Minutes of the Ogden Valley Planning Commission Regular meeting September 27, 2016, in the Weber County Commission Chambers, commencing at 5:00 p.m.

Present: Laura Warburton, Chair; Greg Graves, Will Haymond, Jami Taylor, John Lewis **Absent/Excused:** John Howell, Robert Wood

Staff Present: Rick Grover, Planning Director; Scott Mendoza, Assist Planning Director; Ronda Kippen, Principal Planner; Charlie Ewert, Principal Planner; Felix Llevereno, Planner II; Courtlan Erickson, Legal Counsel; Kary Serrano, Secretary

*Pledge of Allegiance *Roll Call

1. Consent Agenda:

- 1.1. UVP071316: Consideration and action for final subdivision of the Parkside PRUD Phase 1 located at The Bridges at PRUD in the Forest Residential (FR-3) and Residential Estates (RE-15) Zones. (WCU LLC and Bridges Holding Company, LLC, Applicants)
- 1.2 UVM071316: Consideration and action for final subdivision of the Mountainside Phase 1 PRUD located at The Bridges at PRUD in the Residential Estates (RE-15) Zone. (Bridges Holding Company, LLC, Applicant)

MOTION: Commissioner Haymond moved to approve consent agenda UVP071316 consideration and action for final subdivision approval of the Parkside PRUD Phase 1, and UVM071316 consideration and action for final subdivision of the Mountainside Phase 1 PRUD subject to all review agency requirements and based on the conditions listed in the staff report and the recommendations on the findings listed in the staff report. Commissioner Taylor seconded. A vote was taken with Commissioners Graves, Haymond, Taylor, Lewis, Wood and Chair Warburton. Motion Carried (5-0)

2. Public Comment for Items not on the Agenda: Jan Fullmer, who resides in Eden, said she has had conversations with the people at Wolf Creek, and basically they in Wolf Creek are looking for an ordinance that will make it clear cut on residential homes to support dark sky. There is a reason for stating within in the highlands architectural standards, because the current lighting standards are beacon when the lights are on. It would be help with the architectural standards to have the lighting so it has to be shielded. She is asking to make that request and consider that ordinance.

3. Remarks from Planning Commissioners:

- 4. Planning Director Report: Director Grover said in one of their bylaws in your Rules of Order; I would like to have your take on prayer, and if you would like having praying, and how you would do it different with a broad based religion. Would they like to have evening prayer, or would you prefer to leave that in, or just throw it out. There was a discussion and Chair Warburton asked to take a vote to leave it in or take it out. Chair Warburton would like to leave it in, Commissioners Graves had no definite choice, and Commissioners Taylor, Lewis, and Haymond preferred to take it out.
- 5. Remarks from Legal Counsel: Courtlan Erickson said that be going to Western Weber Planning Commission as well as Ogden Valley Planning Commission on the Rules of Order but he is still working on that.

6. Adjourn to Convene to a Work Session

WS1. DISCUSSION: Review and Discussion on Outdoor Lighting Ordinance:

Charlie Ewert said we are going to be taking the ordinance that you are looking at or some version of the ordinance that you are looking at to APA next a week from Friday to present our findings. It's not as complete as we would have otherwise hoped it would be as a model ordinance, but we're good to take it as it is with some minor modifications. He as if everyone got the updated that he emailed out. Commissioner Lewis said he might not have the new version, and suggested if he would put the date on it and then a revised date on it, because he didn't know which one is the latest.

Charlie Ewert said the only difference between the older version and the newer version is the pictures have changed and he wanted to present the pictures first just because they would have a good baseline of what we are talking about. Lighting gets very complicated very fast and he talked to a lighting engineer for Maverick Corporation on Friday about

what we are doing. I told him we are just trying to make a simple ordinance and simple as it possibly can be and we don't want deal with these technical terms like photometric for lighting engineers to evaluate all the cumulative light outside put together for a metric plan that helps them understand where light over spill and over flows is going to be. It helps them understand where light trespass is going to be.

