

Wasatch County Fire Board of Directors Meeting

Tuesday April 9, 2024

Meeting held at the Wasatch County Administration Building located at 25 N Main, Heber City.

Those in Attendance:

Steve Farrell

Spencer Park

Luke Searle

Erik Rowland

Kendall Crittenden

Karl McMillan

Mark Nelson

Chief Eric Hales

Dustin Grabau

Farrell: Welcome to the Wasatch Fire District Board meeting on April 9th @ 3:30. We have the whole board here except Luke Searle. Our first item on the agenda is the minutes from our March 12th meeting.

A motion was made by Crittenden approve the minutes. The motion was seconded by Councilman McMillan and the motion passed all in favor.

Farrell: Let's go onto the warrants, we have warrants in the amount of \$1,122,241.38. Chief is there anything on the warrants list that stands out?

Chief: No we are still continuing to pay a little over a half million to Big-D every month for the construction of the station. And I heard you mention that we are going vertical, we have CMU block going up, we have reached the top cord and we have also started constructing the exterior walls made out of aluminum studs. We did have one incident at the beginning of the week, during a wind storm, we did have one of those walls blow over. No one was injured and they were able to get that put back up and secure it this time. So other than that, in this warrant packet we have the downpayment to Alaska Structures for the membrane building so about it on that. Any questions?

A motion was made by Councilman McMillan to approve the warrants in the amount of \$1,122,241.38. The motion was seconded by Councilman Park and the motion passed all in favor.

Farrell: Let's go to the Chiefs report.

Chief report

Chief: Okay, really quickly-We are going to try to give you as much time as we can with Assistant Chief Neerings to go over some things. But we did participate in a Safety Fair, it was a County wide fair that was really successful. We talked about home hardening as well as other things such as hands only CPR c, and we did begin conversations with the Hospital to do a joint project with them in providing community wide hands-on CPR and stop the bleed training. Something that we are working with Amy Tuddenham to put forward. We also conducted air management drills with our crews. That is training on our SCBAs and how best to use them. We also looked at mechanical CPR devices, comparing between the 'Auto Pulse' and the 'Lucas Device'. Our intent is trying to figure out which is the best direction to go between those. That is about all I have for the Chief Report. Like I said, I wanted to give some time to Assist Chief Neerings to discuss a few items regarding impact fees analysis that was conducted a number of years ago and updating that as well as looking at electrical vehicle fires and finally touching on what we call 'Appendix L' which is the firefighter air rescue systems. So ,I will turn the time over to him if you have no further questions. .

Farrell: Any questions for the Chief? Thank you Chief, we will now turn it over to Assistant Chief Neerings.

Neerings: Like Chief Hales was saying, in order to try to stay ahead of it and have those that are moving in kind of pay for the impact that they are imposing on us, we have always continually looked at our impact fees. So just a little bit of back ground information, for some that might not be aware, the original was started in 2018 with Chief Giles that was finished in 2019, that ended up putting a single family residence, so just the houses we see being built all around the county, would pay \$920. There was only a single family dwelling and commercial. Commercial, when Lewis and Young did the first review, came out to \$1465 per 1,000 sq ft or \$1.47 per sq ft. Once we came into 2021, some questions got brought up with the type of development upcoming in the North end of the County, by Jordanelle in the MIDA area. Kind of separating out the single family residential from the multi-family. In that review we went from Lewis and Young performing that review, to Zions Bank. Zions Bank split out the single family from the multi-family which brought up the single family fee to \$937.66 and then the multi-family, an example would be the Pioche Apartments or any residence stacked on top of each other, not necessarily side to side, added in at \$858.66 and commercial increased to \$1.63 per sq ft.

Crittenden: That would apply for what's going in North Village in Heber City too, wouldn't it?

