

City of Portland
Noise Review Board Meeting
Transcription
March 11, 2015

Noise Review Board members present: David Sweet (Chair), Kerrie Standlee, Julie Greb, Paul van Orden (Noise Control Officer)

Absent: Carol Gossett, Melissa Stewart

Guests participating: See attached

Transcribed by: Accuscript

Corrections and clarifications by: Kathy Couch

SWEET: Sorry for being a little tardy. I think some people had a hard time finding us tonight in an odd place. One note. If you haven't yet signed in at that table, if you could do that please so that we do have a record of who attended. If you intend to testify, there's a separate sign-in sheet for testimony, and that's going to help the people who do the transcription at this meeting to keep it accurate. So I appreciate your help in letting us know who you are. We will also be able to send you a copy of our recommendations, notice of our next meeting, that sort of thing if we have your contact information. So some of you may have picked up a pink sheet here. What we're going to do tonight is begin with some board deliberation. We have not had – we're not allowed to meet except in public, so this will be the first time that we've sat down together as a board to consider what we've learned about pile driving and construction noise over the past months and to deliberate on the kinds of things we may want to recommend to council. So we're going to talk about that among ourselves at the beginning, and I think our discussion will give you a flavor of where we're headed so that you can focus your testimony more on the kinds of things that we might be recommending as changes to the code. We hope to formulate some recommendations that will go to the Portland City Council. The City Council will consider those. If you don't like our recommendations, or if you do, that's another opportunity for you to speak up and tell the council what you think about what we come up with. So I've prepared some questions for the board to consider in formulating recommendations. The first question I post to the board is- Some people have recommended that we ban pile driving in Portland. Is that something that we should consider as a recommendation?

GREB: I guess I'll start. I do not think that we should ban pile driving. There are certain instances in geotech conditions that require pile driving. I think it's not the City Council nor the Noise Board's area of expertise. I think it's a geotechnical, instructional engineering issue, and...no.

STANDLEE: I know there are cases where they have to drive the pile because of these requirements for it to be set a certain way and you can't do it with just drilling.

VAN ORDEN: So I'm going to ask an unusual request since it's going to go to a transcription company, they won't have the normal familiarity with the board members, and if the board members could just say Kerrie Standlee and then...

GREB: Got it.

SWEET: We'll do that. Okay, David Sweet. So there are various methods of placing piles. Should we recommend – from you understand now, should we recommend any limits on the methods used to place piles for construction?

GREB: So this is Julie Greb, and again I think the answer is the same that it's not our place nor is the City Council's place to determine which pile construction methodology is appropriate for each location.

STANDLEE: Kerrie Standlee. I agree that we can't specify the method because the conditions in the city aren't the same everywhere, and some places require – you can do it with vibratory pile driving, and other times you can use augers, but there are times when you have hard rock and you can't do that.

SWEET: Okay. This is David. I want to acknowledge that I concur with the board on those first two questions. So my next question is- it's been suggested that, and this follows what the city of New York has in their code, that in the case where pile driving is going to take place, it needs to be pre-approved by the City for good cause shown to explain the reasons why you need to use that particular technique before you go forward. Is that something that we might want to consider?

GREB: This is Julie Greb again, and I like that idea. This is something that could be done through the permitting process so there's sort of a functionality within the City to at least administer that and have appropriate reviewers maybe take a look at it. So I mean as a recommendation, I don't know exactly how it would all pan out, but I like this idea. And that there's an existing code in another city might help, as far as language.

STANDLEE: Kerrie Standlee. I agree that pre-approval is a good idea because it then brings in the community to be more aware of what's going to occur, and it makes it easier for everybody to say yes or no we can or can't do certain things, so I think it's a good idea.

SWEET: Well, thank you. Yeah, David, I like this idea myself. I think it promotes a certain transparency about the operations and where people are going to be impacted as it were by the impact of pile driving. I think that it might help them if they understand the compelling reason why that has to happen. So I think, yeah. That could be something that we're going to recommend going forward. Right now, pile driving is regulated as the same as any other construction noise. The hours are limited 7 a.m. to 6 p.m. Monday through Saturday. Should we recommend any additional limits on hours of days for pile driving specifically?

GREB: This is Julie, and yeah, I like that. I think that the people who live adjacent to these projects are affected a lot by pile driving and construction in general, so I would be in favor of limiting the hours to something like Monday through Friday only, 7 to 6 seems reasonable. That's the normal workday, so, yeah. That's what I would recommend.

STANDLEE: Yes, as well. The pile driving does not need to occur during all those hours, and I think that if it can be reduced, at least that's what I've found over the years with the projects where I've worked on around pile driving.

VAN ORDEN: Paul van Orden, Noise Officer. I think one interesting observation looking at pile driving over the years, I rarely have seen them get started pile driving right at 7. Usually it takes

them time to do everything, to get set up, and I've seen projects start at about 7:30, 7:45, so I would raise a question for the board to explore if it doesn't make sense, although it will create an interesting enforcement challenge of having pile driving starting a little bit later, which would mean they could move equipment into place, they just wouldn't start driving piling until 8 in the morning.

SWEET: Okay, thank you Paul.

GREB: As a construction person, I don't like having one extra rule that everybody has to – just to save one hour when most people kind of get up at 7 anyway, but that's just my decision.

SWEET: I think we have another couple construction people here tonight, so they will probably want to respond to that idea, as well, but thank you Paul. Did you have comments on the other questions we were discussing?

VAN ORDEN: Well I think it's an interesting question to pose if the Noise Office is the right place to limit a particular style of pile driving and if that should fall into the Noise Code. I think it's a challenging one in so far as I think one of the components is, is this a building technologies issue that should be addressed in a different fashion? And if that's the case, then it's probably a bigger dialogue than the Noise Review Board. If the board were to choose or if City Council were to choose to go down the road specifying particular methodology, it would be interesting to see exactly how we would exactly enforce that or what that would mean, but I don't know that I would say that's the best direction to go to solve this issue. I would think that the concept of having pre-approval for a particular style or methodology of pile driving with the public notified and in the mix and having comment opportunities that that would be an opportunity to actually explore the different type of pile driving.

SWEET: Okay. Good. Thank you, Paul. Okay, final set of questions- and this is something that has been recommended by some of our friends who are impacted by construction noise in the Pearl- and that question is should we designate certain areas of the city as Construction Noise Impact Areas where some special restrictions apply, and if we were to do that, how would such an area be defined and what sorts of restrictions might be appropriate for noise impact area?

GREB: Do you want to field that one first, Kerrie?

STANDLEE: I'm confused. I'm not sure I understand what it means since I haven't been part of the previous deliberation or discussions of this.

GREB: Right.

SWEET: You might say that where you have X number of projects that will last longer than six months within Y distance from residential properties, that that constitutes a special construction noise impact area. I don't know how many - depending on how we define it, I don't know how many of those there would be. Obviously the Pearl District is the one we're thinking about first, but I suppose North Williams Avenue might be another of these types.

GREB: So the back history here is mostly that the impact that the citizens have been getting is because of the culmination of multiple buildings being built in the Pearl District.

STANDLEE: Um-hm.

GREB: One right after the other after the other, so there's no reprieve. So this is sort of a question to kind of move that conversation forward. Like, you know, it's not that everyone's opposed to one or two buildings, but it's just seven in a row. It's leading to years of impact. So maybe there's a way to work with BDS to only allow permits certain time to space things out. I

mean I'm not sure how you manage this. I don't know. I mean, also you've got to make hay while the sun's shining, right?

SWEET: Well there it is. Yeah. I think it's tough to ask BDS to limit permits.

GREB: I just don't know how you regulate this. I like the idea for sure, it's getting to the genesis of the issues, but I have no idea how you would move this forward.

SWEET: I'm not sure. The devil is always in the details, and if we set up something like this, does that mean the City is responsible for identifying every impact zone and imposing these restrictions on whoever is working there at that time? Another thought I had was what if we did it – set some general parameters but designated a zone on a complaint basis where citizens bring us the problem and we say, oh, okay, let's take a look at that. Maybe that is a construction noise impact. I'm not sure.

GREB: I don't know. That just seems like that wouldn't get – it would be another year before there would be results.

VAN ORDEN: I don't like the complaint-driven system.

SWEET: Okay.

VAN ORDEN: As a note, I have seen a number of Neighborhood Associations recently raise a valid question of enforcement in the City of Portland and if a complaint-driven system isn't skewed towards more affluent people having the voice and time, and so I would say that I would want to see a system that I would feel I could equitably enforce and that contractors would know what the rules are and that they wouldn't be part way into the project and then you're saying "You're in a district that has new rules now.", so I would say if we're going to do it, I would want to see consistency and not reliance upon a complaint-driven system.

SWEET: Okay. Kerrie, any thoughts about this question?

STANDLEE: When I read the words construction noise impact area, to me that sounds like it's going to be a noisy area to begin with, so I'm not sure – If we're talking about it for pile driving...

SWEET: It's going to be a noisy area because of construction.

VAN ORDEN: We're talking about...

STANDLEE: Right. If we're talking about pile driving...

VAN ORDEN: We are, but we're also going beyond that because of in the process of learning about the impact of pile driving in the Pearl District, we've also been hearing from people that feel they have a really intolerable situation with just the aggregate amount of construction going on around, and so the question is should there be any special sort of relief when the aggregate adds up to so much more.

STANDLEE: I don't have any thoughts on that yet.

SWEET: Okay, all right.

STANDLEE: I haven't formulated a thought. Is this the only list you have or...?

SWEET: Those are the questions that I've formulated for us to begin our deliberation.

STANDLEE: I'd like to add one.

SWEET: Good, thank you. Please.

STANDLEE: Should we require consideration be given to noise mitigation?

SWEET: Say more.

STANDLEE: Well I did a job with a hospital down in Coos Bay where they had to have pile driving next to the hospital – their expansion – and they went ahead and took on the role of mitigating that impact noise.

GREB: How was that accomplished?

STANDLEE: We built things in the building...

GREB: Oh, okay.

STANDLEE: ...to reduce the sound coming into the building, and then they've also looked at their hours. So I mean, also looked at the equipment mitigation.

GREB: Was there any equipment mitigation?

STANDLEE: There is, you just have to find a contractor that's willing to do it.

SWEET: Can you talk more about that? Because we've explored that and...

STANDLEE: Well there are curtains that you can have knotted onto the equipment that would reduce the sound radiating from the impact point.

SWEET: Right at the hammer.

STANDLEE: Yes.

SWEET: Okay, so that has to be mounted on a crane because your pile starts out way up in the air and then moves down.

STANDLEE: Right. Or you mount it onto the handle part. It's I think something that we can just put in there that mitigation should always be considered. Even though it might be within the limit that's eventually developed, if we can come up with one. That number – whatever you come up with – is at a particular distance, and you might have cases where you're closer than that distance to a residence or something. So it wouldn't be – it would be a good idea to always consider mitigation.

SWEET: So that's something that could come into play at the point where application is made and the pile driving is being pre-approved.

STANDLEE: During that pre-approval process.

SWEET: Then a mitigation plan can be part of...

STANDLEE: Sure. I think so.

SWEET: Okay.

GREB: Certainly if there are some contractors here today, something we could ask them about that and see what's out there in the market as far as equipment.

SWEET: I think there are. So I know that we have a number of experts with us tonight, and we'd like to – you've heard the kinds of things we're looking at, and we haven't made any decisions yet, and we certainly haven't formulated our recommendations to the council yet, and so part of my reason for this process is so you can hear some of the directions that we might be going, and we'd love to get responses from the contractors, developers, engineers in the audience. So who would like to start? Scott, you up?

MILLS: If I could speak to one aspect of the question.

SWEET: Please.

MILLS: Oh, do you want me to come up?

SWEET: If you would. We've got a microphone over here. We're going to record the entire meeting, and there will be a transcript prepared, so you start by stating your name and who you are.

MILLS: Scott Mills, and I'm a consulting geotechnical engineer.

SWEET: Thank you for that.

MILLS: You know one question you talked about is the having someone within the city approve a particular method of pile installation. You know, so you'd have to state that other

alternatives were not for whatever reason appropriate. We had to go with driven piles. Like you said, it's kind of the devil in the details on that one is what would be reasons – I mean you'd have to sort this out in some type of a code, I guess, but is being prohibitively expensive a reason not to use a particular method? Because anything's possible. And I think – so for example, you know, shafts that have to go down deep enough to support the building. Especially in the Pearl District, there are not many of them in this area. You'd have to probably import them from other parts of the United States, and that would be one thing. And as an engineer, I'm always looking at how we can do something, I mean, that's part of engineering. It's not just the design. It's also, can we do it with the least expense possible, you know. If it's within a few percent, then going with something that is quiet is obviously the way to go, but that would be one of the concerns I'd have is that decision being made by a bureaucrat that would have their own agenda, and that happens a lot in my business.

