

NEVADA STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS
Minutes of the Professional Association Liaison Committee Meeting
Held virtually, Monday, September 28, 2020

Committee Chair Gregory DeSart, PE, declaring a quorum present, called the meeting to order at 4:00pm. Board members participating were Tracy Larkin-Thomason, PE; Matt Gingerich, PLS; and Lynnette Russell, PE. Also present were board staff Patty Mamola, PE, Executive Director; Murray Blaney, Operations/Compliance; and Louisa Kern, Administrative Assistant.

The following also participated in the meeting:

Jamie Fitzgerald, City of Henderson
Mark Casey, ACEC
Lynn Nielsen, City of Henderson
Jason Higgins, NALS
Bob Thompson, NSPE
Gerald Gunny, City of Henderson
Tom Miller, NSPE
Frank Wittie, NALS
Ed McGuire, City of Henderson
Sam Palmer, Clark County
Andy Hanson, ASCE
Dave Salter, ACEC
Tim McCoy, ACEC
Kent Barber, SEASN
Jonathan Tall, NSPE
Albert Jankowiak, City of Henderson
Ken Lambert, ACEC

1. Meeting conducted by Greg DeSart, call to order and roll call to determine presence of quorum.

2. Public comment period

There was no public comment.

3. Introductions

Those participating in the meeting introduced themselves.

4. Approval of July 15, 2020, Professional Association Liaison Committee meeting minutes

PAL-05 A motion was made by Mr Gingerich, seconded by Mr DeSart to approve

the July 15, 2020 committee meeting minutes. The motion passed unanimously.

5. Facilitated discussion between public agencies and professionals regarding quality of engineering and land surveying documents submitted to public agencies (follow-up to March 4, 2020, May 14, 2020, and July 15, 2020 PAL Committee meeting discussions).

Mr DeSart said the topic, a facilitated discussion between public agencies and professionals regarding the quality of engineering and land surveying documents that are submitted to public agency, follows on from discussions at previous PAL Committee meetings in March, May, and July of this year. The issue of submittal quality was originally brought by the City of Henderson where they were seeking guidance on how the industry could be involved with improving the quality of plan submittals. Mr DeSart asked Mr McGuire to introduce the City of Henderson's perspective and summarize the issues.

Mr McGuire said generally we are talking about development type projects. We make a promise to industry for a reasonable turnaround, where we have a fee schedule and a commitment to have first reviews in three weeks and that sort of thing. We believe it is a reasonable process with fair fees built around cost recovery. He continued to say the assumptions are there would be a submittal, some comments, some follow up with minimal amendments, and then a final submission (submit – review – resubmit – final). The whole staffing model is built around this.

Mr McGuire shared statistics on civil improvement plans reviewed in the past three years (attached). He highlighted the number of plan review cycles for the 302 projects reported on.

| Plan reviews | Count | Percentage |
|---------------------|--------------|-------------------|
| one review | 5 | 1.6% |
| two reviews | 87 | 28.8% |
| three reviews | 105 | 34.7% |
| four reviews | 60 | 19.9% |
| five reviews | 25 | 8.3% |
| six reviews | 12 | 4.1% |
| seven reviews | 8 | 2.6% |

He said they then sampled projects that went beyond a third review cycle, taking into account NAC 625.550. The sample revealed it was more about a bad "owner" rather than bad engineering – where an apparent misunderstanding of codes (willful or otherwise) or naïve assumptions – created a need for ongoing scrutiny.

Mr McGuire said a statistic that was a shock related to plans going to mylar. The assumption is that this is the final step with all reviews complete comments answered – the final-final. The three-year report showed the following:

| Mylar Reviews | Count | Percentage |
|----------------------|--------------|-------------------|
| one review | 61 | 20.2% |
| two reviews | 151 | 50.7% |
| three reviews | 60 | 19.9% |

| | | |
|---------------|----|------|
| four reviews | 17 | 5.6% |
| five reviews | 7 | 2.3% |
| six reviews | 3 | 1.0% |
| seven reviews | 1 | 0.3% |

Mr McGuire said the current fee is \$2,000 for a plan check – generally a flat rate [This is what was stated in the meeting, but it’s incorrect. The plan check fee is 2.25% of the project construction cost estimate based on the items reviewed and inspected]. He added that we realized that the folks that are doing this in one, two or three submittals are subsidizing those requiring four, five, six and seven submittals. He said the City of Henderson would likely adjust the fee structure to include a re-review fee for those projects requiring more than three reviews.