Neerings: That is proposed yes. Nothing that has really gone in at this point but there are a lot of multi-family; like the Village on 12th, the Ranch Land, that would be multi-family and not single family. One of the biggest differences with the revision of 2021 is the removing of parking garages, and then adding single family dwelling. So all of this is kind of preliminary. Myself and Chief Hales have been discussing, kind of, as we get more concrete costs of what station 51 will cost, we are moving forward in the Hideout Station and Victory Ranch Station, we are getting a better idea of what it will cost. We are catching up but prices increases and everything in this world tends to increase, we want to try to stay vigilant to it. Review of the impact fee study is supposed to be done every five years but this will be our 3rd one in four years so we are a little ahead; but with everything going on and with the pace that everything is changing, that is what we are going for.

So some of the concrete number that we have or the harder numbers we have, in the 2019 estimation, the Heber Station 51 would cost \$4.1 million-the cost projection for 2023 is \$13.8 million which moving closer to finishing it will be closer to \$14.9 million. So that gap is significant.

Rowland: Has the building structure changed at all during that time?

Neerings: No, so the 2018-2019 was based off of the rough cost of the Jordanelle Station that was built in 2000, it was built for a little less than \$3 million I believe. The thought process was, it was a little different times, with the amount of money that was available to design a station and bid a station and get a real concrete number so it is kind of a guesstimation in the 2018 review. Then once we got the 2021 update, that is when we started to go through the Station 51 numbers and that is how we got to the \$13.8. But if anybody has built anything, you have your budget and then you have your buffer zone and more likely than not, you move into that buffer zone and that is what has happened and have moved us into the \$14 millions.

Crittenden: On that note, Heber City bids on the cemetery office was double what they anticipated.

Neerings: Yes, so that is where we just try to stay up to date on it so we are accurate in assessment and the analysis is giving. The Jordanelle Station 2 & 3 (56 & 57 in Hideout and Victory Ranch), was estimated at \$1.8 Million in 2019 as a fraction of the Jordanelle cost when it was built, the actual cost is estimated within the \$5.1 million area but these numbers are loose. We have plans and rough numbers and is still a moving target at this point. One of the bigger things that got us into the discussion was in 2019 with the last aerial apparatus that we purchased, we had it delivered for \$1.1-\$1.2 million just in the 5 years since than the aerial apparatus that we have contracted for delivery in 3 more years came in at \$1.7 million. One of the bigger factor was just a regular pumper engine, not a ladder truck, generally those would run us between \$300,000-\$400,000 which would fall below that \$500,000 limit that impact fees can be used for, the last one that will take delivery I believe in 2 years, runs between \$700,000-\$800,000. So these type 3 pumpers that usually were the more economical route, better suited for our wildland urban interface conditions and also our structure fires, everything has gone up so this isn't the 'cream of the crop' 'the best of the best', this is kind of mid-tier that will do what we need it to do with where we are at. So the moral of this slide is that everything is expensive and everything has gone up and is going up.

So, opening it up, we have worked with Suzie from Zions Bank to kind of work this out, we are still in the process of fine tuning everything but with what we are looking at now, this is the potential. This is not finalized, once we do finalize our numbers and if we update it, it will have to go out to the public with public hearings, the same way we did with the 2019 & 2021. With the number that we have now, we are looking at an increase across the board that isn't insignificant. When we got these numbers, which is why we wanted to bring them forth to you, is because when Lewis & Young and in the current Zions, we can charge up to what the analysis finds but we don't have to charge that portion. It was enough of an increase that we wanted to give you a heads up of kind of where we are looking at, and find all sorts of ways to be more fiscally responsible with it so this has a potential of being at or the top of the list but moving down.

Farrell: Is this based on the last study that Zions did for us?

Neerings: It was pulled from that study and moved over.

Farrell: And this is within that value range that they presented in that study?

