CITY OF NEWARK
DELAWARE

PLANNING COMMISSION
GREEN BUILDING CODE WORK GROUP
MEETING MINUTES

MEETING CONDUCTED REMOTELY
VIA GO-TO-MEETING

June 15, 2020

3:30 p.m.

Present at the 3:30 p.m. meeting:

Chairman:	Will Hurd
Members Present:	Jeremy Firestone Tim Poole
Members Absent:	George Irvine Rob Jadick Stacy McNatt Ben Prettyman Reid Rowlands
Staff Present:	None

Mr. Will Hurd opened the meeting at 3:30 p.m.

1. **INTRODUCTIONS**

Mr. Hurd: Alright, so welcome everyone to the Green Building Code Work Group meeting on Monday, June 15, 2020 here on GoToMeeting. In attendance is the Chair, Will Hurd. And then Jeremy and Tim, why don't you introduce yourselves into the record?

Mr. Tim Poole: Tim Poole, City of Newark Code Enforcement.

Mr. Jeremy Firestone: Hi, this is Jeremy Firestone. I am a professor at the University of Delaware and former Chair of the Planning Commission.

Mr. Hurd: Okay.

2. **CHAIR'S REMARKS**

Mr. Hurd: My remarks are very limited. They are, essentially, we're trying to do one last review of the document based upon stuff from Council and then get it back into the pipeline to Planning Commission and then to Council to be an ordinance.

Mr. Poole: I don't think we need to go back to Planning Commission because we're not proposing any significant changes.

Mr. Hurd: Well, let's go through it first because, I mean, there are new credits and there are some revisions so . . .

Mr. Poole: Okay.

Mr. Hurd: We can see. I don't think it's going to be a huge problem at Planning because the first time through, Planning Commission had very little discussion.

Mr. Poole: I mean it is pretty technical.

Mr. Hurd: Yeah, it is. It is. But I think people have actually read it and understood it and . . .

Mr. Poole: Yeah, but it is very technical.

Mr. Hurd: It is. So, that does sometimes tend to limit the questions because it's like, you know, I clearly don't know enough about this to ask a question and so we'll just move it right along.

3. **REVIEW OF COMMENTS FROM MAY 4, 2020 CITY COUNCIL MEETING**

[Secretary's Note: During the meeting, the minutes from the May 4, 2020 City Council meeting and the proposed ordinance for the Green Building Code Work Group amendments to the 2018 IECC were being displayed for the benefit of the work group and the public. A link to the minutes and the proposed ordinance can be found at the end of this document.]

Mr. Hurd: Alright, so the essence of the comments from Council, there were a couple that I felt worthy of consideration and they were mostly from Stu. One was zoning of HVAC systems for efficiencies, UV air cleaning systems . . . I can't remember who pointed it out but noted that the commercial section has a provision for permanent overhangs for shading windows and the residential did not. And then, it may have been Jeremy who asked this, about non-toxic decking materials which isn't actually a sustainability thing. It's more of a health and sort of health thing, and I'm not sure where we're going to fall on that. But what I did is I kind of went through . . . so, switch to the document, let me check on my notes. The zoning of HVAC, there is a document produced by the people who did Manual J and such. I think it's, it's maybe not ASHRAE, but that has a procedure for zoning, this might be in the residential section, zoning HVAC systems. The challenge I had with it was that there wasn't a lot in there about is it better to have a highly zoned system or not. So, it's . . . oh, here it is. So, EC-X, it's between, on page, oh we don't have page numbers, yeah in the second half there. You're almost there.

Mr. Poole: I think it's after EC-9. There it is.

Mr. Hurd: Well, there's the first EC-X which is the overhangs. Actually, we can talk about that one first. Exterior protections. That's the same language from the commercial one about permanently installed projections. And then we keep going, keep going, Michelle, we'll see a mechanical systems section. And, Jeremy, are you able to see things or are you reading this at home? What are you . . . ? Okay, a little more.

Mr. Firestone: I've got the document at home.