Mr McGuire said the crux of the issue is that 20% of submittals are negatively impacting the review process in both time and cost for all. He added the city was going to meet with the Southern Nevada Homebuilders Association to have a similar conversation.

Mr Miller asked if the information related to the number of revisions had taken into account the number of groups within the city that are reviewing the plan set, and whether consideration had been given when fresh comments had been added after previous comments had been addressed.

Mr McGuire said that is something that has been discussed internally, and that if we are going to hold people making submittals responsible we've also got to hold ourselves responsible. Sometimes we value speed over accuracy because we want to get something back in your hands so that you can tell your owner that you're making progress. That's a good point, we need to make sure we balance thoroughness and timeliness. Mr McGuire added, collectively we want to get to a place where you submit a complete package and we give you back complete comments. I appreciate the comment. I think that's why we came here, we have a concern, but I think industry shares in the concern. Nobody wants to be stuck in line behind somebody on their seventh review.

Mr McCoy said, consistency of reviewers is important. He said he has experienced instances when mylars came with sticky notes that were new comments that had not been raised earlier in the review process.

Mr Fitzgerald outlined the general structure of the review process. He said new comments can come about with a fresh set of eyes catching something that may have been missed in an earlier review, but new comments should not be being added in the third or fourth review. But on the other hand, comments can get continually generated for the same issue because it hasn’t been fully addressed. Mr Fitzgerald added that it’s not infrequent that we get a plan that's approved to mylar comes back in with multiple changes – to where a majority of the design has to change. In these instances, we make them go back to first review so that all the departments can see it again to make sure the changes didn't impact something else that effects that department. He said this happens a little more often than you may think.

Mr McCoy said he had had heard of issues where comments weren't being addressed, when maybe comments weren’t being fully understood. He said he stressed to his project managers to reach out to

clarify a comment, and not just guess, because it takes time and money to respond to a comment that wasn't responded to properly in the first place.

Mr DeSart said, in recapping the initial discussions for clarification, is that the city is considering a fee structure that adds punitive fees for firms that have excessive numbers of reviews, and there may be additional tracking related to new responses versus an engineer who didn't respond – and understanding there could be possible disagreements about whether something is a new response or not. He continued to say it creates some semblance of fairness and it moves the conversation towards quality and it also has accountability in both camps. So if in fact it's obvious upon review that the additional reviews are due to the fact that there's a different reviewer that came up with the whole different comment to me that might seem like a reasonable reason to not incur the extra review fees.

Mr McGuire said with plan review now almost 100% electronic we have the ability to create layers, similar to AutoCAD for review, so we can see the plan set and what the comment was, and whether it has been addressed. He said he doesn't want to create a situation where staff are having to debate and negotiate over extra fees – it's not productive. Nor do I want to bankrupt the development service center by not recovering all costs. We are hoping not to drastically change the fee model, and if possible, we'd like to encourage better work. Offer an incentive to improve quality that lessens the number of reviews required.

Mr McGuire said the city would develop a more formal fee proposal and then go see ACEC and the home builders, and anybody else that is interested, and work through details.

Mr DeSart said, again in recap, that the city in adjusting the fee structure, will consider the concept of incentive as opposed to just penalty type fees. He added the engineering community would be open to the idea of incentives and the developers too for that matter.

Mr Palmer said to him it still comes back down to good complete set of plans, drawing, specs, being submitted up front. If we've got a good set to begin with, life is good. We know the project is serious. But 15-20% of projects that come in, that pass the cursory upfront check that it has the right contents, begin to fall apart when they hit the reviewer's desk. Some of these are garbage. He said he understands the professionals may be trying to hold their spot in the line, but this 20% messes up the whole system. Adding to the problem is when it takes engineers an extended amount of time to respond to comments – and then when they do, they want an immediate response back. Mr Palmer said what the entities want is quality plans from day one, and we are here today to try and make that happen.