Neerings: Yes. And this is starting a new study, so we haven't had any fees incurred yet, it is basically the call volume, the cost of the station, cost of apparatus that goes into it. So, we have them breached and have them starting at a completely new study that would warrant, when we did the 2021 review, I believe it was about \$20,000 to do it. So, we are trying to wiggle in there with staying up with it but not being frivolous with spending. So the increase is \$476.66 for a single family; \$436.50 for a multi-family; and \$0.76/sq for commercial. But this is all kind of open at this point and more of a notification that we are trying to be frugal but also not put ourselves in the position that we've been in in the past of playing catch up but as we have been playing catch up it has been moving a little bit further away but we also don't want to put too much of a burden on those that wanting to build but also balance not having to do taxes and things of that nature. To be able to self-maintain what we have at this point. Any questions with the analysis?

Farrell: I have concerns about how that raises the impact fees and having the plans to back it up and apparently the one we had done back in 2021, would back it up to a degree.

Neerings: Yes, this is a different version of the 2021 and so Zions is the one that puts all this money together. This isn't me or Chief, it is Susie with Zions Bank that did the 2021 and is doing it now.

Farrell: Okay, what do we have to do trigger this kind of increase? Do we have to put a notice out?

Neerings: Same steps as 2018 & 2021, we would have to give notices, have public hearings, have open to public opinion and then it would be the same process as the two prior.

Farrell: And then how do we argue that the number we picked back in 2021, based on the same study, is no valid now?

Neerings: So in 2021, we didn't have numbers for the Heber Station. We just moved those numbers over-the 2019 study was opened because of some questions and concerns, that certain developers brought up concerning parking garages, with charging a multi-family that is 400-800 sq ft compared to a 30,000 sq ft house. So that isn't something that is not generally in the breakdown that Zions Bank does but it was a valid enough question that we opened it up to break it down to have it more accurately represent what we see, and what we will continue to see come through.

Farrell: I'm still a little confused on the process of changing the fees. We are usually on a 5 year rotation- every 5 years we do another study and adjust that impact fee based on that. But now we are 3 years into that, we are asking to readjust the impact fees to meet the higher level of the 2021 study.

Neerings: Correct. And this would open it again so we wouldn't technically need to do another study until 2029/2030 but we didn't feel like we needed one in 2021 and then everything that keeps progressing forward, we would...

Farrell: I am in agreement with your plan on how we need it, I just don't want to fall on the steps to get it.

Neerings: That was an in-depth discussion that we had with Susie today at a meeting, what do we need to do, everything has to be noticed, public hearing, everything that we did with 2019 & 2021 is the same process to make sure we have noticed it and make sure everyone is in agreeance. So, this isn't something that is 100% coming through, like I said with the significant increase this is a potential but this

is ultimately up to you gentleman on where we feel like we need to be with the funds that we are going to be using and charging.

Farrell: Is there any way that we could have Susie come to our next meeting?

Neerings: Yep.

Farrell: To provide that we are meeting state standards. Just with this being such a vulnerable animal, I want to make sure we do it right.

Neerings: Yep, and that was the big discussion I had with her today, 'can we do this and not this and where do we need to come to get this, to keep pace and not losing it'. I have spoke with Chief Hales today and we have set up a meeting to get with Susie to wrap our heads more around it.

Farrell: I think the council needs to have the same meeting.

Neerings: Absolutely. We can reach out and set that up.

Farrell: Anybody feel differently?

Nelson: No...

Crittenden: It has to be accurate here.

Nelson: ...The thing is, one of the reasons we have to be so sure and careful, is the citizens are going to react the same way I just did, I was just like "what???" and that is what they are going to do too.

Neerings: Understand that I received this over the weekend and it was enough of an increase that even though it was my anniversary weekend, it was enough that it was copied and pasted right to Chief so he could take a look because it is a significant increase.

Crittenden: Its on new construction?

Neerings: Correct. This isn't a retroactive fee, it is for new construction/permits that will come through. But admittedly it is not nothing. That is why we wanted to bring it here, get everyone on the same page and be able to ask any questions before we get to far down the road.

Farrell: It would be to our advantage to pass this for the existing citizens.

Nelson: Yeah, right.

Farrell: I think it would. I am just very uncomfortable messing with the impact fees just by....

Neerings: Yeah, on my word.