SWEET: That's reasonable, and in answer to your question, I suspect – first of all the question is to whether an application to drive piles would be denied...

MILLS: Yes.

SWEET: ...is not something – I don't know if that's the case. I think it might simply be a matter of you say you need to drive piles. Okay, explain to us why.

MILLS: Why? And what are good reasons?

SWEET: When you spoke with us at an earlier meeting, you explained that there are certain circumstances which you...

MILLS: It's difficult.

SWEET: ...as a geotechnical engineer would require the piles be driven as opposed to poured. Augered and poured.

MILLS: If it's that easy, that'd be great. I just know from experience it can become very difficult and onerous.

SWEET: Yeah, I don't know. Certainly, as I'm sure you know, and codes are developed when the state specialty codes are developed, expense is always a consideration...

MILLS: Right.

SWEET: ...and of course would be in this case. We don't – the city does not want to put people out of work or stop construction from happening.

MILLS: Right.

SWEET: So, yes.

MILLS: I'm sorry for referring to you as bureaucrats.

SWEET: That's all right. As a former city bureaucrat, I take no offense.

MILLS: I guess that's my really only point.

SWEET: Good.

MILLS: The others would be able to answer the other ones.

SWEET: Thank you, Scott. Okay. Yes, sir. Please come forward. And we've got a couple of chairs up here, so whoever wants to be next is welcome to join us up here, as well, so please.

SHAPIRO: My name is Doug Shapiro. I'm with Hoyt Street Properties. I'm one of the developers that you referred to before.

SWEET: Yes, thanks Doug. Thanks for being here.

SHAPIRO: Yeah, not a problem. So I'd like to address, Dave, something you mentioned before about New York City. This is actually near and dear to my heart because I grew up in New York

City, was a contractor there for 20 years. We've never driven piles there. It was always drilling and blasting. And that process usually took months as opposed to our driving process here, which takes about on an average 35 days. I've been with Hoyt Street for about 10 years now, and I've driven a couple thousand piles in the Pearl. A combination of driven piles, as well as geo-piers, and I just want for the record to know that Block 15, which we're building now currently, we looked at all options, and the decision to go with CFA was not driven by noise. It was driven by economy and efficiency. Two major components when you look at an overall project schedule. Because as you can imagine, time is money. So if we can shorten that schedule up and be more efficient and be more costly, that was a decision to pursue those avenues.

SWEET: Um-hm. Excuse me, a CFA, Doug?

SHAPIRO: Continuous flight auger.

SWEET: Thank you.

SHAPIRO: Sorry, which is basically a drill.

SWEET: Yeah.

SHAPIRO: And we looked at and we will continue to look at all options for every project that we move forward, but we're hard pressed financially to evaluate just one, because our soils in the Pearl, which are – as you all know – highly contaminated. So every yard of soil is exponentially higher than you would think of as a pile of dirt because it has to be monitored. It has to be disposed of and then quantified. Well that whole process is extremely costly, and this CFA method that I thought was going to be more efficient, ended up costing me more time and was actually exponentially higher costwise. We lost time on our schedule, and we just literally just disposed of 9,000 tons of soil when we anticipated having 2,500, so the outlay of the spoils was way more than we anticipated. And it's not just by volume, it's by cubic weight. So that's a problem that in that area that came into play. So all these components put into the overall mix have to be evaluated. The SDC fees. They have been going up exponentially. In my 10-year tenure at Hoyt Street, I've watched them go up not once, not twice, but a multiplier of four. So you add those components into a Proformer – that is my essential task to guide these values to a pragmatic project – it all has a serious impact on it, and whether it's one project, two, three, four simultaneously, I think if we start putting those projects at a gate, I think developers will shy away from that just for sheer – our building timeframe is only so long. Granted this winter was uniquely different, but if we're not in the ground by October, it could get very costly. Just even moving around that particular site.

SWEET: Okay.

VAN ORDEN: So a clarifying question. You talked about increase in spoils, and what I would assume – and I can be wrong, so I just want to ask for clarification – did the volume increase not because you wound up having more soils you were pulling out, or did the volume increase that was contaminated? Is that what you were getting at?

SHAPIRO: No, the contamination is there. It's through and through.

VAN ORDEN: So you were just surprised in the increase in the actual volume you wound up having to deal with.

SHAPIRO: Exactly. And believe it or not, it's hundreds and thousands of dollars on a small site. On a large site, I spend upwards of a million dollars just in cleaning up of the soils. That's just for removal. That's not paying for consultants and DEQ fees and so on and so forth. We should

look at all those components that go into a project. It's not as simple as, you know, that noise. The reverberation of a pile. It's everything that goes into it. On the Encore site, which you may be familiar with, next to the train tracks, we had a series of not just driven piles, we had geopiers which had to be implemented, so that's another process. It's a massive caisson, which is fed by rocks that just get literally infused into the soil to increase its bearing capacity, and that's what it's all about. Once you limit those structural components of a foundation, you have a major impact on the sizes of the structure, as well. I'm sure you all realize that.

GREB: I have a question for you.

SHAPIRO: Yeah.

GREB: In that this is a livability issues, right? And that you build buildings and sell your apartments based a lot on livability issues and the livability of Portland is important to us...

SHAPIRO: Yeah.

GREB: ...do you have any recommendations for us? Like we know we need to have kind of a seesaw balance here. Like is there any sort of capitulation that you would recommend that we could have your interests, construction's interests and all the citizen's interests somewhat balanced?

SHAPIRO: Yeah, and it's a course of business as far as I'm concerned, and the timeline is relatively short in the scheme of a project. You know, normal pile driving process is- I'm going to say anywhere from 30-40 days. In a schedule, that's usually 18-24 months. That's very small in the scheme of things. Everybody remembers this massive month of intensity, and then it's gone. It's over and then it's onto something else.

GREB: Yeah.

SHAPIRO: I think the biggest issue, as far as I'm concerned, and I live in the Pearl, is the garbage trucks at 5:00 in the morning. It's just hellacious.

GREB: We've been through that one, too.

SWEET: Yeah. We're probably going to take that up next, but we've got to deal with this now.

GREB: Okay. You don't have to have an answer. Just looking for options. Looking for people's ideas.

SWEET: Let me ask you this, Doug. How much would it increase your service if we were to say you couldn't drive piles on Saturday, for example.

SHAPIRO: It would have a major impact.

SWEET: It would.

SHAPIRO: Yeah. I was thinking about that before. Just efficiency. Our timeline, as I said before, is so finite. If that building process permitting goes through very smoothly and we all make our timeline, it's manageable, and my contractors and the equipment doesn't break down, which I've never been on a project where it has not been that case, it's having that flexibility. If you shut that door completely, I know for a fact my contractors will come back to me and say, well you're schedule's going to be that much longer. And like I said before, time is money. That float, whether it's a full day work, but having that ability to make up those couple of 10, 15 piles makes a difference. It does.

SWEET: Okay. Any other questions for Doug from the board?

GREB: No.

SWEET: Okay. Thank you very much.

SHAPIRO: You bet.

SWEET: Yes, sir. Please.

RICE: My name is Reeder Rice. I'm a retired union pile driver, and this is going to be short. I just wanted to comment when we were talking about alternative methods of pile driving, this gentleman, Kerrie, mentioned vibratory hammers, and the only thing I wanted to say was that's usually not a complete solution. A vibratory hammer very rarely gets the piling down to what's called tip elevation or bearing. So while it sounds good, the vibratory is usually a precursor to the impact hammer, which is the one that's going to make all the noise. And I don't want to get off the subject of the construction talk here, but I overheard you ask this woman if there had ever been any complaints from South Waterfront regarding pile driving noise, and she said, no, none. So is this site specific to the Pearl? I'm not sure I understand.

SWEET: We're just trying to understand.

RICE: Thank you.

GREB: I have a question for you.

RICE: Yeah.

GREB: Have you ever seen a contractor use some sort of skirting around the hammer before?

RICE: It's used in the water as fish protection. They'll hang a skirt, what's called a bubbler, and it pumps air down, and a series of a bubble curtain goes around, and that's supposed to effectively help the fish and the impact under water. So the danger in my opinion there, if you had some sort of skirt around the hammer, it wouldn't be visible, and in a violent application things fall down, metal fatigues, and other than the fact that it would probably work, if you're not watching the stuff, stuff comes down sometimes. So that would be – if there's a way around that, it sounds like a good idea.

GREB: Okay, thanks.

SWEET: Thanks for coming down. Appreciate it.

RICE: You're welcome.

ULLAKKO: I'm Garth Ullakko with Dewitt Construction, and I'm the reason for all the noise.

SWEET: You're the guy. We've been wanting to get to you.

ULLAKKO: I've been to a couple of these meetings already, and I've heard about all the noise that we've got going on, and I decided to do a little research on our project, and I went off of the job that we had down there in the Pearl- Block 17. And as Doug Shapiro stated, most of these durations are 30-35 days, okay? So I went back and I checked the driving logs by Geo Design, Scott Mills' company, for seven days of driving. In those seven days, we drove 76 pile, and it took us 1,251 minutes to drive those 76 piles. That averages 10.85 piles a day for 16 minutes and 30 seconds a pile. For three hours of driving time in an 8-hour shift. So I just wanted to point out the noise isn't for 8 hours constantly. There's a lot of other activities that happen on the job site that happen when the pile driving hammer is not working. I mean it sounds like we're driving piling constantly for 8 hours, and that doesn't happen. So in those seven days, I believe the longest day that we drove pile, we actually had a 14 pile day down there, and we had 3 hours and 52 minutes of driving time, okay? And I don't want to say that Scott's wrong on those logs, but that's from the start of the pile until the finish of the pile. Our hammer is only driving a portion of that time, also. So I actually feel that that time is less than that. I thought, you know, 3 hours and 52 minutes, that's not very good in 8-hour-a-day work, right? But, you know, at 10.85 piles a day, that's down to actually only 3 hours of driving a day. So I looked at the job that we have going on now at Southwest River and Southwest Moody,

and we're getting about 6 pile a day. They're a heck of a lot longer, and the hammer only runs for 10 minutes a pile. So in an 8-hour day down there, that hammer's only running for an hour. As opposed to the Pearl where we had to hit it a little bit harder. We were going a shorter distance. Like I say, in 8 hours, we're averaging 3 hours of driving time.

SWEET: That's because you're dealing with alluvial soil rather than the junk you've got in the Pearl.

ULLAKKO: Right. So I'd like to talk a little bit about the mitigation down at the Coos Bay Hospital. I believe we did that job also, and the mitigation there, there were sound panels on the outsides of the windows and what they did on the inside. We did not hang curtains on our hammer down there, and again, I believe the duration on that job was about 20 days if I can recall correctly. But as Doug said, most of the time, the duration of these projects is only 30-35 days. And I was just listening to Doug talk too about the working on Saturdays. If you can't work on Saturdays, he brought up the CFA pile, which is a continuous flight auger cast pile, and you cannot do one of those pile adjacent to the one that you just put in until it sets up for 12 hours. So some days if you do break down, which you do break down with CFA as well as with pile driving, that Saturday is very important to recoup that sequence that you're doing. So every day counts. With pile driving and with CFA, you run into things underground that you didn't expect to be there. That's another thing that prolongs the schedule, and if you don't have that Saturday to make it up, somebody's paying for it. The other thing with mitigation is we've been doing some sound testing and also we've been trying to hang some blankets around our hammer.

GREB: Any success?

ULLAKKO: A little bit, yeah.

GREB: Okay.

SWEET: What kind of reductions are you getting?

ULLAKKO: In Seattle, I actually believe – and this is one thing I want to bring up first is a test. The City of Seattle was down doing tests, and their meter – they wanted to shut us down a couple different times. The general contractor ended up hiring an independent sound testing firm, and they came out and said we were underneath the 94 dB, but the City of Seattle's meter was reading a lot higher. Come to find out after the project was done, the City of Seattle came back to us and said their meter was out of calibration. So we jumped through all the hoops and we made a sound shield, and it's for a certain type of pile driving. These were pipe piles that we were using, and we hung it not off of our hammer but the blankets were hanging above it and were on three sides of our hammer. So I believe Seattle's sound machine, they had a noise reduction of – Rory, did they say 4 dB that brought it down to just...

MARTINDALE: Rory Martindale for the record from Dewitt Construction. The overall project had a noise reduction between 100 – it brought it down from 101 all the way down to 94. There was only one time during the whole project they did the survey that had the 1 dB over the 94, and that was for a very limited, short amount of time for about a minute-and-a-half.

STANDLEE: Is that an interior and next-door measurement?

ULLAKKO: That was next door on the face of the building right across the street.

SWEET: Distance?

ULLAKKO: It was about 50 feet.