Mr. Hurd: Okay. So, Michelle, one more page. There is it. So, EC-X, HVAC zoning, I just said the zoning of the building has been designed in accordance with the ACCA Manual ZR because there isn't really a whole lot out there about zoning. I, personally, feel that the other credits that we are using, things like no ductwork or locating the ducts within the thermal envelope, energy recovery, will have more of an impact on energy use than zoning. The conversations I see about zoning, a lot of people feel like it's kind of a wash in terms of energy usage. One theory is that if you're zoning properly and maintaining balanced temperatures and smaller control, you can turn off areas and turn them on and you're not like cranking everything all the way up to try to cool the furthest room. But other people are going, yes, but you've got more equipment, you've got dampers and blowers and ducts and other things going on, and maybe you're not saving energy. So, as an energy savings measure, there's no conclusive data on it that I could find.

Mr. Poole: It really comes down to whether the user is ultimately using it correctly.

Mr. Hurd: Yeah.

Mr. Poole: They can save a good bit of energy but if they're not using it correctly, they're not really saving any energy.

Mr. Hurd: Correct.

Mr. Poole: But with automated thermostats and programmable, with programmable thermostats and things like that, it makes it a lot easier to do.

Mr. Hurd: Yeah.

Mr. Poole: But from my perspective, I don't have ACCA Manual ZR so without having that document, I can't verify it's done that way.

Mr. Hurd: Right.

Mr. Poole: It's also a little bit more difficult for the residential designer that isn't really using ACCA Manual ZR or is familiar with it. Is there another way that we could phrase it or design it such that they have to have a minimum number of zones or it has to be zoned per floor or a maximum amount of square footage in a zone?

Mr. Hurd: Those are good questions. I couldn't find anything right off that led to that because that's kind of what I was looking for is sort of like what's the goal of the zoning because then maybe we can set the goal as the purpose of the credit. In general, the goal is to have the zones be of equivalent, roughly equivalent, loads. So, you know, a room with a lot of glass has more load obviously than an interior set of rooms. You know, upstairs is different than down. You know, north, south . . . so the idea of the zoning is to try to balance out some of that instead of sort of saying the whole second floor is one thing. Except that it's going to, it gets used differently and it has different timing and it has different loads and such. Yeah, I couldn't honestly find anything that said, you know, you don't, you know, maximum square footages or those sorts of things. So, I don't have a good answer on that.

Mr. Poole: Okay.

Mr. Hurd: Which is partly why I'm referring to the standard to go the standard is designed to, you know, break the building up into reasonably equivalent load boxes that you can then design your equipment for. It gets into some aspects of, you know, it gets deeper into things like what do you do if you're sending all of your cooling to one zone and not the other two? What do you do with that, I mean how do you have an air handler that does that? That can sort of scale . . .?

Mr. Poole: Do you have some sort of variable speed air handler and things like that you'll get other credits for, but it will make your zoning function properly.

Mr. Hurd: Right. Right, because what you don't want is a fixed-speed thing that's like, okay I'm dumping all the, I'm dumping everything in there and the other two zones aren't getting the air. It's like I'm throwing that away. Because then you're not gaining any energy performance out of that. So, that's where we kind of are on it. I'm okay saying maybe HVAC zoning isn't something that we can effectively address in this document and dropping it and being able to say to Council it's not an effective energy savings strategy. But I wanted to kind of get it out so we could talk about it.

Mr. Poole: Well, like I said, if it's used properly, it can be. But there's the rub. It has to be used properly and set up properly. You know, ideally you would think you'd want a separate zone for the living space and for the sleeping space . . .

Mr. Hurd: Yes.

Mr. Poole: Since they're typically not used at the same time. You know, have it broken down, again, I think the appropriate way to do that would be to set up a minimum number of zones based on the square footage of the dwelling.

Mr. Hurd: Okay.

Mr. Poole: But again, it's difficult to do that on the fly here and I really didn't do as much prep work as I would have liked.

Mr. Hurd: Yeah, well we could certainly say your typical . . . the problem is that things like those townhomes have multiple floors with bedrooms on all of them. I was thinking a typical single-family home, you'd have an upstairs zone and downstairs zone because you have sort of like living downstairs and sleeping upstairs and, you know . . .

Mr. Poole: Yeah, the townhome is a very popular option these days.

Mr. Hurd: Yeah. But not everything is going to be set up that way.

Mr. Poole: Right. So, like you said, I'm thinking a minimum number of zones based on the square footage of the dwelling and, you know, a minimum, you know, the zones have to be reasonably balanced.

Mr. Hurd: Well, we do have a thing in there about balancing, don't we?