Farrell: Because some future "yous" could debate them. We have a lot of apartments being built now and that is going to make a major jump. Of course we go ahead and approve this and it wouldn't go into course for 120 days.

Neerings: Yes, yes correct. And this \$1414 is about the highest it will possibly go. Like I said with everything trying to move the 56 & 57 Stations (Hideout and Victory Ranch) and the increase in the station while trying to decrease where we can, just like with the Heber Station going from \$22 million to...

Rowland: Yeah, you just guaranteed that...

Parks: Yeah, don't ever quote him.

Farrell: Let's move that way, get the technical paper done on it as well as have Susie be at our next meeting.

Neerings: Okay, she has the spreadsheets that make my head spin but she whips around them and we will meet with her again to get a timeframe to wrap our minds around it a little more than we have already and get her...

Farrell: We need her to say this is the letter of the law and this is what we got to meet. She deals with impact fees all the time, which is such a confusing law.

Neerings: Yep, we will get that going.

Farrell: Any other questions on that? Great, thanks Clint.

Neerings: Oh, I'm not done. We are 30% done...sorry to disappoint. I'll try to talk fast.

The next thing that we want to try to stay ahead of is it's framed as an 'Electrical Vehicle Fire' but it is more of a parking structure concern. What we are seeing now days is electrical vehicle fires are significantly more difficult to put out-A: because the battery is hidden from everything, so getting water to it but it burns at a significantly higher temperature. So the issue we run into is call 'thermal runaway' which is an incident where one exothermal process triggers one so basically, in a EV, you can have between 5,000 and 9,000 cells, all it takes is one cell to have an issue-it gets fractured, it gets wet, or some issue that can cause thermal runaway, one turns to two, two turns to four, and then the whole battery panel goes up. The concern that we have is with the number of fires that we have seen throughout and we will go into some of it later on, is the parking structures and the amount of heat that is generated. As we go through here, as you see now, is a single battery plate that they caused to over charge and ignite so you will see it off gassing here-

Crittenden: This is a demo?

Neerings: Yep, it's a demo. So that is a single plate, some of these EV can have one or up to 9,000, this is a plate not a cell but that is kind of what would happen if one single cell goes into thermal runaway, it puts out a significant and violent reaction. So what we are looking to do, is preempt what we have...if I can get off this screen...this is a fire in Japan, it showed an electric vehicle, as we look at it, it starts to off gas on the side-the white is the beginning of thermal runaway and this is what happens when it reaches significant enough temperatures, that gas combusts. So, putting out an electrical vehicle fire is incredibly difficult with the level of fire and with the battery being stored/protected from actual fire suppressant efforts to put it out.

Crittenden: So, what is the burn down ratio on one of them because it is a fairly small vehicle.

Neerings: It really depends on how fast the thermal runaway happens. If we have a complete failure of every one of those 5-9,000 then generally quick. But if it just starts in a corner and slowly progresses through, it can be a significant amount of time, so much that there has been a problem that the tow truck association has developed their own guidelines that any electric vehicle that is in an accident, gets

stored at least a 3 hour barrier away from other cars because it could ignite if it is exposed to water, in a crash, anywhere from 15 minutes to 48-72 hrs. after the incident, it will ignite.

As we have talked about, it can have 5,000-9,000 cells, any damage-even a fender bender- and I could drive around for 2 or 3 days after, it could still happen. It could be a wet battery, a damaged battery, or an overcharged battery. So, our main concern is a parking garage under a residential, because they burn so hot-cement starts to spall or fell at 200-300 degrees, your electrical vehicle fire can burn up to 5000 degrees where your normal internal combustion engine can burn at around 1500 degrees. It is a significant heat that we can't really get too, and one of the bigger concerns is the spread to the surrounding cars. Some of the slides that I have later, will show you 3 of the bigger fires, one in Norway, one in the UK and one was in Scotland, I believe, in parking garages. Then the other big concern is compared to a normal internal combustion engine, EV fires can take from 1,000 gallons to a documented 28,000-30,000 gallons of water to put it out. That becomes a problem because that is a lot of water but also the lithium-ion gas is a hazardous material especially somewhere by the Jordanelle Basin or Reservoir or areas where we have water ways.

