach to some of these organizations.

Short discussion on AASHTO and the NCEES exams. Hanson said it was one of the reference tools for the exam but was pretty generic. Kerr pointed out that the 16 hour structural contained 16 hours on buildings and 16 hours on bridges.

Koonce asks and Rearick once again repeats the options available to the Board regarding the motion. A discussion ensued regarding the option to send it back to committee and bring it back next meeting. It was asked if they could get input from the societies etc. Jones informed them that they public comment period is over and that if they get comment from another group they have to re-notice it so everyone has the same opportunity. Options discussed were to table and send back to committee, get some amendments ready for next meeting or kill it and start over. It was suggested that we table and come back with some amendments and a robust statement of purpose. Hanson cautioned against tailoring it to a specific group of people. He feels that any public facility designed by the State should be designed by the appropriate engineer with the most expertise they can have so if it's a bridge it should be a structural engineer. Discussion continued leaning toward tabling and working on amendments and a statement of purpose.

On a motion duly made by Koonce, seconded by Eriksen it was RESOLVED to table the motion to adopt changes to 12 AAC 36.063, 12 AAC 36.108, 12 AAC 36.180, 12 AAC 36.185 and 12 AAC 36.990 until the May meeting.

Motion passed on a roll call vote with Eriksen, Hale, Hanson, Kerr, Koonce and Rearick voting in favor and no one voting against. Maynard abstained because of a conflict of interest complaint.

Agenda item 9 – Correspondence Received since November 2015.

CLARB: Luann gives a short report on CLARB issues.

NCARB: Rearick gives a report on the correspondence from NCARB. He mentioned several people that were running for office. Koonce mentions the Regional Summit coming up in Savannah and the National in Seattle. Rearick is on the Education Committee and will apply for reappointment next year.

NCEES: Kerr reports on a breach at the Pearson Vue test center. He mentions the West Zone meeting in Anchorage in May and suggests everyone attend. He reports on the Survey meeting in San Diego. Several individuals are running for office. He mentions the passing of Dave Gibson a huge figure in Geomatics in S.E. Florida.

Item D email from DOL re board title which is Architects, Engineers, and Land Surveyors. That's the official title but it includes all the professions regulated by the Board including landscape architects.

Item E is a letter from Joe Notkin supporting Catherine Fritz's request for appointment to the Board.

Item F is an email from Chris Miller regarding what DOT requires on documents submitted to them and if DOT would amend their requirements to allow what the Board's new regulation project required.

Maynard: Asks if we want to pass that part of the regulation project separately from the structural part.

On a motion duly made by Maynard, seconded by Eriksen it was RESOLVED to adopt 12 AAC 36.185 new sections G and H as public noticed.

Motion passed on a roll call vote with Erikson, Hale, Hanson, Kerr, Koonce, Maynard and Rearick voting yes. Schedler, Christensen and Walters are absent.

Item G was an email from the NC Board regarding FTC guidelines regarding their situation with their Dental Board.

Item H is 2015 Legislative Guidance for Board and Commission members.

Item I is the Division's guidance for working with the Legislature during the present session.

Agenda Item 10 – Correspondence sent since November 2015.

Item 1 is a letter to Mr. Moxness regarding experience. If his reference is comfortable attesting

to his responsible charge that would be acceptable.

 Item 2 is a letter to Mr. Conneen regarding his CE exemption request. We told him we would give him a 90 extension of time to meet the requirements.

Item 3 is an email to Ms. Winfleid regarding her request for a waiver of the FE. We told her if she became licensed in Canada ok, if not then she had to take the exam.

Item 4 is a letter to Mr. Moran regarding a path to licensure. We advised him to check with a university to see how many credits he would have toward a civil engineering degree or if he had enough to go for an MS in civil engineering. We also told him he could send his transcripts to a credentialing agency to see what he has.

Agenda Item 11 – Old Business.

11:25 Break

11:32 On record.

Item A is the 2016 Zone meeting in Anchorage.

Hackenmiller: Gives a report on the plans for the meeting. A short discussion followed on ideas for activities. Hackenmiller added that she is mentoring Christi Thomas from the Colorado Board since the next meeting will be in Colorado.

Hanson: Asks to be nominated for Western Zone VP.

On a motion duly made by Eriksen, seconded by Kerr it was RESOLVED to nominate Brian Hanson for Western Zone VP. Motion passed unanimously.

Agenda item 17 – New Business.

Item A is SB118 An act relating to Surveys....etc.

Kerr: Suggests that the Board write to the sponsor of the bill letting them know that this is not within our purview and it would be inappropriate to add it.

Discussion resulted in a recommendation that Kerr draft a response for the Chair's signature.