Charlie Ewert said something the lighting engineer told him that we are going to have problems with our ordinance is the ratio of brightness on the ground. What lighting engineers like to see is a 4 to 1 ratio with the brightest spot of your area shouldn't be any more than 4 times as bright as the darkest spot of that area. So when you are thinking about lighting underneath a canopy, lighting a parking lot, or lighting a baseball field, the darkest spot and light spot shouldn't be any different than four times greater. Some codes say no different than ten times greater, Midvale City's code says ten times greater. Good lighting engineers especially when it comes to and what this guy was talking about was canopy lighting, you don't anything more than 4 to 1.

Charlie Ewert said what we're going to find here, especially from our graphics from Flagstaff is the canopy lighting for gas stations, that when we do the focus light, downward directional, recessed; we're going to get hot spots and dark spots. We need to make sure that we are comfortable with the tradeoff, and the tradeoff is perception of safety. Imagine in your mind that you are walking down this dark street, you can't see anything else, and you are moving towards a light in the horizon. You know that you can't see it that the light in the horizon has a white line painted at a 90° angle across the right-of-way. You keep walking until you reach that white line and you look up, what do you see? Do you see the light bulb or do you see darkness. In other words, what side of the road are you on? Most people are going to say they are under that light, because they want to walk towards the light for their safety and security is in the light. There is perception of safety and security in the light.

Charlie Ewert said when he was talking with Steve Rush from Rocky Mountain Powder; we were talking about how glare is the enemy, the kind that is blinding you. Talked with the police officer, they don't want to see the light source; they want to see what the light source is illuminating, the direct light is blinding feature. Steve Rush said it's all about perception and people will always gravitate towards the light. So when we are thinking about that, we are trying to weigh the pros and the cons,, and figure out what our policy recommendations for the County Commission. As we look at protecting the night sky, any light is negative. Any light can project and create reflective light which can be picked up reflective light in the atmosphere, but we know we need some light, so to what levels are we bringing lights down.

Charlie Ewert said another thing to think about and he has not been able to verify this as being true, but the lighting engineer from Maverick told a story about how Midvale City revamped their lighting ordinances, and required retroactive compliance. The Maverick in Midvale had to bring their lighting down by about 50% and two weeks later it was robbed and the police in Midvale sited Maverick for not illuminating their site to not comply with safety standards. I think It would be a subjective interpretation of what those safety standards are, and he still needs to talk to the Sheriff's Department. So far, Ms. Fullmer had mentioned that she had talked to Commissioner Bell, who was Deputy and he said that low lighting isn't the problem, it's when you can see the light source. In talking to James Carroll a local famous architect from Park City; he said it's not about being able to see the light; it's about being able to see what the light is illuminating, and these are things to think about.

Charlie Ewert said he called Midvale City and asked if this really happened, and the planners replied they hadn't heard anything about it. So if it has happened it's fairly recent and it's going through the Police Department. It's all relative and Midvale City is a suburban community; so light levels are going to be relative to ambient light levels surrounding uses. Ogden Valley is pretty rural, and we could probably start from scratch and start looking at low light levels.

Charlie Ewert said let's go through a little bit of training and he showed a video clip that referred to lumens. As I was doing research I was trying to find things that helped me understand, and present that in the simplest way possible it helped me get what lumens are. We talk about lumens here and that as technical as we get, we have some technical explanation in the definitions of what these things are, but the most technical we have in the statute is lumen. It the measurement of one candle can do from one foot away. He showed another video clip by Steve Standard titled Introduction to Lighting.

Charlie Ewert said the point is that it can get complicated quickly without having a lighting engineer telling us what to do and how to do it. The most simplistic way to measuring light output whether or not something complies with the lighting standard, seems to be what is on the back of the box for the light bulb, and what can that do on the property. We took this idea from Springdale which they said, "we don't have the tools, the resources, and the personnel to go out and be able to do photometric testing on every site to determine whether or not the site is in compliance." They continued with, "Here's the deal, can we see the light bulb from off the property, if we can you are out of compliance. Is the color temperature the correct color temperature; is it too white or too blue, or the right color of yellow, is it shielded appropriately." That is the standard that they took; they just want to walk to the site take a look, and if it's in compliance check and move on. That seems to be the easiest way to go about it. One of the flaws in their ordinance is you can put a whole bunch of bulbs all over a piece of property, and as long as you can't see it, as long as doesn't have light trespass, it would comply with their ordinance.