This was the Liverpool car park fire in Scotland, you can see in the bottom left, the fire event and then on the right side you can see the actual flooring...

Crittenden: Those are probably the individual cars that burned.

Neerings: Correct. So they are not parked really close together but one of the bigger issues is that in parking garages they have to run the water out somewhere, so a single vehicle fire starts, the gas falls or the plastic falls and then it migrates down and under into other cars and then the exposure goes from 1 to 2 to 4 cars and then it's a full on fire like we see on the left side.

The next one is the Luton Airport fire which I believe is in Scotland, and as you can see in the top right, there has been a collapsed down into it-the fire started out on the top and then worked its way down.

Here in the Stavanger Airport fire in Norway, you can see the starting of the fire down on the bottom and then the full structural collapse at the top. Granted these are the grandiose fires, the big fires. None of these were determined to be cause by EV's at this point. They are still under investigation but with the EV potential and the heat, we want to start preempting what we have.

Moving into the nuts and bolts, the nerdy section of the code, currently the NFPA 13 which is the commercial sprinklers, classifies parking garages at Ordinary Hazard 1-which is moderate quantity and low combustibility of contents. That is the 2019 code, all three of these codes are fires that we just saw happened between 2020-2021. NFPA updated there standard to the 2022 addition which we haven't adopted to in the state-to an Ordinary Hazard 2 which is moderate to high quantity and combustibility of contents. The big change here, is the Ordinary Hazard 1 puts out .15 GPM/Sq Ft. the Ordinary Hazard 2 puts out .20 GPM/Sq Ft. so a 30% increase.

Crittenden: So these are...

Neerings: Sprinkler heads. This is not 100% going to put out the fire because we run into the same issues as bringing water from a fire truck, is that it is enclosed but what this does is protect the exposure of the cars next to it. So, we don't have 1 fire turn into a 1300 car fire like it was for the Stavanger Fire I believe. The over concern that we have is, a lot of what we are seeing is podium type construction

where we have a parking garage under 2 to 3 to 4 levels of residential. And if we go back to what we see in Liverpool fire, granted this isn't the full fire radiating, the 3 hrs you would have between a podium and a residential, but in a very close proximity big fire, we could go from a 3-4 hr evacuation to if there is structural damage due to the intensity of the heat, it could be months if not a year or more to have someone come in, take a look at the spalling to make sure it is accessible. So we are wanting to preempt the unlikely event of a fire because we are just going to see more and more of these come through and if we were to wait until State Legislation adopted it, the earliest we would see it would be July 1 of 2025 and between now and then we have a lot of square footage of parking garages that will be coming through and will have to play catch up with. So this type of amendment, we have reached out to legal for their opinion on what we can and can't do and what is the best way to do this because it is a significant enough of concern that we want to entertain what we can do to indicate the potential issues with this because that is the standard that we see for parking garages below with residential above especially with most anything from 5th north going up, multi-family will have parking underneath because ground is a premium so if they can do parking underneath and residential up top then I have open space and can have a little increase in density. It was enough of a problem that NFPA 88A-which is the standard for parking structures-in 2019 it only required enclosed parking structures over 28,000 sq ft to require it, in there 2023 addition, every parking structure requires it.

Crittenden: Now does this require a retro fit?

Neerings: No.

Farrell: So, what are they requiring to do to limit the damage?

Neerings: Increased water. So today, nothing. With the 2022 code-it would be more water. Which would be increase pipe size, our pressure around town which would be Heber City, Twin Creeks, Midway, JSSD- we have really good water. It would be getting out above it and having the hydraulic engineer and the designer, design the piping to be bigger, bigger heads to get more water.

Crittenden: Fortunately we don't have a lot yet. So if we get ahead of it, it would be better.