On a motion duly made by Maynard, seconded by Hale it was RESOLVED to send a letter to Senator Costello that the Board does not have the resources to accomplish this and that it is not our mission. Motion passed unanimously.

Item is a copy of the last attempt to get the LSA seat a permanent voting seat.

Maynard: Emailed that he asked Representative Olson if he would sponsor a bill to make the seat permanent. Rep. Olson agreed but so far we haven't seen a bill. It looks like it's not going to happen this session but we should continue to work on this so it can happen next January.

Item C is a regulation project 12 AAC 36.050 application deadlines.

Jones: Explains that this is needed to allow sufficient time to get applicant files ready for Board review. It seems too many people wait until the deadline to submit their applications and supporting documents and two weeks isn't enough time to process all the files for Board review.

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Maynard: Asks if we have the language needed and if so let's send it out for public notice now so we can deal with it in May.

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On a motion duly made by Hale, seconded by Maynard it was RESOLVED to public notice a change to 12 AAC 36.050 Application Deadlines. Motion passed unanimously.

Kerr: Wants to modify all the eligibility statements to include "the applicant must have not demonstrated behavior in conflict with the regulations in this chapter". The reason is because all of our language is about registrants. He believes the board doesn't presently have the authority to deny an application based on violation of our ethical standards.

Jones: Reads AS 08.48.171 General Requirements and Qualification for Registration. He points out that this Statute state that an applicant must of good character and reputation and that we have used this before to deny an application.

Agenda item 18 Special Committees.

Licensure Implementation - Rearick notes that he is on the committee so the Board may want to add someone else to replace him as this is his last meeting.

Registration and Practice - Rearick is chair and will need to be replaced. The only thing pending is the regulation project on the table. Hale volunteers to chair the committee.

Licensure Mobility – Rearick is chair and needs to be replaced. Koonce volunteers to chair the committee. Rearick reports that NCARB has an agreement with Australia and a couple other countries similar to the one with Canada that they may ask us to sign off on in the future.

Standing Committees

Investigative Advisory Committee – Several members have been contacted by the investigator during the reporting period.

Guidance Manual – No report. She is still waiting for input from the Board.

Legislative Liaison – No report.

Emeritus Status – Rearick is chair so someone will have to take over. Colin volunteered.

Budget Committee – Nothing to add to the staff report.

Eriksen: Suggests the Board send a letter of appreciation to Sara and Martha for their support and improvements in reports.

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Continuing Education – Jones reports that the letters haven't been sent yet. We have had several requests for military exemption which he has approved and a few requests for medical exemption which if a doctor's letter substantiates the request it is approved if not then

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IDP Liaison – Koonce reports that NCARB is going to stop using the term "intern" and he

Agenda item 19 – Board Travel.

representation at the CLARB meetings.

Agenda Item 20 – National Meeting Reports.

Agenda item 22 – Licensing Examiners Report

electronic review there wasn't time to prepare a report.

Agenda item 24 – Read Applications into the Record.

with other Board MBE's .

place of Jones.

No report

will report to the Board on what they decide.

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44 meanings:

45 'FE': refers to the NCEES Fundamentals of Engineering Examination 46 'FS': refers to the Fundamentals of Surveying Examination

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minutes:

'PE': exam': refers to the NCEES Principals and Practice of Engineering Examination

Page 25

an extension of time to comply is offered. We have had one where the registrant requested an

exemption due to health and age but his doctor said he was healthy enough to practice his

Item A. – Sarena Hackenmiller attended the MBE Engagement Session in San Francisco

January 15-16, 2016. Sarena reports it was a very informative meeting. It was her first exposer

to NCARB and she learned a lot about the organization and what they do as well as networking

Item B – The Governors Travel Restrictions. Colin will draft a letter from the Board asking for an

exemption for the AELS Board. Luanne points out that CLARB doesn't have a funded delegate

Item C – NCEES Western Zone Meeting in Anchorage May 19-21, 2016. It was decided that the funded delegates would be Schedler and Hale. Hackenmiller and Hanson are also funded.

Item D – NCARB Regional Summit, Savannah, GA March 11-12, 2016. Hackenmiller will go in

No report – due to the number of applicants and difficulty of preparing the files for

On a motion duly made by Eriksen, seconded by Kerr and passed unanimously it was RESOLVED to APPROVE the following list or applicants for registration by comity.

The following subsequent terms and abbreviations will be understood to signify the following

examination and in additional branches of engineering with the stipulation that the

information in the applicant's file will take precedence over the information in the

program. Jones asks Colin to include that in the letter and add that we do need to have

profession so he was offered an extension of time but hasn't replied yet.