Charlie Ewert said I thought we need something better than just straight up can you see the light source, does it create light trespass, and what color is it. Especially when it comes to sports fielding lighting, recreational area lighting, and canopy lighting because see stores; and the comment he got from Maverick, "Our light needs to be brighter than Common Sense, if not they will go into Common Sense." See stores are in competition with each other and they want to be brighter. The other one is parking lots, they tend to get overlay. Those are the three things I hauled in on the ordinance, and try to put together some kind of foot candle calculation, but instead of using the foot candle calculation which would tell us what the surface area of this table gets in terms of foot candles, because we don't have the photometric testing equipment for that, and we would just go and count the bulbs. Then we would divide it by the 8th of the area and calculate.

Charlie Ewert said that would just require Iris Hennon, Code Enforcement Officer, to get a ladder, shimmy up the ladder, unscrew the bulb and look at the side and screw it back in and then calculate the area of the surface. For the vast majority of the uses in this ordinances says, can you see the bulb, is it creating trespass, is it the right color. For a small handful of uses it's what is the lumens per square foot of illuminated area ratio. We will check that ratio when we do plan review; when you submit that plan, you tell us what your bulbs are for that given area for your canopy, and what are your proposed bulbs for your ski resort, and how much area you have to light. Then we will do the calculation to make sure you are compliance. As far as homes go or the kinds of businesses go, can you see the light from offsite, is it creating a trespass, is it the right color.

Charlie Ewert said let's go over the pictures to make sure we know what we're talking about and then go through the ordinance. All these I completed the pictures so what you see from Friday aren't exactly complete. We are talking about what the direct artificial light source is; we have a definition in the code, direct artificial light source, the definition directs that to this graphic to the light source. The bulb; the lamp in this case and almost in all cases, the lamp is going to be the direct artificial light source. We are also calling any surface inside luminar and luminar is fixture; any surface inside the luminar that is intended to reflect light sources being direct artificial light. Any area that is designed to defuse the light is also direct artificial light. Any area inside the luminar that is not intended or designed to reflect light, you can see the matt here not intended to reflect light, or the backing is not intended to reflect light, and that is not included in direct artificial light source.

Charlie Ewert said we are talking about Shielding; and he wanted to make it simple and the internet helped us with that with the images provided. These are pictures of unshielded, shielded, and fully shielded light sources and on the next page more shielded and unshielded sources. This image was produced by IDA, what they did was provided lighting types and said all these lighting types have a counterpart that is shielded.

Charlie Ewert said we are talking about Light Trespass; one thing we do and there are two other codes that do this, you can use onsite site improvements to help minimize light trespass. So here we have a wall between the two and it is helping minimize light trespass. That would permissible, downward direct. Light is going where they want it to go, where in this one it's going everywhere. These images are in the ordinance with the acceptable and not acceptable.

Charlie Ewert the next is Color Temperature (3000 lumens or less): I went down to Home Depot to see what we are looking at there with most of their LED lights. The majority of their LED lights are at 3000 Caliper. So when you are looking at all those bright lights, the light that is produced by LED lights at Home Depot, they are wider than what you see

in incandescent bulbs but it would comply if it is 3000 caliper for less. I think it was Springdale that said that 2700, unless it's LED, then you can go to 3000. Janet Fullmer replied we get guides from someone, we generally say try to get as close to incandescent as possible with 2800 and with the new LEDs you can choose your plates on the study with the new stuff.

Charlie Ewert said that's another thing from that guy from Maverick said, we can really retrofit all of our places pretty easily. There was one community that their standard ceiling packs, by the way Maverick ceiling pack produce 17001 lumens per ceiling pack, and they use one ceiling pack to illuminate two receptacles, which one side of a pump, so 17000 is one full pump. International Dark Skies Association recommends in a suburban area, no more than 8000 lumens per pump, in a rural area no more than 4000 lumens per pump. The gentleman from Maverick said we can turn them down; they are all LEDs now, so it's not that hard so we just install them along with a dimmer and ready to go. As long as your ordinance allows us to install that 17001, well pack which is what they buy in bulk, and install a dimmer and turn it down, and they can do the same thing with Kelvin colors and change the color temperatures.