Mr DeSart said that reiterates what the City of Henderson has been saying from the first meeting back in March, and what the statistics presented today back-up. He added it comes back to the question of what the engineering community can be doing to police ourselves or encourage our engineers and the firms out there to do good work in the first place.

Mr Casey said 80-90% of firms appear to be doing the right thing and it comes down to reaching that last 10-15%. He said there is no "silver bullet", but education is probably the biggest thing, getting meetings like this and sitting down with the people that are in charge of putting those plans together and stress the importance of initial quality.

Mr DeSart said that education is very important and would be a pretty good start. Professional organizations are doing luncheons, and right now and they're struggling with finding good topics and getting good attendance. It would be good for professional associations to promote quality through inviting speakers that talk about these issues and talk about ways to open a dialogue on a broader scale besides this small group here today.

Mr Casey added that education would need to reach beyond those who are regular attendees of the ACEC, ASCE, NSPE, and APWA meetings. Those people are likely not an issue. We need to look at other groups, outside the normal luncheon professional association clientele.

Mr McGuire said an incentive like a triple PDH day might be needed to get fringe attendees to attend educational events. He agreed that the issue is not with regular attendees of engineering or contractor associations.

Mr Miller suggested that some training sessions from public entities be created to address the issue. Something to inform all engineers on exactly what the expectation is in the submittal process. He said an hour or so from City of Henderson, City of Las Vegas, and Clark County would go a long way. Mr Miller said communications (emails) could be sent to the city's database of plan submittals, along with other association's email lists. Invitations to attend training sessions could be sent to all Nevada resident engineers. He added licensees would welcome the training and it could be also recorded for future use.

Mr DeSart said he liked the idea of some sort of PDH incentive. He said the board has its ReConnect event which could in the future include a higher-level presentation about engineering quality related to submittals. Mr DeSart said the board could also be involved in a general outreach program.

Mr Palmer said on larger projects issues are greatly reduced because of strong lines of communication. We have good upfront pre-design meetings with all parties involved and you get agreement on a plan and a direction. It's mid-size and small jobs that we usually have more problems, because we don't have that good close communication and we don't use project managers. We also can't guarantee that the same person will stay with the project as it moves through the system. The project will go into a queue and the next person in line picks up that project, that's why you may get multiple comments. Mr Palmer said they are trying to do a better job to improve upfront and open communication and have continuity in reviewing. He said taking these steps forward would definitely help the situation.

Mr DeSart said the idea might have been floated in one of the other meetings, where the concept of on your first submittal, you actually have a first submittal meeting with the reviewing agency and the engineer, and hopefully the developer, in the room at the same time, where they explain the concept and you ask questions to get all parties on the same page.

Mr McGuire said Henderson does something similar on major projects. It's interesting when we have big ticket projects, and everybody is engaged, we get less comments. We don't for small projects and a lot of them just drop off stuff and run. As was mentioned earlier, sometimes people are under pressure to submit something to start the clock, to say they made a submittal, because they've got

money with an expiration date. Frankly, we hate that if it is not a complete submittal.

Mr McGuire said our review team is small, and we currently have a position vacant, so when a bad submittal comes in it can slow up the whole process. There's not a whole lot of extra people sitting around waiting for something to do. Mr McGuire added we need to get back to a process that was in place some years ago when if you got past the third review it was required that the engineer come in and meet with staff and bring the owner because quite often there's a disconnect between what the engineer is doing, what the owners is expecting, and we're all just playing this blame game. Along the lines of, I gave you comments, and you didn't do it, and then they tell the owner well the city's being unreasonable, and there is a lot of finger pointing. We try to do that if we get to an excessive number of reviews, but it's really been a challenge with the staffing levels we have. Although, one positive from Covid, it's actually easier if you can do it online because we have a lot of people working remotely.

Mr DeSart said as part of an incentive/disincentive program, and building on Mr Palmer's comments about the value of a pre submittal communication, possibly consider if a pre submittal meeting was held, and then in the event that you have a third review mandatory meeting, you don't get charged a disincentive fee. Because you've at least proactively had a pre planning meeting. Mr DeSart asked if anybody had any additional thoughts.