- 1 'PS': exam: refers to the NCEES Principals and Practice of Surveying Examination
- 2 'AKLS': refers to the Alaska Land Surveyors Examination
- 3 The title of 'Professional' is understood to precede the designation of engineer,
- 4 surveyor, or architect.
- 5 JQ refers to the Jurisprudence Questionnaire.
- 6 'Arctic course' denotes a Board-approved arctic engineering course
- 7 CA refers to conditionally approved

| CENCULA, FRANK | approved |
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| COOK, MICHAEL | approved |
| JONES, WILLIAM CLAYTON | approved |
| LUCAS, JAMES IVER | approved |
| VOICU, ALINA | approved |
| Kirschbaum, Ned | approved |
| Kirschbaum, Ned | approved |
| MURRAY, NICHOLAS | APPROVED |
| TATCHELL, KYLE | APPROVED |
| ADAMS, STEVEN | ca |
| ALGER, NELSON KENNETH | ca |
| APPERSON, KEVIN | ca |
| BEAMAN, DEREK M. | ca |
| BEAVER, DAVID WAYNE | ca |
| BENNETT, GARY | ca |
| BILODEAU, PAUL R | ca |
| BRADSHAW, TYLER | ca |
| BRAY, STEPHEN | ca |
| Brown, Douglas | са |
| BROWN, IAIN CHRISTOPHER | ca |
| BRUSCHER, ADAM | са |
| CAIN, STEPHEN L | са |
| CALLFAS, FRANKLIN | ca |
| CARLSON, JENNIFER LEE | ca |
| CHANONTO, SUPAT | ca |
| CHRISTIANSEN, SARAH | ca |
| COOK, RONALD | ca |
| DAHL, ERIK | ca |
| DAHLMANN, RICHARD | ca |
| DELBECQ, BRIAN J | ca |
| DILLEY, JACOB | ca |
| DRISKILL, SEAN | ca |
| ECKHOFF, TRAVIS | ca |
| ELLIS, GARY MICHAEL | ca |

| FORREST, JACK T. | 60 |
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| FORSLING, PETER | ca |
| GAMEZ, DAVID | ca |
| · | ca |
| GERLACH, THOMAS F. | ca |
| GILLIE, DONALD | ca |
| GLANTZ, CHRISTOPHER | ca |
| GLAVES, SARAH | ca |
| GOODELL, CHRISTOPHER | ca |
| Griffin, Shawn | ca |
| GUERRERO, EDWIN | ca |
| GUSTAFSON, JASON | ca |
| HAMMEL, RYAN RAMSEY | ca |
| HART, JAMES DIO | ca |
| HAVEL, AARON | ca |
| HAYDEN, MATTHEW | ca |
| Hilson, Mark | ca |
| HOLLAND, ERIC | ca |
| Hunter, Thaddeus | ca |
| JENSEN, DAVID | ca |
| JONES, ANDREW E | ca |
| KELLY, KARRICK J | ca |
| KHACHADOORIAN, REBEKA | ca |
| KLAUDER, KERRY M. | ca |
| KULONIS, KENNETH | ca |
| LECHNER, BRYAN THOMAS | ca |
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| LUCAS, WARREN | ca |
| MADISON, ELIZABETH | ca |
| MANNING, SARA | ca |
| MASSINGALE, JESSI | ca |
| MENGHINI, BRIAN | ca |
| MESYEF, KEVIN | ca |
| METWALLY, HASSONA, MONA M. | ca |
| Moore, Russell | ca |
| Morse, Ryan | ca |
| NEWMAN, STEVEN | ca |
| O'CONNER, FRANCIS J | ca |
| OWENS, JOHN GORDON | |
| • | ca |
| PARENT, MARK | ca |
| PIHLAJA, KRISTIN | ca |
| POTTER, DEAN | ca |
| QUAKENBUSH, JENNIFER | ca |
| RAZO, ANDRE | ca |
| RIDA, YUSUF K. | ca |
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| RIEHL, BENJAMIN | ca |
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| RIXIE, CHASE | ca |
| ROBINSON, WILLIAM | ca |
| ROCHE, COREY | ca |
| ROE, DEVON | ca |
| RZEPKA, STEVEN | ca |
| SARKANY, ANDREW | ca |
| SEVERS, PHILLIP | ca |
| SEVERSON, KEVIN | ca |
| SHEDDRICK, KEVIN | ca |
| Slattery, John | ca |
| STALLER, NICHOLAS | ca |
| STEVENS, MICHAEL | ca |
| STOVNER, ERIC | ca |
| STRANDBERG, NEIL | ca |
| SWOPE, MARK A | ca |
| TAMANG, BIJAY | ca |
| THORNLEY, ERIC | ca |
| TILLEMAN, MICHAEL CHARLES | ca |
| TRAVIS, JARED MARK | ca |
| ULMGREN-MCALLENAN, MAGDALENA | ca |
| WELLS, ANDREW BRENT | ca |
| WEST, ALEXANDRA | ca |
| WHITE, BERTRAND | ca |
| Winnett, Steven | ca |
| ZEMLICKA, JASON | ca |
| ZIMMERMAN, WILLIAM J. | ca |
| ZULFIQAR, NASIR | ca |
| LAPENTER, BRIDGET | CA |
| LATHAM, DEANNA | CA |
| Santos, Dolores | CA |
| WALSH, DONOVAN | CA |
| Zamora, Willie | CA |
| Bisch, Jeffrey | CA |
| Barrett, Brian John | CA |
| Bonito, Douglas | CA |
| Faschan, John | CA |
| Stepovich, Michael | CA |
| Hipsak, Stacy | CA |
| Yeager, Ronald | CA |
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On a motion duly made by Eriksen, seconded by Koonce and passed unanimously it was RESOLVED to find the following list of applicants for