Mr. Poole: I think so. But I think that's only in the commercial side.

Mr. Hurd: Okay. Yeah, you might be right. Balance, oh, that's not what I want. Alright, balanced heating and cooling. Actually, it's under indoor environmental quality. So, we kind of got that covered. Jeremy, any thoughts? I'm sorry I don't have more of my notes and such that I might have had when I was pulling this together.

Mr. Firestone: Hold on a second. I'm going to be switching over to computer.

Mr. Hurd: Okay.

Mr. Firestone: But I read over the, when I looked through the minutes and from what I could tell, everything seemed pretty minor and any changes that you guys think we need to do to accommodate them seemed relatively small and probably not, won't change the document much.

Mr. Hurd: Okay.

Mr. Firestone: I didn't have any specific thoughts.

Mr. Hurd: Okay.

Mr. Firestone: I'm going to hang up and just use my computer.

Mr. Hurd: Okay. Alright, so we could write something about minimum, buildings and zoned at least one per floor and balanced, or . . .

Mr. Poole: I say we go with something along the lines of a minimum of two zones. It has to have, has to be used in conjunction with a variable speed furnace, variable speed air handler. And that . . .

Mr. Hurd: And balanced loads?

Mr. Poole: Yeah.

Mr. Hurd: Okay, which is what I . . . and the problem is that the Manual ZR, I didn't go and buy one because I didn't have any need for it. But let's try to think about whether that had a lot, whether that had enough information, whether that's sort of saying the same thing.

Mr. Poole: Right. And we could add more points. I mean certainly just having the zoning, it really doesn't, because it doesn't offer a tremendous amount of additional efficiency, it's a lot about comfort, and if it's utilized properly it can give you a lot of efficiency. But, you know, I think that depending on where we put it, if we want, give them additional points if they're going to make it a more complicated and zoned system, as opposed to something that meets the very minimum requirements.

Mr. Hurd: Right.

Mr. Poole: You know, maybe give them one point for two zones and one additional point for each zone beyond that. But I don't know . . . and it has minimum requirements like it has to have a variable speed air handler and it has to have programmable thermostats for each zone.

Mr. Hurd: Oh, that's true. Programmable thermostats, that would be a useful thing to throw in there because I don't think we have that.

Mr. Poole: Well, programmable thermostats are required these days.

Mr. Hurd: Oh, okay.

Mr. Poole: Having one for each zone might be a change.

Mr. Hurd: Okay. One of the things I found was a public comment recommendation to add, basically zoned duct systems shall be designed and installed in accordance with the ACCA Manual ZR to the IRC Mechanical Code. So, there may be, I mean it didn't look like it got in for 2018 but it does seem to me that there's some kind of push for getting that into the code itself. So, we may be, you know, this may become a moot point at some point, hopefully.

Mr. Poole: If it does, it will go in the efficiency code, but I don't think it will get there. Particularly because of smaller dwellings. If you get to a larger dwelling, you sort of want it. But on something that's less than 1,500 square feet, there's not necessarily a whole bunch of options . . .

Mr. Hurd: Right.

Mr. Poole: As far as going beyond a couple of zones.

Mr. Hurd: Yeah, the item [inaudible] was about, basically provides procedures for designing zoned comfort systems for single-family detached homes, duplex and triplex homes, rowhomes, townhouses, and large multi-family structures that are compatible with ACCA Manual J procedures. So ZR and J are intended to work together. Okay. Alright, I think I understand what you're trying to get at here, Tim, so I'll draft something that seems enforceable without your having to buy another book. Now, when they submit, you know, like a Manual J calculation, do they just have to say, oh, it's a Manual J compliant calculation?

Mr. Poole: Typically, the only folks that submit that are designers . . .

Mr. Hurd: Okay.

Mr. Poole: And we're talking about a mechanical engineer and they have it and it's pretty straightforward.

Mr. Hurd: Right. Okay, so you're not going to see a lot of that kind of level of stuff.

Mr. Poole: No. Just about every single-family isn't really designed that way.

Mr. Hurd: Yeah. It should be but we won't get into that.

Mr. Poole: Spoken by the design person.

Mr. Hurd: Yes, well . . . because you get guys that are like well you've got so many square feet, here you go. And that tells you nothing about, especially here when we're talking about enhanced insulation and air tightness and things like that. That needs to roll into the Manual J, so you get equipment sized properly.