Neerings: Yep, we have talked to the building department a little bit about it because there is a multi-faceted concern we have-1: the fire; 2: the hazmat; 3-the ventilation control; and 4: being able to terminate power to the charging systems that we have. And then we also regulate kind of the distance of where the charging systems can be. We have discussed the potential for, I don't know if its retro-active, but if you want to install charging units in an existing parking structure, that has been a discussion of having it verified that we have enough water to do it. This wouldn't be something that we would go through to all the parking structures and make them go retro-active, that's why we want to preempt those that haven't submitted for permit yet, get the word out so they can start designing their system accordingly.

Crittenden: Would you maybe though, if they come in putting in charging stations in parking structures, they would maybe have to update above that charging station and retro-fit?

Neerings: The difficult thing with this is we know where the charging stations would be, but I could park a car anywhere, park an EV anywhere and I could be in a fender-bender in the middle of town, drive up north or south wherever we are going, and between a couple days later I could have an issue so it would be if we went that way, a retro-fit of the entire system. Because I could have an increase density over

the charging stations but I could park on the other side of the structure. And we could work with the developers and the designers about having "here's the charging station, here's your designated EV parking" but really, they could park where there is an open spot which doesn't really help to do only specific locations.

Farrell: Well you laid out a number of options. The first one I see is don't buy a Tesla, the second one is don't go to Scotland or England, the third one I see is vote for Trump so we can get lower gas prices and don't need EV's and the fourth one would be to get ahead of the curve and make an ordinance that fits this.

Neerings: I think I like that last one you said, that's the only one I can speak too.

Parks: Has legal said anything about this? I mean, this is a big dollar amount and you are going to have a lot of people challenge you.

Neerings: Yes, he is looking into it.

Crittenden: But if its part of the code...

Neerings: It's an adopted code

Parks: Generally adopted by the legislature though.

Neerings: So, the legislature hasn't shown...

Crittenden: Yeah, it would have to be adopted.

Parks: The legislature will adopt it next year or it would come into effect July of next year...

Neerings: We just adopted the 2021 code so we are 2-3 years behind but there is so much coming through, especially north that I mean, we are talking several hundred thousand sq ft of parking below a lot of this. The cost of it, isn't lost on us, but the hazard...this is exactly the same thing of the impact fee, is that a concern and we want to see if this is something that we are okay with, we have reached out to legal and some of the ICC professionals to see what is the best step to do. The state legislator, to date, hasn't shown a propensity to amend the hazard classification so this would be an all out adoption of the 2022, it would specifically be for parking structures being in an Ordinary Hazard 2. Generally the legislator has done 13D or 13R, your residential and low high-rise but I haven't seen where they have tried to amend this section. It's not to say the wouldn't but to open the discussion with you gentelman, to say this is a concern we have, this is a path we feel would be adequate, obviously depending on making sure legal says we are good to do it and verifying that we get notice out so that if it is going to be enforced, people know what to design too. And one of the good things is, all sprinkler and alarm plans are differed submittals so very few permits come through, have there designs in hand and ready to go. Because they have a pretty good buffer time to work that out. They can be through the process but generally it's not completed and final because it's a lag behind the building, especially with what we are seeing come through.

Farrell: So, I think what you are asking is too, kind of authorize you to move forward, working to legal to see what the options are.

Neerings: Correct. And if we don't feel like it's that big of an issue, then that's why we wanted to bring it up before we get to far down the road and...

Farrell: But at some point, it's going to be an issue.

Neerings: The potential is there, yes sir.

Crittenden: Will the people that are likely to have them are in the Jordanelle Basin.

Neerings: Salt Lake City has per X amount of parking spaces, you have to have a percentage that have either an EV charger or a conduit for it. Park City has it as well. It is a trend we see coming, not that Wasatch County would have it but I could see it potentially with MIDA adopting something of a percentage where they need to have it. It could be a way Heber City goes. It is wanting to have a discussion to see if that's a viable path forward with you gentlemen and with legal.

Farrell: Let's look into it and see if we can be ahead of the curve but I am not saying whole heartedly that we should be doing this right now.