SWEET: 50 feet.

MARTINDALE: So you have Seahawks Stadium – right at the end of Seahawks Stadium is a new building being constructed. Right across from that is 255 King Street.

ULLAKKO: No, that's the site.

MARTINDALE: That's the site. But they're building right adjacent to that measured at the ground.

STANDLEE: And you know if that was peak level or RMS level?

MARTINDALE: The overall level. Brought it down within 94 dB for the duration.

STANDLEE: Do you know what that 94 was? Was that 94 dBA? Or 94 dB?

MARTINDALE: Yes, 94 dBA.

ULLAKKO: And that was with the pipe pile driving, which we were able to bring the hammer down because like Reeder just said it can be dangerous and there's something up there hanging over your head all the time. We were able to bring the hammer down to the ground every time and take a look at what we had hanging, and the first thing that we used, the sound blankets did not do it. Did not help anything. We ended up trying it another time. We got another type of material and put on there that the people that I bought it from said "This is the stuff they're using on the tunnel; it's going to work great." It did not. So what we did is we used a combination of the two, and we had a bunch of pile bucks out there weaving and fabricating this kind of two-stage blanket, and we got some noise reduction. But like I say, it worked for pipe pile with our air hammer. Now with the diesel hammer, it works a little bit different where that diesel hammer is actually a combustion engine where it's sucking in and blowing out. So when that piston goes up, it will suck those blankets right in, and then when it exhausts, it's going to blow them right out. I have seen some mitigation, some blankets that have worked on that, but it's a cage and they were using a lot shorter piles. It was in Canada and they had a three-stage deal. Which again, all of this it can be done, but it's going to cost more money. And my first step at this, it didn't cost much at all, but as we get into other things, it's going to get more expensive.

MARTINDALE: Well the other aspect that you're looking at this, and the gentleman before mentioned it, that things tend to fall off the hammers, and so for you to be able to recognize and see something's coming down at you is pretty important, so you're creating an extra hazard potentially for the pile bucks that are down below. So you want to be able to mitigate that or try to correct those types of hazards and correct the noise at the same time.

SWEET: But you were able to do that to satisfy the City of Seattle's code.

ULLAKKO: Yes. In that application. Just with the air hammer. We had two different hammers on there because the air hammer would only take it down to the hard layer, and we had to get a very big diesel hammer to bring it, but the diesel hammer makes a different noise than the air hammer. So it was already under.

SWEET: All right. Let me ask you this. If you're only driving for an aggregate three hours or so a day, would it make a difference if you – do you need a full 11 hours allowed? Do you need to start at 7 a.m.?

ULLAKKO: Yes, and this is what I tell just about every general contractor that I go into their office. We're going to break down. And it doesn't matter if we're doing drilling or we're doing pile driving, we have heavy equipment and it breaks, and if we want to stay on schedule, we've got to have those hours. And a lot of times we work right up to the hour repairing. We may not be driving. Once we get it repaired, we may have to use those hours the next day to drive

right up until that time to get back on schedule. And, you know, we don't always start right at 7. I mean, we'd all like to, but it takes us a while to get going in the morning. We've got all kind of things going on. We like to go out and warm the equipment up. Start that at 7, but we also have a routine that we do every morning, so we don't usually fire off the hammer until about 7:30, but as it gets lighter in the summertime and the schedule allows, you know, if we can, we'll be starting at 6:30 to take care of our routine so we can fire that thing off at 7. And if we can get the first one in at 7, I mean look at that. We drove 14 pile in 8 hours with 3 hours and 52 minutes of driving. If we can start at 7 and get that first pile out, maybe we can get 3 or 4 more pile in that day if it's a good day. And what's that going to bring that driving up to even at 17 pile. It's going to be about 3 hours and 45 minutes.

MARTINDALE: So the extra hours per that shift may alleviate along the end of that schedule to where they're not exposed to that extra pile driving that we're going to have to do to make up those piles that we're not getting on those succeeding days.

SWEET: Okay, questions for Garth and Rory?

STANDLEE: On the pipe drive, have you ever considered filling the pipe?

ULLAKKO: Filling the pipe?

STANDLEE: Yeah.

ULLAKKO: With?

STANDLEE: Sand.

ULLAKKO: No.

MARTINDALE: I think you're adding extra weight into a crane.

STANDLEE: No, I mean the pipe is up.

ULLAKKO: After the pipe is up?

MARTINDALE: You're still adding the extra weight to the top of the crane.

ULLAKKO: Yeah, and then you'd have to have another rig in there so...

STANDLEE: Well it's in the ground for that distance and then you...

ULLAKKO: Well, yeah fill them up with sand, but right down here at the PGE Building at the South Waterfront, we drove them in the ground as far as we could and then we filled them with concrete, and then we drove on the concrete, but the noise was no different.

STANDLEE: Well earlier, one of the fellas, Reeder, said that the vibratory hammer can only go a certain distance, and I know that that's the case. Is it possible you could use both during a job?

ULLAKKO: We do, yes, and that's usually how it works. The...

STANDLEE: The vibratory is quieter a little bit.

ULLAKKO: The vibratory will take it down on certain piles. If you're doing pipe piles or H piles or sheet piles, you use a vibratory hammer, and you can take them down to the bearing layer. Some vibratory hammers are big enough to actually get into the bearing layer, but most geotechs will still want you to proof it with an impact to see what it is.

STANDLEE: That's a mitigation itself though.

ULLAKKO: A bit of mitigation. However, for the...

STANDLEE: Mainly because you're not having 30 days of the hard impact. You're having...

ULLAKKO: Right.

STANDLEE: ...both, and so you've got some quiet...

ULLAKKO: You could have some.

STANDLEE: ...and then you got...

ULLAKKO: That's if you drive that kind of pile. Now the driven grout pile, it works extremely well here in Portland and it's very economical. You cannot use a vibratory hammer with it.

STANDLEE: I see.

ULLAKKO: And that's what we were using down in the Pearl.

SWEET: So, if as part of the permit process you were asked to explain the compelling reason why you need to drive piles and as part of that were asked to come up with a mitigation plan to reduce the noise – I mean that's where things like a vibratory hammer would come in – is that something that would be onerous for you? Would that be difficult?

ULLAKKO: I don't know that it would be difficult. One of the things that makes the loud one work or why they use it so much is because it's cheap. It's cheaper than steel. It's cheaper than the CVA because you don't have to get rid of the spoils, so you're just adding money to it. Which I think the end user is going to be the one that feels that money. And then also it's going to expand the schedule because when we were up there in Seattle with the sound curtain, we watched our production go down just because we had to check on everything more often and when the wind blows and catches that stuff and blows it in the hammer, it rips it up, you know, so it slows things down. A lot of it's about money, so during that permitting process and the mitigation, that's going to be something that probably the **Geotech**, the owner, the engineer are going to have to figure out beforehand.

GREB: Yeah, it's going to have to be at specs.

SWEET: Of course.

GREB: It would have to be maybe in the specs so that the bidders would know what they're up against.

ULLAKKO: But let me ask you this. If you're the owner and it's at spec and it's all specced out and this section is going to cost you 3.5 million dollars...

GREB: Right.

ULLAKKO: ...and I come in and say I can do it for 1.5.

GREB: I know. That's what we're weighing out here today, essentially.

ULLAKKO: I mean and that's where a lot of this comes from because it's going to be me this year, but next year it's going to be somebody else that comes up with a better mouse trap, you know.

MARTINDALE: The other part is the geotechnical engineering. The part of putting it into the ground- so putting it into the ground, you don't know what's in the ground, so you get hung up on a few problem pile to where you have to re-drive it or you have to redo them, so again it just adds to...

GREB: Thanks.

SWEET: Okay, Brandon, this might be a good idea to talk about a better mousetrap.

SJULIN: Brandon Sjulín, Zefiro Corporation. We're up from Southern California. We're a pile driving contractor in California and certain advanced applications with our Giken technology that we have, we'll, you know use that technology throughout the country. Giken is actually here today. Specifically more on the sheet pile side that the gentleman before mentioned, we would prefer to actually use our technology. We typically use it for Orange County flood control, City of Los Angeles, Los Angeles Department of Water and Power, where we've got to do temporary supportive excavation within third party properties events, and a lot of instances during the permit process, you can't get the permits approved because of environmental noise

impacts and endangered species or what have you, so it's almost in some cases on the flood control side, you know, temporary shoring side, almost exclusively used in Southern California. New Orleans, it was probably well documented more than any other place. On the foundation side, it seems that a lot of this is focused on, unless you had a continuous wall, I don't see how this would make sense. In terms of doing a foundation type system, but I'm not an engineer so I couldn't speak to that detail, but we typically when we do use the Giken silent piler technology, it's typically always sheet pile: seawalls, flood control, or supportive excavation.

GREB: What about building foundations? Do you do any of those?

SJULIN: So right now there's a lot of engineers that are getting ready to start design on the new Union Station downtown, so the supportive excavation, because it's such a highly populated area, most likely they'll specify this technology, as well. So in those cases, yes.

GREB: But that's just for the excavation. What about for the actual bearing piles for the building?

SJULIN: I couldn't speak to the pipe application in terms of the engineering side.

GREB: Yeah.

SJULIN: But if you did that location, from what I could tell would be what we call the Gyro Piler, which is you're hydraulically pressing in a pipe pile ultimately.

GREB: Okay.

SJULIN: The loudest part of the applications, the boom, the crane, is when the crane is placing up the pile into place, it's driven off a hydraulic power pack, which is a lot easier to mitigate because you can put sound panels, curtains, around that.

GREB: So the crane lifts the pile, and the machine hooks on down here and it vibrates from down here?

SJULIN: It's doesn't vibrate. It hydraulically presses it, and it works off of reaction piles, so you have what they call a dummy pile. You put it in the first initial pile, and it pulls up and then presses down. The gyro piling works differently than that, but on the sheet pile side.

Specifically, that's how it works. Right now we have three active projects going on in Southern California. One is called a seawall, and then the two are for temporary excavation. Supportive excavation. We're within 8 feet of a three-story house, and we have not had any complaints, period. And no vibration. Literally the loudest part is when you rip that sheet just with your shackle.

GREB: Interesting.

SWEET: Thank you Brandon.

SJULIN: You bet.

SWEET: Who else?

VAZ: I can – oh, sorry.

SWEET: Okay. Come on up. We've got two chairs up here. You can be next.

VAZ: All right.

BERT: Joel Bert, Dewitt Construction. I appreciate the opportunity to be here to talk to you. I'm a little bit late, but I came in when you said pre-approval. How does that work, and who would do the pre-approval?

SWEET: I don't know. How do you think we should do it?

BERT: Well frankly, I don't think the Noise Review Board should do it.

SWEET: I don't think the Noise Review Board would.

BERT: Yeah, that would be an engineering question...

SWEET: Yeah.

BERT: ...and they would have to be qualified and so forth.

SWEET: I would expect it would be part of the permitting process, and you'd be dealing with the technical folks you work with now on permitting.

BERT: Right, so we still don't know what – I'm thinking of a bidding standpoint. There's so many unknowns, I'm not sure how one would go about bidding this pile driving job in the future because we don't know the criteria, we don't know if it's going to be approved, or if it's not approved, then what? The low bidder – you don't submit this until after you get the bid, right?

GREB: The permit application?

BERT: Hmm?

GREB: Is the permit application gotten by the owner or by the contractor what you get the job?

BERT: Typically by the owner.

GREB: Right, so it would already be established prior to soliciting...

BERT: The owner would say my geotech tells me we've got to drive piles on this, so that's going to be part of the project, and you explain the compelling reason why you need to do that and any mitigation that's going to be done.

GREB: Which is done by the owner?

BERT: Yeah.

GREB: And that gets into the specs and gets past them?

SWEET: And that would get into the specs and you'd be told this is the way it's going to be. Yeah. We're not...

BERT: Those details haven't been ironed out.

GREB: We're furthering the conversation.

BERT: Well I guess that's where the concern is.

SWEET: So if you have guidance for us about that, but it would be something that would be issued as part of the permit before you even bid on it.

BERT: And criteria would be spelled out? Or would it be a contractor compliance? In other words, would it be up to the contractor to – you have a list of criteria. I've seen a lot of bids where it says you must meet the city code noise ordinance. I mean how...?

SWEET: Well this would be a little more specific. This would be specific to the job, is what we're talking about, and I mean it could be done at different levels, and we haven't decided anything here. But, you know, one way to do it is just a matter of getting it out – transparency. That you need to drive piles for this project? Okay. Explain the need, show us a reason why that has to be done, and that just becomes part of the documents so that when people say "Why does it have to be done this way?", we say, "Well here's the reason."

BERT: So another layer and another cost essentially.

SWEET: Well, it doesn't have to be terribly onerous, but...