Mr. Poole: Oh yeah, definitely. As it gets more and more efficient, the smaller and less output the systems need to have.

Mr. Hurd: Right. Okay, alright, so we'll keep the zoning, but we'll restructure the language. So, you're thinking two points plus one for each additional . . .

Mr. Poole: No, one point and then one for each . . .

Mr. Hurd: Oh, one.

Mr. Poole: Additional zone, with a minimum of two zones. Because, again, we're not going to make a whole lot of energy savings on these, so we want to weight it appropriately.

Mr. Hurd: Right. So . . .

Mr. Poole: It does add significantly to comfort.

Mr. Hurd: Yes. So, the first point is for the first two zones and then one point for each zone beyond that?

Mr. Poole: Yeah.

Mr. Hurd: Okay.

Mr. Poole: What do you think of that, Jeremy? You're usually someone who doesn't like giving away a lot of points.

Mr. Hurd: You're still muted, Jeremy.

Mr. Firestone: Alright, I like that you're being constrained in giving away points, Tim. It's the conservative position and this is one of those times that having the conservative position is the good position.

Mr. Poole: I agree. Like I said, you're not going to get a lot of energy savings, so you don't want to give away a whole bunch of points.

Mr. Firestone: Right.

Mr. Hurd: Okay. Okay, we saw the one on overhangs, so then I think the filters, the UV one is under the, oh, here we go.

Mr. Poole: IQ-7?

Mr. Hurd: Probably.

Mr. Poole: I see IQ-7 is the high efficiency air filtering and then you added IQ-X for UV air cleaning just below that.

Mr. Hurd: Right. So, that's install duct-mounted germicidal UV lights on both the coil and return air duct must be combined with IQ-7. And the point for that is the UV lights do, you know, reduce bacteria in the air but the filters actually take dust and the bigger chunks and stuff out of the air. So, it's like you've got to do the filters first and then you can do the UV lights. But the UV lights by themselves aren't going to improve the quality enough, in my opinion. So, that was that one. Oh, if we go back up in the RCs, where was it, between RC-7 and RC-8 is an RC-X.

Mr. Poole: Durable exterior decking?

Mr. Hurd: That's the one. So, that was my solution for the non-toxic kind of decking suggestion. The challenge, as you can understand, if you have a durable decking like a composite deck, it's not very recyclable because it's already made out of recycled material, so it kind of falls into that category. If it's pressure-treated, it's not, it's a toxic material, so you lose the non-toxic sort of aspect. So, if we say naturally rot-resistant, then we're looking at cedars or [inaudible] or maybe even the heat-treated decking, and then I shrugged.

Mr. Poole: Again, I don't have a problem with that, particularly with the feeling around the toxic materials that are used to make pressure-treated wood. It should say decay resistant.

Mr. Hurd: Oh, decay. Okay.

Mr. Poole: That's the verbiage that's used in the Building Code.

Mr. Hurd: Thank you.

Mr. Poole: And again, it's worth a point but probably not much more than that.

Mr. Hurd: Okay.

Mr. Poole: You know, there is . . .

Mr. Hurd: It's kind of the same as certified wood. I mean, yeah, we're not giving a lot of points for some of this.

Mr. Poole: But I mean it certainly is environmentally friendly and a better situation using natural decay-resistant wood or recycled content.

Mr. Hurd: Right. Now, actually I'm looking at how I wrote this, and we already have decking, recycled content for decking getting a point, so should this just be about naturally decay resistant and strike the part about comply with recycled content criteria as a way to . . .

Mr. Poole: Well . . .

Mr. Hurd: Because if they do recycle, they'll get that point in the recycled content.

Mr. Poole: Yeah, so we'll do natural exterior decking.

Mr. Hurd: There you go. Okay.

Mr. Poole: That way we'll have the naturally decay-resistant wood and then the recycled content would get the credit in the other area and they wouldn't get to double dip.

Mr. Hurd: Right. Because I'm looking at this going, I just gave them two points and that wasn't right. Okay, that might be . . .

Mr. Poole: And then I think we added some points on the PV panel or at least we should be looking for it. But I'm pretty sure that you did.