Neerings: For sure. And we don't have anything drafted or anything to present to you, this is just a discussion so we can start putting the information together if interested.

Crittenden: Do you see the future that parking structures will inhibit EVs or will put them in just a certain place so they could protect that specific area?

McMillan: But people could park those EV anywhere.

Crittenden: Not unless you have an "you can only park here if you have an EV" in this structure.

McMillan: But those fires in the examples weren't even caused by EV's.

Crittenden: But if they did that than they would only have to update a certain area.

Neerings: It's a policing issue on how...really there is not a good way to distinguish an EV. There are big blankets that you can put over it but you take it off and then its reintroduced to oxygen...

Crittende: Need a lot of water just to keep the heat down.

Neerings: A lot of fire departments are just pulling and dragging them out of the way.

Rowland: My understanding is lithium technology is getting fazed out for more sustainable battery technology that doesn't have these issues so that might be something that might be a temporary thing.

McMillan: Or might be bigger one.

Rowland: But it doesn't change the fact that a car starts a fire in a parking structure, regardless of if its an EV or a gas, its going to be a problem.

Neerings: So we will kind of cross our T's and dot our I's and get something like a rough draft together, like I said this isn't anything we have in proposal at this time, we have just worked on it since the past year-year and a half, kind of getting everything together to start moving through...

Farrell: Just making sure we are aware of it before it hits us right between the eyes.

Neerings: Yes.

We are 66% done. I will try to be quick. With everything that we have coming through, we're not...obviously you gentleman know, that we are no where near where we are today 10 years ago. And in 5 years from now, we are going to be even further away from that. We used to be big houses and fire and we are now going to go from hay piles to high-rises. One of the concerns we have, is there are two things that a firefighter needs to have to fight a fire; well to efficiently fight a fire inside a building are water & air. So stand pipes bring water to high-rise structures and what we are going to talk about now is a Firefighter Replenishment System (FARS) that Chief Hales talked about, would mimic that stand pipes system but brings breathing air. So what you see in the upper right hand picture, it is a box that you plug your SCBA into it and it refills the bottles, it will refill at least 2 bottles in 2 minutes for up to 50 bottles. The problem that we are running into is that for a high-rise per NFPA standards, so if MWR were to have an incident, your first alarm in a high-rise needs to have a minimum of 42 personnel so between Wasatch fire, Park City fire, South Summit, North Summit-we may meet and barely exceed that but that's if nothing else happens. So this lets us free up people. If we don't have the FARS system and we have a fire on the 12th floor, we are dedicating a number of people to take SCBA bottles and taking them up to the fire floor, bringing empties down and refilling them on the ground, bringing back up, etc. So it is a personnel issue and a tactical problem of the faster we can get back into the fight and suppress it, the better efficiency we can have. Just like in a single family home, if we can get there in 4 minutes compared to 8 minutes, it can be easier to contain and there is less damage. So 'Appendix L' basically says "the considerations that shall include number stories above grade, the floor area, special hazards, fire department staffing levels and the availability of fire department air replenishing vehicle. What we are looking to amend in it would be the layout because fighting a high-rise fire in our area is different than fighting one say in Texas. So they have every fifth floor and every third floor from there needs to have one, we are not going to see extra tall buildings that are 420 ft high in the near future so the way and what we propose for the amendments would be above grade fill station at the 3rd floor and every 3rd floor above that; and below grade, we don't want to have to go below the fire floor to fill up and then come up. So for that we have a fill station 2 floors below grade and then every 3 below that. Building of 250,000 sq ft or more, I don't foresee that coming around here, the new Smiths that we have going in is rough 140,000 sq ft so having 250,000 sq ft building is a significant building but just to cover it because as of right now, it has it at a 500,000 sq ft building; but with staffing levels being where they are and trying to catch up to where they need to be, this is a big benefit to free up hands not only to fight the high-rise fire but leaving hands available for other calls. And then the stairwell fill stations.

And that is it.

Farrell: What are you suggesting? That we go ahead and do an ordinance that requires this and put it to a vote?