BERT: Well, we don't know. That's the problem. Too many unknowns.

SWEET: It's all unknown right now.

BERT: Yeah. So you mentioned the limiting hours Monday through Friday.

SWEET: Um-hm.

BERT: I think it's been addressed about Saturday. That is a crucial day to make up. I think we typically count on a five-day week, but we need that Saturday in case something breaks down,

which is almost always. You have to understand that these hammers are continuously steel on steel all day long, and that's hard on equipment, and it's just the nature of the game you break down. So you don't know when, but you know you will. And again, that Saturday work is really critical for make up, and if you get longer hours, that just means shorter driving, which extends how long we're going to be there. So you might take a 30-day job, and it might end up 40 days because of the limited hours and on Saturdays. So now you're exposing people to the noise on a longer period. So I'm not sure that's a good solution.

SWEET: Okay. All right. But...

BERT: But I was curious – oh, I'm sorry. Go ahead.

SWEET: Well let me ask you this about that. I don't mean to interrupt you, Joel, but...

BERT: Sure.

SWEET: ...right now the code says you can't work on Sundays.

BERT: Correct. Sundays.

SWEET: So there is a limit. You know that.

BERT: Oh, sure.

SWEET: If you could work Sundays, then that would be an extra day for you to make up for breakdowns, and it could shorten the amount of time you're there and lessen the cost. So if you were to bid a job where you knew going in you're not allowed to work Saturdays, you would expect okay that's going to extend the time and it's going to extend the cost, but it's something you could live with then isn't it?

BERT: Oh sure.

SWEET: Okay.

BERT: I mean if you couldn't work Saturday, you couldn't work Saturday.

SWEET: Yeah, and so, yeah, and you'd be bidding only against other contractors who understand the same limitation.

BERT: Right, but – yeah. I wasn't addressing that so much as the – like Doug said. Time is money and if you can get in and get out quicker, everybody wins. Even though it might be more noise in a concentrated period of time. Kerrie mentioned that he didn't see a need to work extra hours. I'm curious. Where did that come from? Saturdays.

STANDLEE: Oh, I didn't say anything about Saturday.

BERT: Okay.

STANDLEE: I just said the length of time on a day.

BERT: Okay. I thought I heard you say there wasn't a need.

STANDLEE: No, I just said from projects I've seen they don't get started until 9 in the morning on the actual driving, and then they stop at 4 in the afternoon. But it's not – I didn't say anything about Saturday.

BERT: Oh, okay. Wintertime that extra hour would be critical because the days are so short as it is. But again...

SWEET: You don't have good daylight in the wintertime at 7.

BERT: Yeah, we've got enough to get started. We've got lights. Usually the project has generator lights. Floodlights. Noise mitigation. That's great, but the technology is just not there to be effective. You can reduce it a little bit, but we put a lot of time into this trying to find methods, and there are things out there, but the effectiveness is in question. Maybe Kerrie can address that. We're not looking in the right place or found something that we've missed,

but even if there was noise mitigation, there might not be any guarantees that it would work, and if it didn't work, then what? Do we stop until it does work, and then that plays havoc with the schedule. And everybody, you know when you affect a schedule, that just doesn't affect the pile driving, it's everybody behind you or in front of you, so these are things to consider. So all in all, we do recognize that it's a nuisance, but I would like to clear up one issue of when someone said it was harmful inside of a building, and I don't understand that because OSHA does have a threshold of 90 dB for 8 hours exposure. Anything over – supposedly you can stay in that environment for 8 hours without any harm. Then there's noise mitigation at 85 dB, but anyway, inside of a building it would be more of a nuisance than harmful. That's been our experience.

SWEET: Okay. I think you'll find there are medical and audiological professionals who might disagree with you about that.

BERT: I'm just going by the OSHA standard.

SWEET: I know the OSHA standard, yeah.

BERT: Okay.

SWEET: And that's for your employees.

BERT: Yes.

SWEET: The folks in the front row here are not your employees, their...

BERT: Well, there are employees.

SWEET: Unwilling bystanders.

BERT: Yeah, the employees are exposed.

SWEET: It's a different standard.

VAN ORDEN: So Joel raises...

UNK FEMALE: More than a nuisance.

VAN ORDEN: Joel raises an interesting thought. When we spent all that time – and there are at least a few people here- Joel might have even been on the board at that point. Kerrie I think was on the board when we explored garbage truck noise, one of the things that went back to council with was a recommendation to further study a few different ideas on how we could abate garbage truck noise. So it's something we really haven't talked about in meetings leading up to tonight. So I throw it out because I would say in my experience, I think we're in a tough position to say conclusively that there's a perfect mitigation methodology.

GREB: No. Methodology is...

VAN ORDEN: It's just something that we could potentially explore as saying before we go and enact something that we would like to see City Council fund looking at this more directly.

BERT: That would be certainly an acceptable way to do it.

SWEET: Yeah. We haven't heard anything definitive about mitigating the noise of any hammer on a pile.

BERT: Yeah, it's tough. We haven't found that velvet hammer yet. Anything else?

SWEET: Questions for Joel? Okay, thank you.

SIPE: Can anybody here ask a question to somebody up there?

SWEET: Not right now.

SIPE: When we come up we can?

SWEET: Not right now, but yeah.

SIPE: Okay.

SWEET: Yeah. You will get your turn. Yes, sir.

VAZ: My name is Ian Vaz. I'm with a company called Giken America. We are manufacturers of minimal noise, and I should say practically vibration free pile driving equipment. I just wanted to add to what Brandon was saying before. He was discussing about the machine and what we call the press-in method. Basically when piles are pressed into the ground. Whether it's sheet piles or pipe piles. And he was referring to Southern California with the drainage projects and New Orleans with all their drainage projects because of the drainage projects (inaudible), but the origin of how this actually came about was due to the urbanization of Japan. Because our technology is from Japan, and a lot of people started complaining because of course they had vibration or impact hammers there. So the current president actually created this concept to press-in piles by using a reaction pile of clamping into piles already into the ground and then hydraulically pressing in, and the equipment actually can walk along on top of piles. So you don't have to use that much space either. From what I understand, the Pearl District isn't an area with a lot of space. I mean I could be wrong, but – I came from Orlando – but basically what I'm getting at is the origin of this whole technology is for urbanized areas or areas with residents. Not just drainage or whatever have you, but we saw this. Actually, we found out about this Friday and decided that we should actually come out and try to help solve the issue. So that's why I'm here.

GREB: Do you guys have a rig that installs pile to bearing capacity for buildings?

VAZ: From what I understand – I'm not an engineer, but we have...

GREB: Do you sell them to pile driving contractors?

VAZ: We rent and sell, and we also provide technical advice for our press-in method.

GREB: Right.

VAZ: So even if there are potential or companies that are interested in what we do, we'll give them advice. We get inquiries all the time about, oh if we use your method, what would happen? How would we go about the certain soils that we have? We always give advice to all those inquiries. I'm trying to think of what else I can add. Basically, it's just. We think it's the right technology for the issue that's going on in Portland.

STANDLEE: Is it just for sheet pile?

VAZ: It's also for pipe piles, as well. Different...

STANDLEE: It just show sheet, and I just wondered – Z and U shape.

VAZ: Right. And I think Brendan had mentioned the Gyro Piler. That machine, the basic function of it is the same. It just installs pipe piles, and it installs and rotates the pipe piles into the ground at the same time. So it's able to penetrate through reinforced concrete with the proper ring bit on the pile toe without any severe noise, and I have some charts on me, but basically our company has been doing a corroboration study with the University of Cambridge in England for over 20 years, and they've come up with various results. The main one being the noise. From about 10 meters away, or 33 feet, 32 feet, you're looking at under 70 dB for piling. 66 to be exact.

GREB: So I think what I'm getting after though- is the equipment that you guys are selling compatible to the vibratory hammer? But then the pile driving they take that off and then they use a diesel hammer to get the final bangs to capacity?

VAZ: Oh, no, no, no. They're...

GREB: Able to...

VAZ: Right. It's able to press in to capacity.

GREB: Okay. Thanks.

SWEET: Okay, thank you, Ian. Gentlemen.

HYKE: My name is Ryan Hyke. I'm a representative with the Carpenters, Millwrights, and Pile Drivers Union representing over 5,000 members in Oregon, Southwest Washington, many of which live in the downtown corridor here that we're speaking about today. Thank you for allowing us the opportunity to speak. I really don't have much. I would just urge you to not make any recommendations to modifications to the way we drive pile here in Portland. I think it would jeopardize the safety and integrity of the buildings, and with all due respect, I think Julie said it best when she said you guys aren't professionals or engineers in this field. So I figured she said it, so I could say it. So I would second that, Julie. Thank you for that.

SWEET: I'm surrounded by engineers here.

HYKE: It's funny we're talking about this because most of the buildings in the Pearl District are sitting on pile foundations that are driven.

SWEET: That's right.

HYKE: And if I'm one of those buildings living, you know, I could respect that someone else wants to build a building right next to me and be my neighbor. So I'm not going to restrict them from moving in next door. If I want to be in solitude, I'm going to go out and move in the country where no one can build right next to me. That's just something we have to deal with in an area like this. I think that's all I have. Thank you for letting us speak.

SWEET: Thank you, Ryan.

MYERS: My name is Willy Myers. I'm the Executive Secretary Treasurer of the Columbia Pacific Building and Construction Trades Council. Like most of my affiliates, we follow the pile bucks under the job site most of the time, so I'm following him. I'm speaking up here. We would oppose any expansion of the sound ordinances that already exist within the city. Limiting the days is not going to answer the sound issue. The cyclical nature of construction does. There's building right now. Five years ago, we went through one of the worst recessions in the country's history, and no industry was hit harder than the construction industry, especially in the Northwest. I represent 15,000 working men and women from the city, you know, who would like to keep working.

HYKE: I did have one other thing I wanted to add. I wanted to thank Dewitt Construction for doing what they could do to help mitigate the noise, because that wasn't in their agreement and contract, and they went above and beyond to help the neighboring residents. So thank you guys for that.

SWEET: Okay. Questions for these gentleman? Ryan, Willy, thanks for coming down.

MILLS: Can I come up one more time?

SWEET: Scott, sure.

MILLS: Scott Mills again. I just wanted to make sure there's a clarification about the Giken method. It's a very good method. We used it on one of our projects in Los Angeles several years ago, and what it's primarily used for – I don't anything about the rotary pile driver or whatever you said. Gyro, sorry. It's not readily available that I've seen at least in the foundations that we've done, but the Giken Method is very effective on shoring, which is basically do that before you do your mass excavation, and that's not where the noise is occurring on these projects down in the Pearl. Those soldier piles are bored into the ground,

and usually they drop in an H section and then into the ground, so there is no real noise there. But the Giken Method, I think it's preferred to beating sheet piles into the ground. And probably you'll remember 1st and Main that was very noisy, but the Giken Method would have been probably better. Much slower probably – well I don't know. It went on for a long time. Anyway, I just wanted to make sure because it seemed like there might have been some misunderstanding about what the Giken Method is really used for, and it's primarily for shoring in my experience.

SWEET: Thanks. Okay, anybody else? Any other experts in the audience who are looking to tell us what you think tonight? Okay. So we have experts of another kind in the audience.

VAN ORDEN: Quick question though.

SWEET: Yeah.

VAN ORDEN: So I know we had the questions so far that we had on the plate, but I also wanted to throw out that probably one of the bigger things that wasn't in the questions you formulated...

SWEET: Yes.

VAN ORDEN: ...was the concept of notification. And so I would say humbly one of the reasons this issue really became such a heated concern for City Commissioners was the timing, so when this all came into fruition of multiple projects at once, it was at a period of time when I was out of the office on paternity leave and concerns from neighbors were vocalized to the city, and with no Noise Officer present, neighbors really didn't get a clear picture of what the heck was happening in the neighborhood. That combined with testimony we've heard over the last several months about requests for improvement on notification, but by no means am I saying that notification fixes the noise issue, but I think a major component of one thing we should have on the plate is something relative to how we're going to let people know what they can expect to happen on construction sites because there's not a trigger right now that effectively gets that notification for pile driving.

SWEET: Yeah. Well it's a good point and it is one we need to address, and it is well established in the literature of noise impacts on human beings that if we understand what's going to happen, why it's going to happen, and how long it's going to last, then we tolerate it much better than if all of that is unknown. So that is something that we definitely want to work on is how to get the word out to folks. How to explain those things in advance better than we have in the past, and that is something we seek to do. Thanks. Good point. Okay, anything else that needs to be asked or said before we invite testimony from the citizens of Portland? Okay. You're up. Who wants to go first? Please. Come on up.

SIPE: My name is Mary Sipe. You're all very familiar with me. I've been here a number of times.

SWEET: You have, Mary, and we appreciate your diligence.