Mr McCoy said, generally any additional fees are going to be the burden of the engineers – it is unlikely they will be passed on to the client. I think it is better to be proactive, to have a sit down early if it's a difficult project. I also like sitting down once we have the comments. In fact I've told some people at agencies that I'll have a guy sit outside the lobby and whenever your checker has a question he can just bring them in to speed up the Q & A and avoid delays. It's cheaper for me to get the question resolved right away than getting a question on my plans to review. Back to communication, I wish someone would pick-up the phone and ask them the question rather than send it in a comment. Better communication would help the process. Another thing to consider is that a number of agencies offer express or fast-track options which could jam up the review system anyway.

Mr DeSart asked if engineering firms would have an appetite to pay an additional fee for a post-comment review meeting.

Mr McCoy said other entities do something similar, where for a cost, you are able to have a comment review meeting that they could guarantee that all the comments be resolved. I would definitely do that and probably eat that cost just because it wouldn't take the amount of time to go back and forth. Good engineers will develop that rapport and ask the questions and get things resolved to the best of our ability there and then.

Mr Palmer said it also becomes an issue of staff availability, budget, and having the right people at the meeting who can make the decisions. A meeting for the sake of the meeting without the right players just adds to the problem.

Mr DeSart said if a fee for the meeting was paid by the engineer or developer it could help pay for the resources to be available.

Mr Fitzgerald said meetings are effective but challenging when you have to wrangle up to nine different departments. Back when meetings were part of the program, we had fewer departments, more staff, and a lower volume of projects coming through the door. Now with 100 projects a year and being open 208 days, you can see the challenge of having mandatory meeting with all projects. He added having a meeting for those projects beyond third review is something that could be more manageable – and with virtual meetings becoming the norm, we can be more efficient with our time.

Mr DeSart said the first meeting probably wouldn't be mandatory but where it could be requested by the engineer, and I would suspect in those situation, it is probably the better engineers in the first place who would be requesting those meetings, but it would maybe get them from a three or four review to a two review and that frees up your calendar to figure out how to deal with the problem engineers.

Mr Fitzgerald said a number of engineers do request pre meetings, and doing them online is not as much of a burden on staff time as it was when everybody was in the office in person together.

Mr Lambert asked what the City of Henderson staffing levels look like as a function of the development, applications that are coming in now compared to historically.

Mr McGuire said, surprisingly this year, we are at about the same pace in August that we were in August last year. So, we had a big lull in April, you know middle of March we closed City Hall. We were physically closed for a month or more but within a few weeks we had converted most things to online and by July and August, August was basically 100% of last year, which was the biggest year we've had post-recession. So, the absolute biggest numbers were further back, and back then we had 14 people in Land Development. And at this point we currently have two plans examiners. We're divided up a little differently, but we physically have a lot less people.

Mr McGuire continued to say the way we do business hasn't changed that much, and I think this is really good dialogue. Fourteen years ago, we went through a thorough formal fee study and business impact to adjust our fees, but it hasn't been revised since – its overdue. Staffing levels are fee driven, the labor is paid for with the fees we collect, and nobody wants to pay a bigger fee, but then everybody wants a little better service.

Mr McGuire said we now have an opportunity to talk about and review expectations. Operating virtually offers opportunities for efficiency and also improved communication. Physical meetings are hard to schedule but virtual is not as much so. We can invite engineers to join the review session on certain software platforms – Bluebeam for example - where once we start that review session you're looking at the same set of drawings the reviewer's looking at and we could go over those comments real time. We're going to review the plans either way, and if the engineer can login for that meeting you could potentially solve issues live and you could avoid a fourth or fifth review by logging in and being able to answer those questions, being together and talking about it for 10 minutes could save hours of back-and-forth.

Mr McGuire continued to say I want to look at the process and say everybody's entitled to a meeting, but here's the new model. I want to get away from the fifth, sixth and seventh review and save that money and put it towards virtual meetings or something that makes the process more efficient. If

that's a slight fee adjustment, and if the industry supports it, then great. I don't want this to be a battle about fees. We would need the engineering and building community to talk to their clients and say, we're trying to make this into a better machine and if a premium machine costs an extra \$200, but on average saved you six weeks, would you be in favor of it. We want to offer a fair service for a fair fee.