Neerings: We would have to amend Appendix L and then adopt it with the revisions. We have worked with Layton, they have adopted it a few months ago, Spanish Fork is in the process of adopting it. It is kind of moving in that direction but same thing with the parking structures and adopting the Ordinary Hazards of NFPA 2022, is we are getting a lot starting to come through and we are working with MWR to replace some of the cash rooms with this system to get it in so we are trying to work retro-actively from there but we are looking to put together...

Neerings: Good. Because as of now, you either have the cash room that...St. Regis has cash rooms at the 3rd level and then every other level from there-in it there are 6 bottles, 400 ft of hoses, there's tools; that in 20-24 years they have not been used and that comes with added costs of bottles have to be tested every year, hydrostatically every 5 years, they have to be replaced every 20 years; the hoses have to be tested every year to 200 PSI. To where we can remove that from their initial overhead of purchasing it to the long term maintenance of it and give them the square footage back of that room in exchange for installing this FARS system.

Parks: Is FAR like oxygen?

Neerings: Yep.

Parks: And I guess you guys have figured out how that doesn't create another flammable hazard.

Neerings: The pressure that it is tested too, so it is in your stairways between a 2-3 hr rating and it is rated I think for several thousands PSI so there is that potential but able to terminate it. You have the option for in-house oxygen supplied or mobile air unit to come and supply it but it's not installed in the individual units that would add to the fire behavior.

Parks: Okay.

Chief Hales: And just to clarify Spencer, it is not just oxygen-it is compressed air so it's just the atmospheric air...

Parks: Ah, not as bad.

Hales: Yeah, it's 21% just like we are breathing but it is not a higher concentration of oxygen that would help sustain combustion, but it is pressurized.

Neerings: It is not high concentrated oxygen, it pulls it out of the air and has filtration, monitoring to make sure we are not pumping CO₂ into the bottles at high concentrations because then that kind of beats the purpose of having a mask full of air.

Parks: So it's probably a lot cheaper than because it is just pumping in air that is filtered. Than having an oxygen generator.

Neerings: Yes, correct. Code does require it has to be, obviously, can't be in parking garage, can't be 'here' or 'there' so that it is not pulling in contaminated air but it is pulling it in enough to fill two bottles at a time and up to 50.

Nelson: Are there any building in Wasatch County that have one of these systems?

Neerings: FAR System, no.

Rowland: So will you return with a proposed amendment?

Neerings: We will bring in a proposed adoption, yes. This would be an adoption of Appendix L with our amendments in it to where the NFPA one would be an adoption of a specific section if that's the way legal points us too.

Farrell: Any more questions?

Nelson: If this were to be adopted, are there any existing building in Wasatch County, that if they were built, they would have to put this system in?

Neerings: We are working with them to go retro-active by giving them cash rooms. We don't have anything, other than St Regis that would breach the 5 stories that would require it. Because anything 4 stories and below is considered low-rise. This is only for high-rise of 70 ft or more, so nothing. We would be well ahead of the game, other than 24 years ago when the St Regis was put in.

Farrell: Okay, so none of the other 3 hotels planned for the MIDA area is over 5 stories?

Neerings: They are. But they have just not submitted to us to have it a requirement yet.

Farrell: But they would have to qualify under this...

Crittenden: If we approve/adopt this proposal.

Neerings: Correct.

We will clarification on the parking garages, we will talk to Susie about the impact fees to get that worked out and we will have something hopefully by May's meeting for Appendix L. If there are any questions between now and next meeting, don't be afraid to reach out to myself or Chief Hales. Thank you for your time.

Farrell: Thank you, Clint. Chief is there anything else?

Chief: No, unless you have questions. We appreciate your patience.

Farrell: Anything from the advisory commission, I don't believe you had a meeting last week.

Chief: We did not have a meeting this month.

Farrell: Any questions from the board for Chief Hales?

A motion was made by Councilman Crittenden to adjourn. The motion was seconded by Councilman McMillan. The motion passed all in favor.