SIPE: Thank you. And I have to say I appreciate your diligence, as well, in having the experts here. I have primarily some questions of some of the experts, and I also wanted to kind of just make a little statement about in May when we first came to the Noise Review Board meeting and presented our concerns, we were told that going to the City Council was what we needed to do, and that is exactly what we did. And I was one of the four individuals who testified before the City Council, and unfortunately I had a computer crash and I have lost almost all of the mountains of research that I did, but I think Paul's office has a lot of that, if not all of it,

because I sent it on to Chad Stover. But in that meeting we were very specific about our requests, and as I recall it was to remove the exemption, the noise exemption, for impact hammer pile driving. And you'll notice also that I'm very specific. I make sure that I use the term impact hammer because that's what we're talking about. Pile driving to me is this huge, huge thing. I mean there's more than one way to skin a cat, and there's more than one way to put a pile in the ground. And so that was our first request was to remove the exemption that the impact pile driver that there was no limitation on the amount of noise that it could make. One of our other requests was noise mitigation, considering the hours of the day and the days of the week, and then also reviewing other technology and proposing that when safe and appropriate that other technology be used, and that's a lot of what we're talking about here. So I had a couple questions of some of the experts that would kind of fill in on that if that's okay. They're quick.

SWEET: Yeah, to what end, Mary?

SIPE: Well I just kind of want to know a little bit about – is Jim – are you Jim from Pacific – no.

STANDLEE: Jim is not here.

SWEET: No, he's not.

SIPE: Is Jim from Pacific Foundation not here?

STANDLEE: Jim is not here.

VAN ORDEN: He's not here.

SIPE: I was just curious of a couple of things. One, I thought Brandon maybe could speak to the question that was brought up about this whole bidding proposal and the questions that you had about that because it sounds like you're already dealing with that and there's a process in place and that that's kind of what happens in the permit process. Is that correct?

SJULIN: Yeah, usually, at least for the jobs I'm familiar with bidding with, is throughout that permit process so they can put that project out for bid, the parameters will be set. So my competition, myself, we all know the rules of engagement in what we have to comply to. I know one of the – Joel made a comment about not knowing. That's the worst thing you do. If it's not clear, they write it in the specs, make it very clear. If it's not, usually we ask questions and it's clarified through addendums. That's what I'm used to seeing.

SWEET: Okay.

SIPE: So that's kind of my end to that question. That could help.

SWEET: Yeah. In the interest of moving things along...

SIPE: Um-hm.

SWEET: ...what we're trying to do tonight is collect information...

SIPE: Right.

SWEET: ...for the board for our deliberations, so I would like folks to limit their comments, if you would to...

SIPE: Right. Yeah, and...

SWEET: And what do we need to know in order to make a good decision.

SIPE: And that's what I'm trying to ask because...

SWEET: Well, I...

SIPE: ...some questions have been brought up that I think there are experts here that could answer.

SWEET: Well, why don't you tell us about your experience and your concerns.

SIPE: Okay.

SWEET: And then we'll – I see you and we're going to...

MALE: I just want to clarify. What Brandon said regarding Joel's comment, I believe Joel's comment was regarding the unknown. We talk about that in pile driving is what's down there.

SWEET: Yeah.

MALE: Despite geotech and soil tech, there's always something somewhere potentially. I don't think it was unknown as far as not knowing what the permitting or the process was there. I believe that's what he was talking about.

SIPE: Okay.

MALE: Sorry to interrupt.

SIPE: No, that's good. So then I had two other things. One was we talked about the contaminated soil and removing all of that and hauling it all away, and one of my questions is, is there anyone that has the, I believe it's called fully displaced auger? Because that is another method that's available. It displaces the dirt. It doesn't bring it up is my understanding. So I wanted to throw that out there so that's another piece of information that you have.

SWEET: Thank you for that. What else?

SIPE: I have one final question, and that's directed at Dewitt.

SWEET: Okay. I prefer that you direct your questions to us.

SIPE: Okay. I guess part of what I would want to know in doing this is that you're very aware of what the availability of these different technologies are, and we keep hearing cost being brought up and that you also have the information about the differences in cost and that you like contact like Pacific Foundation and Dewitt and all these other companies to really find out, what is the difference in cost? Because 1.3 million dollars on an 800 million dollar project, you know...

SWEET: That's a pretty big project.

SIPE: Yeah, but – or not 800. I meant 80 million, sorry. Hey, it sounded pretty good. So anyhow, that's my - the thing I want to say is that I would just encourage you to be sure that you're also asking those questions of the experts as you go along and formulate your proposal.

SWEET: Okay.

SIPE: Thank you.

SWEET: Yes, please.

HANSON: I'm Patrice Hanson.

SWEET: Hi, Patrice.

HANSON: Most of you know me. Not everybody, but I'm retired from the health field, and so when this impact hammer pile driving started occurring across the street from where I live in the Pearl on block 17, I just – I mean I was flabbergasted. It was so shocking. I never experienced such a thing. But I just immediately started researching the effect and impact on health, especially, and you've seen that. I didn't bring any of that with me today, but I think that's really important to consider. I think the idea of pre-approval is a really good idea because I know when they started on Block 17, all the other projects that were going up planned to use the impact hammer pile driver, but then after working with them, everybody switched, and they were saying they had to use it. You know, so I think for them to be able to present the criteria to show really why when it is needed that's a really important. And also I like the idea of this special construction noise impact area because like Doug was saying, it may

take 30-40 days for the impact – the job to be completed, but when you're looking at numerous projects, one right next to each other, one after the other, you're looking at months of pounding every day. The construction workers across the street, I was talking to a couple of them, they were grateful because they were trying to figure out how they were going to be able to do a really good job building a really good building with all this noise going on with impact hammer pile driving at the other locations right next to where they were trying to work, and they were grateful that it's changed, and so I appreciated – because they couldn't speak up because it was their job, but we spoke up. I think mitigation is good and limiting the hours is a good idea. There's been a lot of discussion about the expense of equipment, but I think probably even more important than that is the cost and expense on human life and well-being and health and goodwill. You know, you want to create an environment that people are going to be drawn to because it feels good there. Because people feel good there and they feel like they're being considered, and that is just so very important. Also there are people who work at home. They're trying to do their work on the phone or think, and then it impacts their income and their lives. And maybe they're not big, wealthy people with a lot of millions of dollars, but their lives are important too. Everybody's important. And the young man from Dewitt said that the impact hammer pile driving over the course of an 8-hour day may take 3 hours, but it's intermittent throughout the day, and you never know when, and my research showed that that kind of noise is more detrimental and has a negative effect on human life than a continuous noise. So there's a lot of construction going on in our area now, and the regular construction noise it's, you know, it's not a big deal to me. It was the impact hammer that was huge. It was that for me. I know for other people there are some other considerations, but for me, it's just interesting watching it. I think they're doing amazing work and big jobs, and it's just incredible stuff going on out there. The whole face of the neighborhood is changing.

SWEET: Let me assure you, Patrice, and that we do not minimize the importance of the impact noise on you. If we did, we wouldn't be here.

HANSON: Yeah, I know, and I really appreciate how you've been addressing this issue, and here it is a year later and here we are. This is awesome. So I really appreciate you a lot and thank you very much.

SWEET: Okay. Thank you, Patrice. Who's up? Okay. What? Sure come on up.

SEEMEL: Hi.

SWEET: Hi.

SEEMEL: I'm Gwen Seemel. So I think that we're talking about two different – or if we can sort of frame this decision that you're trying to make in terms of extremes. One would be the thing that the contractors are more voting for, which would be no change at all, right? That would probably be more ideal for them. And then the extreme would be always using the auger. So no hammering, okay? That would probably be what more of the residents are interested in. So if those are the extremes, let's find a compromise in between those. Like both of us are going to hurt a bit, and we get that, but as long as both us are hurting, it doesn't feel quite so unfair. I also did want to mention that the pile driver union guy said, you know, just move to the – just live somewhere else if you don't like this. I would like to say to the construction workers and the developers and stuff, if you don't like that when you come into an area where there's a lot of construction and all of a sudden you have more rules, then don't bid on those projects.

FEMALE: That's right.

SEEMEL: Okay? So we all hurt and that's the way it should be. That's how democracy works is when we all hurt a little bit. So, please, let's think about this. No change at all and only auger. There's a space in between there where all of us can be happy and not happy in the same room. Thanks.

SWEET: Thanks, Gwen. Yes. Sure.

APPLEFIELD: I'm Lizbeth Applefield, and first of all I want to thank all of you and everybody who has been involved in this since we started in May requesting and begging because it has really reinforced my belief in local government to know that you've listened. You've heard us. And I've been listening today, too. Of course I don't envy you. You're between a rock and a hard place.

SWEET: Which are you?

APPLEFIELD: Pardon me?

SWEET: Which are you? The rock or the hard place?

APPLEFIELD: I think I'm the hard place.

SWEET: Okay.

APPLEFIELD: But a couple of things have stood out to me. First of all, when you say about the hours that they – that's fine if it's from 7 to 5 or 6 or whatever it should be, but that's not what happens. What happens is for a couple of thousand dollars – and I do mean a couple of thousand dollars – the construction people will get very often for a period of months variances, which means that we can be awakened at 5:30 in the morning as I was with pile driving up through 6 p.m. Now maybe that only happens a couple of times, as far as the 5:30 in the morning, but it was definitely there. In fact, I asked a couple of my neighbors. And so the variances have been inappropriately distributed, I believe, in my opinion. And the other thing that strikes me here is not so much that these people are experts. They're professionals and they have a vested interest in their outcome and their bottom line, and a couple of words kind of spoke to me. That redhead over there he said it's cheap. And so he is imploring you, and I heard several different sob stories from developers today and contractors about their bottom line. And as Mary said, you know when you're dealing with a project that's 80 million dollars and you've got a loan for 80 million dollars, you know you're going to be getting back a hell of a lot more than 80 million dollars, and the extra million or so that it might cost to do the right thing is a pittance. Literally a pittance. And you know it's easy for these gentleman to come in and say, you know, it's just three hours a day over a period of 10 hours. Three hours a day. But as Patrice said, it's intermittent. You never know. We don't know. They don't tell us every hour or half-hour or 45 minutes, oh, we're starting now. You know, hold your ears. And your glass of water, because that may actually not only shake but shake itself off the table, which has happened, and I am not here tonight for any personal reason because the pile driving is over in my neighborhood. I have no vested interest here except I would hate to see other human beings go through what we went through in – and it was almost 8 weeks of this ongoing, never knowing when to brace yourself, and so it's misleading for people to say it's only 3 hours. And it's inappropriate for some other people to say, this is a nuisance. It's a nuisance and not a hardship because it is a hardship.

SWEET: Okay, and we are aware of that.

APPLEFIELD: Thank you very much.

SWEET: Paul, are you – I'm not aware of any variances for early start for pile driving.

APPLEFIELD: Do you know what? I got up one morning and it was a quarter to six. I was awakened at 5:30, and it was the people on Block 17, and I said to one of the construction workers, how can you be doing this at 5:30, and they said, well go ask the boss, and I went to the boss and he was very nicely arrogant and said that I have a variance, so you can't do anything about it.

SWEET: All right, well, we have to issue any variance, and I don't anticipate issuing any variances for early morning pile driving, but thank you. Thank you, Lizbeth.

APPLEFIELD: The thing is, that if there is another way, that other way, the least invasive way should be used. Especially in a residential community.

SWEET: We here you on that. Thank you. Okay. Anyone else? David?

VANADIA: I'm curious to know – I'm David Vanadia. I'm curious to know what stopped the piles in the Pearl. In the past year, there were piles being driven, and then at some point neighbors were complaining, and then people started using augers. And what made that transition? Was it a top down type of thing?

HANSON: We did. I can tell you.

APPLEFIELD: We contacted the developers.

MILLS: You did not.

VANADIA: So what was it?

SWEET: Scott. You can answer the question.

MILLS: Yeah, I was involved in all three projects. We drove piles on the first one, which was 17, and then on 15 we had a couple different options. One of them was auger, and augering was supposedly going to be quicker.

SHAPIRO: And cheaper.

MILLS: And cheaper.

SHAPIRO: That's the only reason. That's it. That's it.

MILLS: Quicker and cheaper. And then the third one was the Unico property, which is – it was going on a mat and we started hitting variable soil conditions around that site, and I decided to change from a mat foundation to drill shafts at the end of it.

VANADIA: So it was cheaper, it made more sense, and it was...

MILLS: It made more sense. It absolutely...

SHAPIRO: More effective.

MILLS: And to do a pile driving operation, you have to build a ramp into the hole, and they didn't have to do that with the method that they used.

SWEET: Thank you, Scott.

APPLEFIELD: And it was more humane.