Mr. Hurd: I didn't change the points on PV, I think. There was a, yeah, no, I didn't edit the points for photovoltaics.

Mr. Poole: Are you sure?

Mr. Hurd: Yeah.

Mr. Poole: Okay, because I thought we had less than that and that's why they said that they felt we should give them more.

Mr. Hurd: No, I didn't touch points at all. I think he was saying that six points for the amount of money you're putting in didn't seem, I think the councilman, this was Horning who brought it up. Someone had talked to him about saying it costs a lot to put photovoltaics on and I'm only going to get up to six points. That doesn't seem, you know, that doesn't seem balanced or whatever. But I wasn't, yeah, I wasn't going to go higher on the points just yet. I was going to let it ride and see if it shifted behavior first.

Mr. Poole: Well, I wouldn't mind pushing it up a little bit for a situation like where we go three points for every two kilowatts with a maximum of nine.

Mr. Hurd: Okay.

Mr. Poole: That way, they would get, for a six-kilowatt system, they would get nine points, but they wouldn't be able to get higher than that. Because most, for a house, are between three and eight.

Mr. Hurd: Right.

Mr. Poole: Depending on the house and what the original demand was.

Mr. Hurd: Yeah. The other thing we could consider now that I'm sort of looking at this is, in a sense, a sliding scale to say for the first two kilowatts is two points and then, you know, three kilowatts is four. So, you get like the more kilowatts, the points start rising to push people maybe to go to the higher levels. I don't know.

Mr. Firestone: It should really go the other way though. I mean you've got fixed costs on a small . . .

Mr. Hurd: Oh, I see what you're saying. Right.

Mr. Firestone: And the additional should be. I mean maybe two points for the first two and then you should get fewer points as you make it bigger.

Mr. Hurd: That's a good point.

Mr. Poole: Or you get [inaudible] points for the first two and then one point for each two after that.

Mr. Hurd: Right.

Mr. Poole: That way it incentivizes you to put it in and then really at that point it's about demand and being able to provide enough for the energy that the house is expected to use.

Mr. Firestone: Right now, we're only taking about residential. We're not talking about the commercial, right?

Mr. Hurd: Correct.

Mr. Hurd: Yeah, I mean I think there's similar arguments for both of them.

Mr. Firestone: Right. It's a little trickier though because the units and size and . . .

Mr. Hurd: And financing and paybacks and things. So, yeah. I was kind of liking that, Tim, or maybe it was Jeremy who said it, that the first set of points you get just for putting photovoltaics on, you get a bunch of points to kind of break the ice. And then you go, then every additional two kilowatts, yeah, it's, for every additional kilowatt it's not another four points or something, you know, you get.

Mr. Poole: Right.

Mr. Hurd: Yeah.

Mr. Poole: So, that way we incentivize them to put it in and then it's just sizing for the demand.

Mr. Hurd: Right.

Mr. Poole: Do you want to maybe change that to . . .

Mr. Hurd: So, I was thinking maybe like four points for the first two kilowatts and then we still want to hold eight as the upper, so it would be one point for every additional kilowatt or every two kilowatts maybe.

Mr. Poole: If they're looking for us to incentivize it or make them more valuable, then there probably should be a little push on the upper end. But you got to get there.

Mr. Hurd: Okay.

Mr. Poole: And, I mean, if you're looking four for the first two and then . . . or do you want to do four points for the first whatever or, you know, however many points for the first whatever and then two or two points after that for whatever our increments are?

Mr. Hurd: Yeah. Jeremy, do you remember what the, you had that great data chart. What was sort of the starting point, do you remember?

Mr. Firestone: Let me see if I can, what I can find.

Mr. Hurd: Because I remember eight was kind of the, was that the mid-range, I think? Or that was . . .

Mr. Firestone: Here, I found my file. Residential, the median is 6.3.

Mr. Hurd: Okay.

Mr. Firestone: And the mean was 8.2.

Mr. Poole: So, theoretically, we could do five points for the first five kilowatt hours and then one point for each two beyond that . . .

Mr. Hurd: Yeah.

Mr. Poole: With a maximum of eight.

Mr. Firestone: Yeah, I mean . . .

Mr. Hurd: Still eight points, right.

Mr. Firestone: The 25th percentile was 4.5 so I think saying you should get up to five is sort of saying you should get in the game.

Mr. Hurd: Right. Okay.