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registration by comity, examination and in additional branches of engineering INCOMPLETE with the stipulation that the information in the applicant files will take precedence over the information in the minutes.

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IRVINE, BRANDON incomplete
REEVES, JOHN INCOMPLETE
Grey, Delenora INCOMPLETE
BAROVSKY, DOUGLAS J. incomplete
Wilson, Michael Incomplete
LEONELLI, JEFFREY Incomplete

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8 9 Maynard and Hanson questioned conditionally approving files that only had the application, work experience and fees. Jones pointed out that our regulations allowed that. Discussion put it on the Regulation and Practice Committee to consider a regulation project to change that.

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Agenda item 25 - Calendar of Events

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Board meetings:

May 5-6, 2016 in Fairbanks August 4-5, 2016 in Anchorage November 3-4, 2016 in Anchorage February 8-9, 2017 in Juneau

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Eriksen: Has a conflict with the May meeting and possibly with the August dates. He will have to see when his company board meeting is in August.

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National Meetings:

NCARB Regional March 10-12, 2016 in Savannah GA.

(Koonce, Hackenmiller)

NCEES WZone May 19-21, 2016 in Anchorage, AK.

(Board)

NCARB Annual June 15-18, 2016, in Seattle, WA

(Koonce, Jones)

NCEES Annual August 24-27, 2016 in Indianapolis, IN

(To be determined)

CLARB Annual September 22-24, 2016 in Philadelphia, PA

(Urfer, Jones)

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Agenda item 26 - Board Member Comments

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Koonce: Wishes Rearick well and thanks him for his wisdom and knowledge. He will help Catherine transition into the Board. He appreciates the good work the Board did this time and thanks Sarena and Vern for the electronic file review which he was dreading but found to be easy and efficient.

Hackenmiller: Thanks Rearick for his hard work and will miss him on the Board.

Urfer: Wishes Rearick well and thinks the electronic file review was terrific and the way to go.

Eriksen: Wishes Rearick well and appreciates his contributions to the Board. He welcomes Catherine Fritz to the Board and thanks Sarena and Vern for their time and effort preparing the meeting.

Hale: Appreciates the level headed guidance Rearick has provided. Thanks staff for their work.

Jones: Tells Rearick that he will be missed and invites him to lunch in August. Meeting went better than he thought it would with all the last minute preparations. We will continue to fine tune the electronic reviews.

Maynard: Good meeting. Thinks Sarena and Vern got things to the Board as well as they could and thanks the Board for working around his inability to get to Juneau. He thanks Rearick for his service and invites him to future meetings.

Hanson: This was his most painful meeting ever (broken collar bone). He will miss Rearick and enjoyed working with him. Thinks everyone did a great job.

Rearick: Thanks everyone for their kind words. His perspective after 7 years is that this is a different Board than when he started. He feels the Board is effective and has a high level of integrity and can have difficult conversations and at the end of the day still be friends and respect each other professionally and personally. It's been a great experience to serve on the Board and Nationally with NCARB. He feels the Board is very efficient and attributes that in part to Sarena and Vern's preparations. He thanks Sarena in particular for her improvements to the summary sheets and putting together the electronic files with her comments it was more organized and easier to review. This is a great group and he is glad to have been a part of it. Jones reminds him to bring his wallet the August lunch. (laughter) He feels that the Board should pass a resolution that a person chair their last meeting on the Board. He feels that when the board has contentious projects or issues that it's a very deliberative process and he feels we come out with the right decisions but sometimes it takes a lot of discussion to get there.

12:40 p.m. Meeting adjourned

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