SHAPIRO: But that's not the reason it was done.

SWEET: I'd be curious about that myself.

HANSON: [crosstalk] much more humane, and that's a very good reason.

SHAPIRO: True, but it's not as good of a foundation.

SWEET: Okay, David.

VANADIA: Well I'd like to point out that there are no citizen representatives here tonight on the board, and...

SWEET: Yeah, we had an epidemic of flu, and I'm sorry.

VANADIA: ...and I'm also curious – it's my understanding that Julie's second term expired last month, and so I'm wondering what capacity are you serving us right now?

SWEET: That's not my understanding.

GREB: That's April.

SWEET: I believe so.

VAN ORDEN: Who did we just renew? We renewed...

SWEET: Melissa...

COUCH: We renewed Melissa. Julie is up in April.

SWEET: Melissa's first term expired.

VANADIA: It's April or is it – I thought it was February.

GREB: I don't remember.

COUCH: April.

GREB: Whatever their records say.

SWEET: Yeah.

VAN ORDEN: We can check with the auditor about as far as specific terms. This is not the appropriate venue for that.

VANADIA: Okay, and what else did I want to say? Oh, I just wanted to predict that Kerrie Standlee gets a consulting gig where he inspects all of this and is trying to figure out if there's a way to...

SWEET: Okay. I...

VANADIA: ...mitigate the sound and then he determines after two years and like \$25,000 or...

SWEET: All right, David...

VANADIA: ...\$12,000 that nothing can be done. That's my prediction. It's just a prediction, that's all. Thank you.

SWEET: Do you have any testimony to help us in our deliberations? Because I would like to hear that. But...

VANADIA: I do. I have been coming to talk to you guys for a year...

SWEET: ...insults and innuendo we can do without.

VANADIA: Okay.

SIPE: Why didn't you come to meetings?

VANADIA: I have been.

SWEET: All right. Hey, we don't need the crosstalk, thank you.

SIPE: Sorry.

VANADIA: There's a lot of like sneering and snickering amongst the construction folks when people are talking about how this impacts their lives. You're rolling your eyes. You're looking at each other. You're kind of laughing, and it's really frustrating to have to deal with a massive, massive onslaught of construction workers, city government, police – a lot of money that basically puts us down and makes us feel less than, and so the constant, constant noise is just a reminder that we are less than and that...

MALE: (whisper) oh, my God.

VANADIA: You said oh my God.

SWEET: David, do you have anything to help us?

VANADIA: You just asked me to talk about it.

MALE: This is becoming a farce. I have to say - I'm sorry.

SWEET: I'm sorry, please.

MALE: Really, you're wasting my time here.

VANADIA: We're wasting your time?

SWEET: Yeah.

MALE: Yeah.

APPLEFIELD: Yeah, see? There you go. Proof in point.

SWEET: David...

VANADIA: So your time is more important.

MALE: This is supposed to be productive, okay?

VANADIA: This is productive. This is an information-gathering place.

SWEET: All right. Please come to order.

VANADIA: Right?

SWEET: NOW! Thank you.

VANADIA: Yes.

SWEET: David, if you have anything to tell the board...

VANADIA: Yes.

SWEET: ...to help us with our deliberations, that would be germane. Anything is not.

VANADIA: I have told you for a year how I feel.

SWEET: You have. So if you anything...

VANADIA: So you know how I feel.

SWEET: I do know how you feel, and if you have anything to add, I want to give you time to do that, but if you...

VANADIA: I feel...

SWEET: ...if you feel...

VANADIA: Once again I'm going to express that I feel desperate, and I feel like nothing is being done, and this is a big puppet show.

SWEET: Okay, thank you, David. I'm sorry folks, but we do need to maintain some order here and not be crosstalking. We can't hear you when that's going on, so thank you. Is there anybody else who wanted to be heard tonight? Anybody who hasn't spoken. Anybody who feels they need to respond to something that's been said in the interest of helping the board with our deliberations.

ULLAKKO: I had one last question.

SWEET: Yes, Garth.

ULLAKKO: Were any of the sound tests done inside your guys' building, and what were the decibels.

APPLEFIELD: What was it, 110?

SIPE: No, that was in Fields Park.

VAN ORDEN: No, we didn't do analysis.

SIPE: We did some that were over 90 in the apartment. [crosstalk].

SWEET: I don't think we did that.

ULLAKKO: Okay.

SIPE: We did some in Maura's apartment. They were over 90.

APPLEFIELD: Yeah, I knew they did.

SWEET: Who did?

SIPE: Oh we just did it personally. We had a little sound deal. We were tracking some of that.

SWEET: Okay.

SIPE: I know it's on record somewhere in our stuff.

APPLEFIELD: And this young man, David, in our building.

SWEET: Okay.

APPLEFIELD: He got 110.

SWEET: Well...

ULLAKKO: Out on the street.

APPLEFIELD: But I was on the phone with the City Council members on several occasions during the pile driving from my apartment with the windows closed, and they couldn't believe it. So they were amazed.

SWEET: Okay. Loud enough to amaze a council member.

APPLEFIELD: Yeah, Amanda Fritz.

SWEET: All right, Scott, one last thought.

MILLS: Just one last thing. I just want to make it really clear as an engineer, my duty is for the safety of those occupants of the building, and I would not put continuous flight augers under any of those high-rises again. I believe that they're safe, but I lost about a year off of my life just worrying about the installation. They are very problematic. Quiet and everybody was happy, but I'm not happy with the extra tension that we had to put in to making sure that the building was safe.

SWEET: Thank you, Scott. You have made that point to us before.

VANADIA: And citizens have lost two or more years of their lives giving up time to construction...

SWEET: Okay. Is there anybody else?

MALE: Here's my comment referred to as a snide remark, it's like getting on board a boat and then pulling up the ladder. Nobody else can get on board. You guys all moved here and you're happy, and now construction starts...

SWEET: All right.

MALE: ...at the next building, and you don't want it to happen. [crosstalk].

SWEET: Please maintain order and we don't need testimony that's simply responding to remarks that offended you.

MALE: All right, I'm sorry.

SWEET: If you have something constructive for the board. Rory.

MARTINDALE: Well there was a remark on the hydraulic style of pile driving, and they didn't give a cost or what the cost is versus the real, you know, a hammer style pile driving.

SWEET: Yeah.

MARTINDALE: And what the timeframes are in scheduling those out. So you've got to compare apples to apples and oranges to oranges when it comes to that.

SWEET: Certainly. We do get that, Rory, thank you. Okay. Thank you all for coming. It's helpful. It's confusing. We're going to have to talk some more among ourselves now to consider all that you've helped us understand tonight, and we really appreciate you taking the time to come down and help us with this process. So thank you very much.

MALE: Thank you for your time.

FEMALE: Thank you.

GREB: I move that we approve the minutes from February.

STANDLEE: I'll second.

SWEET: Okay. All in favor, aye. Okay, thanks Kathy.

COUCH: You're welcome.

SWEET: We really appreciate the detail there.

GREB: Yeah, no kidding.

SWEET: It doesn't always have to be that way, but...

COUCH: I thought from last meeting, it needed to be really detailed.

SWEET: You were absolutely right. I'm grateful. Okay. So let's just outline a plan. What do you want to do and we can go home.

STANDLEE: Well we were talking about relative to this question of pile driving.

SWEET: Pile driving.

STANDLEE: Okay. Since I was not involved in any of this in the past, how many meetings or...

GREB: Eleven.

STANDLEE: Have this been discussed?

GREB: Probably 10.

STANDLEE: In what form?

SWEET: Well pile driving, haven't we really only had one?

GREB: No because it came up in May and then we...

SWEET: Well it came up in May, and we heard testimony from two dozen Pearl residents who were angry and upset and wanted us to do something right now, and they were even angrier when we explained to them that we weren't able to do something right now. So they think that they did it themselves and that that's why...

GREB: They think they can go to auger method without...

SWEET:they used CFA on the other project.

STANDLEE: Okay.

GREB: And instead it was a happy coincidence.

SWEET: Yeah.

GREB: Really.

VAN ORDEN: The gentleman they said they convinced – the company that they said they convinced to do it because of noise issues – happened to be the gentleman who was present tonight who said that was not in fact the case, and we have been trying for a long time to get that answer on the record, because it was really confounding things for City Council that somehow the Noise Office wasn't doing a good job, but citizens could just call up and get it changed.

SWEET: It's not the way it happened. So then that was in May. We didn't do anything until October?

COUCH: September there was a lot of citizen comments.

SWEET: But we had a hearing was the first time Scott Mills was here and Rory testified, so we had one hearing where we brought in contractors and engineers to educate us about it.

STANDLEE: Okay, I should probably get copies of those minutes, then or information that is provided...

COUCH: I can send them to you and they're also on our website, too, but I'll send them directly to you because it's easier.

STANDLEE: Because I kind of came to this cold tonight not knowing how far you guys have gotten.

SWEET: Not very far. I mean you heard most of it reiterated tonight.

STANDLEE: I see, okay.

GREB: I would say that the overarching issue is that there's a bunch of buildings one right after the other going up. And so it's the compounding of one right after the other.

STANDLEE: In an area that requires pilings.

GREB: Yes, exactly. And it isn't just the pile driving. It's all the construction noise. It's – contractors have been getting variances to start at 5am for long concrete pours, which we've been giving them for four variances total over the duration, and so it's just the compounding of that and then the contractors may or may not be following the rules, and so they just feel like nothing ever gets done and that the Noise Board just passes things through status quo.

Nothing ever happens. So this pile driving thing – and this is my preface of the whole, but it came up and so we've been trying to move it forward by having these discussions and bringing in the knowledgeable people, and now we've kind of collected everything, so today was our kind of culmination, last ditch effort, and now it's time for us to at least talk about what we think that we would like to recommend to City Council to move this issue forward, right?

SWEET: Yeah.

STANDLEE: Okay. Well I'm going to need to, like I said, review what you've heard in the past, and if you guys have discussed things in the past, ideas in the past, I'd like to know about those. So hopefully I'll get to see that.

GREB: Well I'd like to say where I'm at right now.

SWEET: Yes, please.

GREB: So I absolutely think that we need to come up with some sort of work/life balance here. Because I think the people in the Pearl District are being very affected and it's a problem. It's a livability problem, and I highly believe that it's true. I think there are some small things we can do, and one of the things I think is I think that we could take Saturdays off the board. I know the contractors say they need that day to catch up, but if it was never an option from the beginning, it actually puts everybody on the same playing field. Overall duration, yes it's longer with the number of days, and the citizens will see that as a trade off or a balance, right? Also in some regards from the developer's standpoint, it actually gives some cost consistency because the contractors aren't bidding in a Saturday, which would be time-and-a-half labor hours to do the repairs, so you might actually get some more competitive, equal bids. Just putting that out there. So I think that that is – and you know it would take effect at some point, and then all contracts after that would have that already built into the specs.

SWEET: So we could structure something for like any permits issued after a certain day.

GREB: Yeah.

VAN ORDEN: Like so if you've started building, we can't tell you to change your methodology because you just bid...

SWEET: If, yeah, for a project that's been bid...

GREB: Obviously it's not applied.

SWEET: ...on the basis of this already has been bid and the permit has already been issued...

GREB: But that's something we could do because it's a change to the noise code, right?

STANDLEE: But it wouldn't go – if you could specify the time when it's going to go into effect, then that would take care of all those...

VAN ORDEN: Like we do with leaf blowers.

GREB: However that functionality works. So I think that that's a really good way...

STANDLEE: So it would technically be six months before taking effect or something like that.

GREB: And it's a give and take from both sides, but it's not a huge give or take on both. Any of these things about the Noise Board having any part of deciding what kind of piles- even limits to the type of piles and pre-approving? We have no business in that.

STANDLEE: Yeah.

GREB: I think that's off the board and that it always lies on the project geotechnical engineer of record and that that is the way it is done in the United States. The end. Recommend additional limits on the hours. I think the hours stay the same. You have the same working hours, you just take Saturdays off. I like this idea – I mean definitely maybe we should talk about notification. That the contractor needs to tell people of work that is going to be happening that is above the approved level. Maybe that's a way to address notification.

STANDLEE: When you say above their approved level, what do you mean by above...

GREB: You know, Dear Neighbors, we will be starting the pile driving on our building on April 1st. This is the portion of work that is above the allowable construction noise...

SWEET: The allowable construction noise levels is 85 dBA except for pile drivers, rock drills...

STANDLEE: Right, right. They're exempt, but whether it's above or not, I think you ought to go ahead and just make sure all pile driving has notification.

GREB: Yeah, that's fine. That's a much better way to do it.

SWEET: Yeah.

STANDLEE: Have it based on whether it's going...

SWEET: So what does notification look like?

VAN ORDEN: Two-and-a-half blocks.