Mr. Poole: But it basically makes them almost net zero.

Mr. Hurd: Yeah. Actually, I'm looking at this and if we're going to give them, if we want them to get the five kilowatts first, I think we have to give them more than four points because that's, four points now is just four kilowatts of capacity.

Mr. Poole: Okay, do you want to do four and give them five points because if the smallest one that you're seeing is four, then is that where we want to be? And then give them another point for every two additional kilowatts up to a maximum of nine or ten.

Mr. Hurd: We could do that, nine maximum. So, that would be, right, so if they did the maximum, they do eight kilowatts of power for nine points, which would hit the mean.

Mr. Poole: And it also says you need to really get this thing going to get these points at all.

Mr. Hurd: Right.

Mr. Poole: But if you do actually install a system, you get points that are worth it.

Mr. Hurd: Right. Okay.

Mr. Poole: But we definitely want to make it look like we increased it based on the feedback.

Mr. Hurd: Yes.

Mr. Poole: We want to make sure that they recognize that we were listening to them.

Mr. Hurd: Yes. So, we're listening and we're incentivizing that first, that initial effort to put photovoltaics on.

Mr. Poole: Yeah, because that's where the bulk of the expense is, getting the equipment hooked up, installed, getting the inverter, getting all that mechanism. And then the increased capacity really doesn't cost as much.

Mr. Hurd: Right. So, actually, we could write this as five points for the first four kilowatts and then one point for every additional kilowatt up to a maximum of nine. I mean that's still getting us to eight kilowatts of power. Or do we want to do it in increments of two?

Mr. Poole: It doesn't matter. I mean let's go to ten. A maximum of ten.

Mr. Hurd: Okay.

Mr. Poole: And then one per additional kilowatt is fine because then the system is going to get sized and they're not pushing to get to the next size.

Mr. Hurd: Right. Okay so a little more granular after that first bump. Okay.

Mr. Firestone: Yeah, I mean, 70th percentile was 8.7, so you know, if you go up to ten, you're going to get most of them except for these gigantic systems that people have.

Mr. Hurd: Right.

Mr. Firestone: And we don't really, hopefully, have too many McMansions.

Mr. Hurd: No, hopefully not. Alright, can we do a similar thing for commercial? I'm scrolling back to, there we go. So, Jeremy, you're looking at the thing, for the commercial, what was the 25%?

Mr. Firestone: It looks to be, you know, I think it was 15.6.

Mr. Hurd: Okay.

Mr. Firestone: And the median being 45.

Mr. Hurd: Okay. So, if we did a similar thing, if we said that you get four or five points to get the 15 kilowatts and then . . .

Mr. Poole: One for every five?

Mr. Hurd: Five, yeah.

Mr. Poole: And a maximum, again, of ten points.

Mr. Hurd: Right.

Mr. Poole: Which would get them . . .

Mr. Hurd: Five, five, twenty-five, so that's like forty.

Mr. Firestone: Well, I mean the 75th is 170 so it's a bigger range. You've got, you know, if you have fifty units . . .

Mr. Hurd: Yeah, we had, in previous discussions, we had maxed commercial out at forty-five kilowatts, which was the median, you said.

Mr. Firestone: Yeah, I think that's the median.

Mr. Hurd: Okay. So, forty-five, that's nine. Yeah, that's nine. Well, I mean, we could just set it so that they max out at forty-five kilowatts with points but in increments of five. Or we could use what we did here which was basically increments of 7.5 kilowatts. So that would be three, six, so eleven is the maximum.

Mr. Poole: Like I said, I don't really want to give them more than ten points.

Mr. Hurd: Okay.

Mr. Poole: You know, because I think that's sort of the upper threshold of where we want to be.

Mr. Hurd: Okay.

Mr. Poole: Because, again, once they get to a certain capacity, then they might be approaching a net zero building and then they're completely exempt from our requirements entirely.

Mr. Hurd: Yeah, this is true. Okay. Alright, so I can rewrite that one. And I think that might be . . . because we have durable exterior decking, UV air cleaning, exterior projections, zoning . . . yeah. Okay. So, yeah, you're right, Jeremy, these may be minor enough that we don't need to get Planning to approve it. I can just put it in the packet as a courtesy copy. But that means we can get it back into the Council track sooner.