Mr Lambert said communication is always the key, nothing has changed in our business about that, but if you cannot facilitate communication because you just don't have the staff to do it you're losing the ability to resolve these issues before they turn into this ping-pong of submittals and re submittals and things like that. There comes a point and maybe you're already there, where there's just not enough staff to really engage in the kind of meaningful communication you want, we're somehow making the potential for this situation to just grow and grow and grow. Mr Lambert said, a partial solution, which some other entities have done, is to outsource some components – drainage studies for example – to consultants, during the peak times of demand.

Mr McGuire said the point is well taken, if you just don't have the time to sit down and be thoughtful and then sit and talk on the phone about a project. Sometimes you turn into a ping-pong ball. Like you said you just bounce it back and forth and hope somebody comes up with a creative solution but there's not a whole lot of time to talk about it. So, this might be the blessing of COVID-19 that it changed the way we did business. Maybe we can use our time a little more efficiently and I'm with you, I'm soaking up a lot of stuff. There is a lot of good stuff in this conversation.

Ms Mamola said we field a number of calls from frustrated agencies about what I call bad apple engineers, and what I always tell the entities is I wonder if these bad apples know they're a bad apple because nobody tells them they're bad apple. And I wonder how many of those are part of that 10 to 15 percent that are slowing down the system for the majority. I understand that an agency may hesitate to file a complaint, simply because they are too busy. Ms Mamola said is there a way we can figure out how to deal with those separately, if we could take some remedial action with those guys, if agencies were willing to let us know who these bad apples were. You wouldn't have to file a complaint necessarily but we could make sure they personally got an invite to maybe a specific PDH event that the board could host related to how to communicate with your client on a difficult project, how to submit quality plans, how to avoid multiple plan submittals, that kind of thing. She added, aside from the bad apples, there is also another group of engineers that are just poor communicators, lacking in communication skills. And when you have those terrible clients to work with you have to be very strong in your communications. Maybe we can provide a different kind of training to guide that engineer. Is there some role the board could play to facilitate and help with some of these lower-level engineers so that we can improve the profession, because that's why the board exists, to protect the public. We're proposing operating in a gray area because usually we consider regulation about disciplining somebody, but maybe there's a middle ground role we could play in this besides just facilitating this conversation.

Mr DeSart said he understood any entities reluctance to make and file a complaint, it is personal to file a complaint, whether it's intended to be personal or not. And then there's always the time involved with the complaint. What Ms Mamola is saying, is possibly the board could have an avenue other than an actual formal complaint. Some intermediary invite to training or something similar.

Ms Russell said she could see how a complaint could be taken very personally, but if we're

consistently seeing the same names coming up over and over and over again, and maybe it does warrant, a stronger action. On the lesser side we could offer up information about training coming up, but for repeat offenders something stronger maybe needed as our agencies are paying the price for that and maybe our entire profession is paying for that as well.

Mr McCoy asked if the City of Henderson had hosted any workshops lately or anything of that nature to go over the submittal process.

Mr McGuire said they had not lately but resurrecting it in a virtual format would be a good idea. We could present to a good number of people and record the session. We could bring that up at a second review or something. We could include the link to say you might consider viewing our quality submittal presentation, how to optimize your time and use your engineering resources wisely or something. The challenge will be reaching the intended audience. It's not the people that come to the lunch meetings. It's not the people that are on the board of NSPE or APWA or the volunteer for the State Board. So maybe that is part of the answer, we present in the most painless format possible - virtually. We could invite in a small panel and have it in the council chambers where we have all the AV equipment. He added the recorded version could then be required viewing for someone who has hit the fourth revision threshold - to get the point across about code compliance and public safety. Mr McGuire said, as mentioned earlier, it could be a collaborative virtual presentation with all the entities - Clark County, City of Las Vegas, LVVWD, etc., involved too. An engineering palooza concept. It may take some organizing, but if it saves us from the fifth, sixth, and seventh review its worth doing.

Mr Palmer said an issue we see, and I'm not singling them out, are the out-of-town non-resident engineers. If there was some training on what a good submission is, they can learn ahead of time and things can only improve. Mr Palmer said they had a "second opinion" program to help resolve issues. If there is a dispute between you and your plan checker, the "second opinion" will get a neutral party involved to review it and come to a decision/resolution. We push that to help us get through some of these smaller difficulties, to have a second opinion committee, there are some private guys and some public guys who help out on some of these issues to help push them through a system and help educate the individuals, the poorer engineers, and that could be doable for other entities as an option.