GREB: A mailing to everybody within two-and-a-half blocks.

VAN ORDEN: Which is...

GREB: Three blocks?

VAN ORDEN: ...500 to 600 feet.

SWEET: Two-and-a-half blocks is 500 feet. Yeah.

GREB: Does that seem reasonable or people who are affected by further than that?

VAN ORDEN: People are probably affected further, but the question becomes what's a reasonable criteria for people who are heavily impacted? I'd say two blocks is pretty reasonable. We've historically done that, so it's not...

GREB: Okay.

VAN ORDEN: Shouldn't be a giant impact. The question will be for the contractor. We probably want to be more specific and have the developer do it because...

GREB: The owner, yeah.

VAN ORDEN: They have a better capacity, generally speaking. What we see in the noise office that drives us a bit crazy is we have somebody who's not normally doing notification.

GREB: Yeah, I understand. And somebody who's busy trying to build something, and is busy 10 hours a day.

VAN ORDEN: And is just not good at it.

GREB: Yeah. And then this construction noise impact area. I really like this concept. I don't know how we move this forward, although this could be one of those recommendations the City Council does something to investigate this or empowers them, but I think that the culmination obviously is the problem, right? Or the aggregate of all of the construction is the problem, and so...

SWEET: It's a problem for some people.

GREB: Okay, I get that.

SWEET: Some of the people here tonight, Lisbeth...

GREB: For instance, yeah.

SWEET: It was the pile driving. The rest of it is- yeah moved to the city, I know it's noisy.

STANDLEE: It's part of the city.

GREB: Okay.

SWEET: But for David and Gwen, it's the aggregate.

GREB: I'm sure they're not alone.

SWEET: I agree.

STANDLEE: Yeah, but that has nothing to do with the pile driving, as far as...

GREB: Oh, we understand.

VAN ORDEN: But it rolls into that.

GREB: It ends up being...

VAN ORDEN: It is the aggregate of what's going – I mean that's why...

SWEET: We've ended up dealing with a lot of this, Kerrie, and part of that is because every time we issue a variance in the Pearl for an early start for construction noise, David appeals it to the city council, which is why as part of whatever code changes we submit to council. I would like to propose that appeals of variances go to the code hearings officer and not to the council.

GREB: That seems like a very reasonable use of city time.

SWEET: I hear from council staff that that would be a very welcome...

STANDLEE: Proposal.

SWEET: ...proposal.

GREB: That's great.

SWEET: I don't – council has clearly been very confused at dealing with variance appeals. It just doesn't come up very often, and it probably won't again after David runs his course, but in the meantime...

STANDLEE: Every time. It's been coming every night.

SWEET: Yeah.

STANDLEE: So are you guys thinking – I don't see question on here about limit level.

SWEET: No.

GREB: No.

STANDLEE: And why is that?

SWEET: I don't think we felt – I'll answer that. I don't think I felt confident that I've seen evidence yet with the capacity we have to do research because we squeezed this in as best as we could between all the other noise variance processing to sit here and say from that limited amount of time that we feel confident of X level.

GREB: No.

VAN ORDEN: And that's why I said in my recommendation earlier was I do think that something that we've been good at addressing as a city, you know, garbage trucks. I felt we did a great job on City Council. They didn't adopt it. Leaf blowers? They didn't really put us in the position to effectively enforce it, but we came up with a standard that now everybody in the country is adopting and that the companies are now manufacturing their leaf blowers to. So this is something that I wouldn't want to hammer Dewitt or other companies – I wouldn't want to put a standard that we're not sure is achievable yet. So I would say if council really wants us to address it in that capacity and if they receive testimony from citizens that they want that, then they need some work done because with the time the Noise Office has available and the time the board has, we're not in position rightfully I don't think to specify a number yet.

STANDLEE: I understand. It sounds good.

SWEET: Yeah, and by the same token, there may indeed be technologies, or even a technology, that's quieter and that works, and I'm not sure how much it works...

GREB: Yeah, I'm not convinced at all.

SWEET: Yeah.

GREB: If you can tell.

STANDLEE: For the type of...

GREB: Right.

SWEET: Yeah.

STANDLEE: ...construction we're talking about.

SWEET: So I don't know the answer to that, but I'm not comfortable at this point specifying you have to use this technology and no other, which it seems to me that setting any sort of reasonable noise level involves something on that order because, frankly, I continue to believe that a hammer hitting a pile is too loud for people to live around...

GREB: Um-hm.

SWEET: But that's what we got, and I don't see setting a level that lowers that 4 to 5 dB and still not protect it.

GREB: Right.

SWEET: And I'm not absolutely sure...

STANDLEE: I agree with you. You probably have more influence on livability if you don't put a limit than if you put a limit. If you look to put a limit as soon as they were there, that's as much as there going to do.

GREB: Right, I agree.

SWEET: All right.

STANDLEE: I just wanted to know why it wasn't on the list.

GREB: Also with mitigation, it seems to me that we don't have any – that mitigation for pile driving seems to be in its infancy, and so I don't think we can speak to that yet either.

SWEET: Yeah, I mean...

GREB: It doesn't seem reasonable for the application, unfortunately.

SWEET: I mean I can appreciate that for a hospital when you might make an extraordinary effort to...

STANDLEE: Well, they did.

SWEET: They did.

STANDLEE: The hospital did because the patients.

GREB: Sure.

STANDLEE: They had to deal with patient...

SWEET: Well, we have some inpatients, but I don't see Rory going around putting plywood over all the windows in the Pearl.

GREB: No.

STANDLEE: All of them? No, you just do it in a certain distance.

SWEET: That's a lot of windows.

STANDLEE: This was pile driving within 20 foot of the building.

SWEET: Okay. There's a lot of windows within a line of site of where this is going on.

GREB: Yeah.

STANDLEE: Well but not 20 foot away.

SWEET: No, not usually.

STANDLEE: But that's the thing, you know. If it's in the process that mitigation should be considered, it gives it up to the contractors to bring forward some ideas of things they might can do to minimize the impact. It doesn't mean eliminate it, just minimize it. Things that they can think of.

SWEET: Okay. So that brings me back to the idea of a pre-approval,...

STANDLEE: Yeah, as part of that.

SWEET: ...which is not to say that we're going to deny approval.

STANDLEE: No.

SWEET: But just that you have to ask and you have to explain, and that it seems to me is where the notification gets addressed is at the same time.

STANDLEE: Yeah, right. I think what it looks like we're setting up here is a process by which pile driving will now go through this process, it's just not – you know, they decide we're going to do pile driving. We don't have to do anything other than – I mean it's exempt from everything, so we don't have to worry about that. They have to now go through a process so that there's a discussion...

GREB: It's like having to develop a work plan sort of.

STANDLEE: ...with the City – with the right people of the city, then have a discussion and they say okay, here's the things we want you to do to minimize impact. Not eliminate, minimize. We want you to talk to the people. We want you to tell us what type of equipment you're going to use. Have you looked at everything? We want to know all the reasons you've chosen what you've chosen. Is there any possibility of doing it another way, and you know go through that process of discussion.

VAN ORDEN: So I'm going to play devil's advocate from two different angles. So this is kind of classically what goes into the problem where people are saying the Noise Office does nothing. I think we do a pretty darn good job with variances and taking these things into consideration, but a lot of that does not happen on a piece of paper where I write, I considered this. Just like the neighbors testifying tonight, well do you realize that noise is a health issue? It's like we're all here and we realize that, but each meeting we're not going to sit here and say the five members of the board recognize that noise is a health issue.

SWEET: Yes.

VAN ORDEN: So the challenge will be if we put that as a requirement on the industry, now no matter what they say, the citizens who are not happy are going to say they're getting an

engineer to sign off on this just to say yes use this methodology. So now they're not going to believe pile driving company X, then they're going to look for a trigger where they have a voice to effect change, and then when I look at it and say I'm not a geotechnical engineer, I shouldn't be making this call but I see there's a nice report here that's reasonable and shows they have to do it, they're going to say, well this is just a rubber stamp and then we're back in the hot potato mode of the Noise Office isn't doing anything.

STANDLEE: No, no.

GREB: I think this is not a Noise Office thing.

STANDLEE: Right. This is not going to go through the Noise Office.

VAN ORDEN: Okay.

STANDLEE: It's just in the Noise Code. It says...

SWEET: I'm not clear on that yet.

STANDLEE: ...that it will go through a review. It doesn't have to go through the Noise Review.

SWEET: Well, yeah, except if it's all happening at BDS, I'm not sure anything is going to happen.

STANDLEE: You want the responsibility.

VAN ORDEN: I'm trying to help you guys see when we proposed our recommendations on leaf blowers to City Council, I very respectfully said this is a good set of standards. There's one notable weakness. You said something that I can't logically enforce. There's one of me. At that point there was one, but even with Juliette, who I didn't get to introduce you to tonight, the woman who was in the back, was the new Noise Inspector – even with two of us, you can't catch a leaf blower. So the question becomes this is the same type of thing where if we get something and there's a reasonable stamp from an engineer saying this is what we need to do. And I review it like I do with things already. Sometimes I get something from you guys, and I look at it occasionally, I might say, hey, I'd like to see more here or there, but with this particular issue with no background in geotechnical engineering, all I can really do is accept it into record. That's fine, we just need to be really clear in this process that's what we're doing because Kathy will get calls and Mary will get calls and Juliette will get calls and Paul will get calls, what are you doing about this? We think they're bamboozling us. Do you know about this Giken Method? Do you know about this other method? Do you know about that?

SWEET: And...

VAN ORDEN: I think it's okay, we just need to realize that's just going to be one of the conundrums is how is it serving the public.

SWEET: Okay. Let me see if I can answer that question. If I as the developer have to come before the city and justify the use of pile driving as opposed to any other technology, even though I know it's going to be approved, does it make me more thoughtful about what techniques I use? Do I consider other techniques that I might not otherwise consider because I have to explain myself.

GREB: Because there's more eyes on that point in the project planning.

SWEET: I don't know if that's the case. What do you think?

GREB: Well that the money is already spent on your geotechnical engineer, so it's basically the city is going to end up rubber stamping whatever the engineer wants.

SWEET: It is. It is.

GREB: So maybe this isn't something that is really feasible. Like hiring an independent geotech is probably – I mean that is your pre-approval in certain regards.

SWEET: I mean the city has its own geotech, and I suppose we could ask, but he's not going to overrule certainly.

GREB: No.

VAN ORDEN: That's the messy part. I mean part of the challenge is, is there a way to offer that as something council should explore that shouldn't happen instantaneously. I honestly think something of that nature really is a bigger dialogue with BDS. And I don't want to throw them under the bus and say they should do it. I don't think we should be in a position to tell BDS you need to have this extra level of review, but maybe that's a decision point for council, and I think if that was put to the question at council that the board has reviewed all these items. In the time that's been allotted, we have accomplished this, this, and this. We have not set a decibel level because that would take a lot more work and the industry is not there yet. We haven't required an engineering report because it seems like with the noise office focused on the things that it is and with the staffing number, it's not going to be able to do anything, but we would like to recommend to council that that issue be explored in X manner. We could say for a year the city explore of this methodology should happen, blah, blah blah, and that's what we do with garbage trucks. We said we think that – and that was pretty amazing how much research we did chasing things in the middle of the night – came back and said 3 yard dumpsters are the heart of your problem why we're getting calls. We're going to treat 3 yard dumpsters with sound attenuation for about 75 bucks. When we have a complaint, we will require that. We actually came up with a solution, and that took engineering and that took time, and that's kind of where I see this goes is if it is an engineer's report that's somehow going to help us, I think that's going to take some specificity to study how to implement that. If we do it, it's going to be not as well thought out as we need, and it's going to be unfair to the industry and unfair to us.

STANDLEE: Okay, let me ask a question now. So if we're going to recommend something to council to adopt to replace the exemption that they currently have for pile driving, that's going to become part of the Noise Ordinance, right?

SWEET: Right, so if we said no...

STANDLEE: Okay, okay. It's going to be part of the Noise Ordinance. So if we have notification requirement as part of the Noise Ordinance, what does that mean?

VAN ORDEN: That means that...

STANDLEE: Who's going to enforce – how's that going to be enforced to say...

VAN ORDEN: What you missed in the last year while you've been away is we've been under intense scrutiny that we're not doing a good job on notification.

STANDLEE: I understand, but how are you going to enforce it? It's in the code and the code says, pile driving...

SWEET: They're not coming to us for a variance, so we're not even aware...

STANDLEE: Right.

SWEET: ...who's doing pile driving when.

STANDLEE: So we say they even have to get a permit. It can only be done by permit.

GREB: The permit holder would be the way to do that.

STANDLEE: It can only be done with a permit, and the permit has to be on the site visible showing that you have the permit.

GREB: Right, which is always the case.