Mr. Poole: Yeah, because really, we have how many different options and we've amended five of them. We added one and changed four others.

Mr. Hurd: Yeah.

Mr. Poole: So, it is a very small percentage of what the document is.

Mr. Hurd: True. And we haven't fundamentally changed any of our conceptual goals or concepts or intentions. So, yeah.

Mr. Poole: And we can certainly ask Mary Ellen if she thinks it's a substantial change, but I really believe that it's almost inconsequential.

Mr. Hurd: Yeah, I hear you. Yeah, I'm trying not to look at this from my Chair hat and going, yeah, well, we'll just . . . but yeah, I think I'll make the changes, I'll send it to Mary Ellen and say the opinion of the committee is that these are minor edits to the overall thing and we're not feeling that it needs to get re-approved by Planning but that we could just put it right back into the Council's docket, which is, because of the edits we made to the site plan approval section, that section of Code has a longer advertising period than typical ones, which is what held us up the first time. Alright, any other thoughts?

Mr. Poole: I assume that since they're going to be permanent changes now, everything gets re-numbered.

Mr. Hurd: Yes. So, I'm going to go through, I'm going to edit the text, I'll re-number the document and then re-send it to Michelle . . .

Mr. Poole: Since we are changing the values and we're adding one category, the maximum possible points changed, so we'll have to edit that, as well.

Mr. Hurd: Do we mention that?

Mr. Poole: I thought that there was something in there. Maybe it's only in our explanation to Council.

Mr. Hurd: I think it was just our, yeah, we did say a minimum of 50 points as specified. We don't give a total.

Mr. Poole: Okay.

Mr. Hurd: Okay.

4. **REVIEW AND APPROVAL OF AMENDMENTS TO THE 2018 IECC**

Mr. Hurd: Alright, so that feels like we have general approval and consensus on the revisions. I'll send this out to you guys or send it through Michelle so you can all kind of look at it before I commit it to Council.

THE REVISIONS TO THE PROPOSED GREEN BUILDING CODE AMENDMENTS TO THE 2018 IECC ARE APPROVED BY ACCLAMATION.

Mr. Poole: I would also, when we send our memo to Council, I would definitely have the changes as part of that.

Mr. Hurd: Okay.

Mr. Poole: And just identify, based on your feedback we made the following changes. That way they don't have to really pick through and find them.

Mr. Hurd: Right. Okay, good thought.

Mr. Poole: And it also makes it clear to them that these changes are based on their feedback and only their feedback.

Mr. Hurd: Cool. Okay.

Mr. Poole: And how we addressed it.

Mr. Hurd: Yes. Alright. Well, thank you everyone. We're almost, almost done with this.

Mr. Firestone: Okay.

Mr. Poole: The home stretch.

Mr. Hurd: That's what I said in like February.

Mr. Firestone: Yeah.

Mr. Poole: Well, this is a really substantial document, you know . . .

Mr. Hurd: It is.

Mr. Poole: And we're taking a little bit of extra time with it. It's kind of expected.

Mr. Hurd: Yeah. No, I agree. And it is the better for it, for sure. Alright, so let me just quickly check the agenda and see if there's anything further we need to do. Review and approval of the amendments, we did that.

5. **GENERAL PUBLIC COMMENT**

Mr. Hurd: General public comment, there's nobody. Do we need a formal motion to approve? Or are we just going to roll with the, with everyone's . . .

Mr. Poole: Have we had formal motions? I thought we pretty much did consensus.

Mr. Hurd: Well, we had, yeah, I never know. I'm okay with the consensus. It's clear from the minutes where we stood.

Mr. Poole: Yeah.

Mr. Hurd: We'll just go by acclamation.

Mr. Firestone: I'm thinking you can just go back to Council.

Mr. Hurd: Yeah. Okay. I don't have anything else from me, so thank you, gentlemen. Thank you, Michelle.

Mr. Firestone: Okay

Mr. Poole: Thank you.

Mr. Hurd: We are adjourned.

There being no further business, the Green Building Code Work Group meeting adjourned at 4:21 p.m.[1]

Attachment

[1] This was the final meeting of the Green Building Code Work group.

Exhibit A: May 4, 2020, City Council Meeting Minutes
Exhibit B: Proposed Ordinance Green Building Code Amendments to 2018 IECC