Mr DeSart reviewed the suggestions made during the discussion as a recap - where seven items were highlighted.

→ The possibility that the entities, that Henderson in particular could specifically look at incentives and disincentives,

→ Looking at incentives and disincentives to promote good quality plans, and to look at new responses possibly in a different category such as when an engineer doesn't respond or doesn't address a comment.

→ Education by industry groups. We talked about not only the groups on this call, but also possibly industry groups like NAYOP and home builders. We talked about the board possibly having some targeted PDHs towards quality plan submittals under that education category - possibly the "triple PDH" plan.

→ Ideas that came up in relationship to communication. We have a couple concepts; one was everyone gets one meeting approach, and that might require changes to the fee structure in some form; two, we talked about mandatory third review meetings. In addition, we talked about pay for comment review meetings where the developer or engineer could pay a fee for that.

→ We talked about workshops as a time effective way of education, and this category would be virtual, efficiencies that we have stumbled across due to COVID-19. That relates to having workshops where you can have 10 people in a room to provide information to a thousand people. It also means you could have increased virtual staff meetings, Bluebeam comment review meetings and that relates to the staffing issues. We might find that the virtual efficiencies give you the equivalent of one additional staff to have better communication. And if it doesn't then maybe the additional fees might help pay for that additional staff you actually need to hire, or the other suggestion out there was potential outsourcing which could be considered by the agencies.

→ Agencies can and should consider reporting bad apples. The board could possibly have a role lesser than formal discipline, and the form that role would take would have to be determined later by the board.

→ The “second opinion” option to help resolve conflicts.

Mr DeSart asked the group for any other comments related to the discussion.

Mr Nielsen said in the last meeting one of the topics that was brought up was what constitutes a quality submittal to the agencies. I took this back to my team and we talked about it at length and internally we have all kinds of checklists, checklists for all these different kinds of submittals, and frankly, you could write a book and just have it filled with all these different checklists, but that's not going to get us there. Then one of our staff members had a really good idea and said the Nevada Blue Book has a listing of standards for submittals. The Blue Book has about six pages or so that are devoted to a building plan submittal and all the elements that need to be included in a building plan submittal. It is so simple it often gets overlooked. And it is so simple that you can, yes, you can take it and expand it to the most complex projects, but everything's in there. All the framework is in the Nevada Blue Book to form a, if you will, a complete submittal and so it's the recommendation of my staff that the board of engineers and the PALS committee communicate that out to all the registrants and encourage the registrants to become familiar with the 2020 Nevada Blue Book and particularly Pages 22 through 27 and what constitutes a complete submittal. (ACTION)

Mr DeSart said we now need to think about how to follow-up this discussion and decide what are the next steps. He suggested that each entity and association take the seven categories that have been suggested, back to their respective organizations to review, discuss, and bring back to the next PAL meeting more refined ideas. (ACTION) He added that some things that were brought up can be implemented right away. The board can write newsletter articles about our discussion, begin or explore how to deal with “bad apples”, and talk about how it could incorporate some PDHs aimed at quality submittals, and maybe those PDHs could literally go back to that Blue Book suggestion made by Mr Nielsen.

Ms Mamola said a newsletter was planned for late October and this would be a great article to include --this meeting and what was discussed. It would be a great way to introduce the topic to licensees and memorialize the discussion, and then see what kind of feedback we get. This meeting will get reported on at the next board meeting and we'll have a discussion at the next board meeting. But in the interim, we will get a newsletter article out talking about this meeting and some of the things we talked about. (ACTION)

6. Open discussion topics

No topics were put forward for discussion.

7. Next meeting date and location

Tuesday December 8, 2020, was suggested as the next meeting date.

Ms Mamola said she would coordinate to determine the best time to meet and then send an invite out to the group. (ACTION Item)

8. Public comment period

There was no public comment.

9. Adjourn

The meeting was adjourned at 5:45pm.

Respectfully,

Patty Mamola
Executive Director