STANDLEE: But where do you know - who issues the permit, how do they know that notification has occurred?

VAN ORDEN: So that's the fiasco we're facing right now. So to get back to what I was about to say is in the last year, primarily centered around this dialogue on construction the neighbors have started, there's been a concern that when we do issue noise variances that we have no idea if people have actually been notified. So we've only tried to do calls to see if people were notified, which is time-intensive. It's not a perfect scenario either, so part of the challenge becomes in Planning they hire a person to just sit there and do notification. So they have a person that just does notification. In Planning, the Design Commission, which has way less cases than we do in the Noise Office, Design Commission has a person just to sit there and do one task out of the 50 tasks that Kathy has. All they do is minutes, set up meetings, and do things. We're at that point with the Noise Review Board, and so I think a component that we didn't really chat about with the citizens, what is coming to mind right now based on what Multnomah Neighborhood Association said the other day is you can't run a Noise Office on three people. It can't be done. So I think part of the issue is if you want to do more notification, don't put Kathy in a position where I lose Kathy because she's being overworked...

STANDLEE: We're not saying that the city has to (inaudible), we're saying that...

VAN ORDEN: But you need to know that it was done.

GREB: There's no enforcement checking in.

SWEET: But where do we...

STANDLEE: Get the proof. How do we get the proof notification was done?

GREB: Because the Noise Office needs to receive the same mailing?

VAN ORDEN: It's not a perfect system. So for instance, on a bunch of things the City has done recently, as a citizen now putting on my citizen hat, the notification wasn't done right. There were mistakes to be real honest. And it's not a perfect world. It's really hard to do notification to every neighbor within X distance and get it perfect. It doesn't work perfect, but it's great that we make every attempt to do that. So the question with this becomes is there a way to require it and then have some reasonable expectation for council of what we would actually be able to do. So we're going to make sure that we clarify - one thing we've started doing in the Noise Office is we've been supplying in cases - this is not every case yet because it is time consuming - but on cases that are heated and that we perceive a notable impact on the community, we will actually give a contractor a notification radius and addresses.

SWEET: Yeah.

VAN ORDEN: And so to do that on every case as possible, it still doesn't answer the question of are you sure, so in some cases just to test the system, we had five apartment buildings of anywhere from 80 units to a couple hundred units, and we called the property manager and said we had the construction company drop off 200 copies of the flyer so that each one of your tenants can have it. Have you distributed that in any capacity? And more than 50% of those buildings reported back, oh I've got them sitting right here. No I haven't passed it out yet. So the question becomes, would you say that Rory who's sitting in the room right now, if we pass those out to the building that he didn't do due diligence to notify the neighbors? So in that case I would say that the tenants should be complaining to their property manager - if it's a condo, to whoever is at the concierge at the front desk - that they screwed up and didn't notify. Because these guys and women can't get in these buildings and go door to door. It's

not possible. Most of these buildings are fairly locked down. They could mail. Do we want to add 1,200 bucks, I think that's what I came up with.

STANDLEE: That's small.

VAN ORDEN: Well that's up to you guys.

STANDLEE: An 80 million dollar project.

SWEET: We just heard that a million dollars is a pittance.

VAN ORDEN: I'm just saying maybe that's the answer. That we do require mailing and proof of mailing.

STANDLEE: I'm going to have to cut it short here because I have a dog sitting in my car that's been there now for coming on four hours, and I don't want to push him anymore.

SWEET: You can get arrested for that.

STANDLEE: He's in the parking structure, too, so I've got to get going.

SWEET: Okay.

STANDLEE: My wife's out of town and I'm responsible for the dog.

SWEET: Let's move this forward. Do we have anything that we're sure of besides Saturdays? It sounds like we've got agreement that we should have no pile driving on Saturdays, is that right Kerrie?

VAN ORDEN: And I would add something, though. I would say we need flexibility. That's what we've heard again and again. In all different directions. I would say there should be an understanding.

SWEET: There's a variance process.

VAN ORDEN: That's what I was going to say. Someone can get a variance to work on that Saturday.

STANDLEE: I will say, variances are still there.

SWEET: There is a variance process.

GREB: No skin off your back if you don't have to work Saturdays because of the law anymore.

SWEET: I would like to – I would like a level playing field where everybody knows going in before they bid you can't do it on Saturdays.

STANDLEE: Can I ask a question of the person sitting in the room here besides us?

SWEET: You can ask Rory.

STANDLEE: Is the cost issue your cost or is it the customer's cost?

MARTINDALE: It could be both, and the thing about flexibility of cost...

STANDLEE: Wait, wait, for you. You have the equipment. You own the equipment.

MARTINDALE: Yeah, we own the equipment.

STANDLEE: So you don't have to go rent it.

MARTINDALE: But there might be something stipulating in the contract if you don't have the days allowed in the contract that you have to get it done by specific date, and you don't have the flexibility to say I need a variance for Saturday, that's why I would say think about the flexibility of the options on those things.

SWEET: Right now you don't have the flexibility to work on Sundays.

MARTINDALE: Right.

SWEET: So we're already limiting your flexibility. This is a further constraint, but it's one that you know going...

STANDLEE: But does it have an impact on your cost?

MARTINDALE: Yes, it does.

SWEET: One that you know going in when you bid.

GREB: No.

MARTINDALE: Well it does have – the impact on our cost would be if we have late days we end up paying because we can't work that flexible day...

GREB: Yeah, I understand that.

STANDLEE: You're not going to negotiate those late days as soon as if you have less...

MARTINDALE: They're in there. They're in the cost. They're a fixed cost. If you're not done by such and such date, you're going to pay us the \$10,000 a day.

STANDLEE: But they would have to take into account that you have fewer days to do the work.

MARTINDALE: Not necessarily.

STANDLEE: That's what I'm saying. You're going to argue with them.

MARTINDALE: Yeah, they would argue with it.

STANDLEE: I only have five days a week, so I can't be held to this timeline when you see I only have five days and I've got this number of days.

MARTINDALE: But you signed your name on the dotted line for that and so you're going to eat that cost, and that's what they would come back to you...

GREB: No, no. What we're saying is that any contracts that were let prior to this will be held to that standard.

MARTINDALE: You would be bid on that, but I would say that the flexibility to – like you said. They're built in. You could get a variance...

STANDLEE: Yeah, but not for every one.

MARTINDALE: ...but not for every Saturday.

GREB: But you would just say yeah, you're same...

MARTINDALE: And that's the board's...

STANDLEE: We will give you for that equipment breakdown.

MARTINDALE: ...recommendation, but I would say think about the flexibility of being able to – because the constraints and costs like you said on the contract.

SWEET: If we don't recommend something that you and others come to council and complain about, we're not finding that middle ground that we need, frankly. I mean we've got to do something here. We really need to give people some relief, and right now, this is the only one we're talking about, so you understand where we're coming from.

MARTINDALE: I do. We liken it to you live next to a train track and that train is going to run down that track for every day and every day and every day.

SWEET: Yeah, and if that wasn't regulated solely by the Federal government and the City had no say about it, believe me, we'd be talking about regulating those. We would.

STANDLEE: And there have been changes to that in the Pearl. They have a whistle free zone now.

SWEET: No whistles.

MARTINDALE: No horns. No whistles.

STANDLEE: Except in emergency.

MARTINDALE: Absolutely.

STANDLEE: There still is that exception. So right now it sounds like Saturdays is the only thing we've come up with?

SWEET: Yeah, and Julie does not think we should limit the hours further.

STANDLEE: So the notification requirement is no longer...

SWEET: Well we're still talking about notification. I'm looking at where we are so you can get back to your dog.

STANDLEE: Do we have to have it nailed down tonight?

VAN ORDEN: We need to have something that they're commenting on for the April 1st meeting.

STANDLEE: Who, the people?

SWEET: Yeah, I mean we can postpone that meeting, too. I mean we – I'm seeing some difficulty here. First of all, we need to draft code changes and we need to write explanatory prose about the code changes, and we need to run that by five City Commissioners.

STANDLEE: Legal council.

VAN ORDEN: I am going to clarify that I said this months ago, so the reason we're here today is we're under – the Noise Office is under clear direction, and it doesn't impact you. You're an independent board and commission, but the Noise Office was under direction that they wanted to see this at Council ASAP. And so I said on something this big of a change to code, we would expect more time so we can have something, but that's why it is a completely different element if the board as an independent body thinks that that won't be possible to do, so I'm saying – and I don't think we're under pressure – I don't think you guys are under pressure. That's why we came to this conclusion that we thought we needed to do this...

SWEET: I think – I saw tonight that having something sent out in time for people to review it for an April 1st meeting is unrealistic.

STANDLEE: Well especially since it's only three weeks away.

SWEET: Yeah, I don't think it's realistic. I would like us to think through the notification thing because I think that's important.

GREB: Me too.

SWEET: I want to figure out how to do that. I want us to think through the impact zone idea, and that's simply not going to happen. Julie and I will not be at the April 8th meeting.

GREB: Yeah, so maybe we need to reschedule it?

SWEET: When you already have Project Pabst and at least one other thing.

GREB: Two others.

SWEET: Two others.

VAN ORDEN: And we can't cancel that at this point.

SWEET: No, it's got to go, and so we really need to nail down – there will be no flu allowed on April 8th.

STANDLEE: I heard you say April 1.

SWEET: April 1 is scheduled right now as a special meeting to review our recommendations that are then going to go to Council. I don't think we're ready for that. I think we need to cancel that meeting.

STANDLEE: Well because spring break is right in there too.

SWEET: Isn't spring break earlier than that?

VAN ORDEN: 24th, 25th.

STANDLEE: I'm saying it's the last week of March, which brings it up to the April 1.

SWEET: April 1 is a Wednesday.

STANDLEE: Right. Spring break is the week before that and a lot of people...

VAN ORDEN: 24th, 25th, 26th.

SWEET: All right. Yeah, okay. I'm going to propose that we cancel April 1st. That we draft a letter to the mayor's office explaining what we're doing. We are looking (inaudible) whatever we need to do.

VAN ORDEN: I think they'll be fine. I think we just need to also get the word out to all these folks that are expecting April 1st is the date that they should...

STANDLEE: Be here to testify.

VAN ORDEN: Yeah, so we've got quite a few e-mail addresses, and tonight your comment to make sure you signed in, hopefully we've got e-mails that we can read that aren't chicken scratch.

SWEET: Yeah.

GREB: That'd be good.

SWEET: So it's going to be May before we can get back to this. I'd like us to do – I'd like you and I to do some work on this in the meantime. The board can't meet except for the board meets publicly, but you and I can see what we can work out on notification and begin seeing what else you want to do. The other thing I want in this package is a very minor change that I think is to classify the EX zone as commercial instead of industrial. The Pearl is all EX zoned, and the Pearl is not the only EX zone, but two things are going on. First of all, all the development happening in EX zones is residential with ground floor commercial or residential with no commercial. And secondly, the mixed use zones project is going on right now, and they are going to do away with the EX zone and change it to commercial mixed use. So that's going to happen but not for two years. I'd like to get ahead of that. Right now give the Pearl folks something else and say, okay from now on the maximum sound level in the Pearl is not 75, it's 65. In one fell swoop. So, Yes?

GREB: Sure. I'm on board.

SWEET: And if anybody has any ideas about how to define a High Noise Impact Zone and how we can approach enforcement...

GREB: Will you do me a favor and e-mail me that question?

STANDLEE: You know what? I think that High Noise Impact Zone should really only be part of what you consider for variances.

SWEET: Okay.

STANDLEE: That it's more for the board to be aware of than it is as a code thing. It's more of a policy thing than codified in the code.

SWEET: That's – okay. So we can make that a directive from the board that we recognize certain High Noise Impact Zones, and the Pearl is one we don't deal with.

GREB: We can't blanketly say that there's nothing to variance.

STANDLEE: No, you'd have to take it into consideration - in providing variances in that zone, you have to take into consideration the culminative impact.

SWEET: But it's going to be our preference not to grant any variances for High Noise Impact Zones.

STANDLEE: Right. So I really think it should be more of a policy thing that the board adopts rather than trying to get into the code.

SWEET: All right. One more thing. How do you feel about my fiat requiring that all construction noise variances in the Pearl come to the board. Is that something we want to continue with at this point?

STANDLEE: I think so.

GREB: Sure.

SWEET: Okay. Maybe that's part of how we treat...

VAN ORDEN: It's a short-term fix for now at least.

SWEET: Well it is, but maybe that's part of how we address...

STANDLEE: This impact zone.

SWEET: ...the impact zone, and that doesn't have to be a code change, that can simply be a chair's decision. Okay. Good.

GREB: Move to adjourn.

VAN ORDEN: Second. I'm leaving.

SWEET: All right. We're adjourned.

Meeting adjourned 9:00 pm