Charlie Ewert said this is the canopy that he was talking about; this is one of the examples that Flagstaff uses that was a success through their mining ordinance. What you find you've got recess lighting and it looks like direct light but it's not, light is reflective incidental light off of the inside of the can which would be fine. You can see the hot spots and the gentle man at the Maverick said, "Try to check your oil when hot spots and dark spots, and it's not as easy." That is why they like to light it up like it's the middle of the day so it's just easy for the utility. Flagstaff said, "We don't need that utility here, we're fine, and we know the tradeoff and we are okay with the light levels." The other thing that it does, it doesn't project light past the perimeter of the canopy more than five feet, and that is pretty strict.

Charlie Ewert said the gentleman from Maverick said, "We if we can get 17,001 Lumen in ceiling packs here, we don't have to do a lot of stance around the outside of the parking lot, we just illuminate the whole parking lot with those Lumens." The problem is that it's going to be hard for them to direct that so it's not light trespass. He said if we went this direction and he specifically brought up this image, so it must be a pretty famous image in the lighting world. We have to do something more with parking; which would be more light poles around the perimeter, and the rest of the parking area. There are tradeoffs but it is possible to get low light level with low ambient light; you bring this way down under the canopy and then around the perimeter.

Charlie Ewert said your lighting ordinance allows parking areas to be lit at two lumens per square foot, whereas the ordinance allows the canopy to be eleven lumens per square foot of area. Those lumens tradeoff, we can adjust them how you want. The eleven lumens under the canopy from the ordinance come from an average between what IDS says a rural gas station pump should be illuminated at, and a suburban gas station should be illuminated at. When I look at the Maverick in the valley, this isn't out in the middle of nowhere, but it's certainly not in the middle of the community. It's somewhere between rural and suburban; the difference between the two turned out to be eleven lumens per square foot. That is square foot per canopy area, so we will take the canopy and find out what is the square footage of that, look I already did the math. There are 14 lights underneath the canopy, each of them at 3750 lumens, and that equals to 250 watts, anyway it's a brighter light at 3750 lumens. Then there is 5,040 square feet of canopy area and you divide that out and you get 10.1 lumens per which is under your eleven.

Charlie Ewert said then we have parking areas, now the picture here depicts way more than two lumens per square foot. The point is when doing the math; you get the same answer here, 60 light bulbs 4 light bulbs per fixture, that's 8000 lumens per bulb and that's a pretty heavy bulb, and 250,000 sq. ft. of parking lot there, and that's 1.29 lumens per sq. ft. Baseball fields, soccer, swimming areas, and recreational facilities are the same. Sometimes you think about these big pillars of light, and how could you possibly shield the neighbor's house from these pillars of light. Apparently there are engineers who specialize doing this and you can get light sources similar to this. It's hard to see a light source on any of those lights, but that whole field is illuminated. As long as it's recessed enough into that shielding, you can get it to exactly where you want to go without significant light travel or any light trespass. You just add up every single bulb, the lumens on every bulb, and divided by the amount of square foot of recreation activity area. I've had a good conversation with both ski resorts trying to figure out exactly what their needs are. So far it seems like we're way over their needs on our lumens per square foot for recreational facilities, ten lumens per square feet and we may turn that down. I kept it high because I didn't know where those recreational areas were. Jackson County just barely adopted their new lighting code. Theirs is a little more engineer intensive with candle feet and all that stuff; but for recreational facilities they put a cap of 555,000 lumens per square field them and asked them how are they getting this number, they said they

copied from somebody else. They weren't sure what the number meant, what the totals lumens of 555,000 per site were. When he started doing the math he went to engineering for Sports Fields Society for America; and he tried to figure out exactly what that made for a semi-pro soccer field, and the calculations turned out to be about 10 lumens per sq. ft. of field. If that's the number for ski resorts then we just take it and go. If we get something really bright out in the horizon, we can take that back down.

Chair Warburton asked what type of lighting Nordic Valley has for night skiing, do you know? Jan Fullmer replied no, she just know that it's not what Powder Mountain adopted which is the magnetic resonance lighting that the Canadian Resort and a number of resorts in the United States, so its lighting that's glow and not glare. It's a new thing and saves them a lot of money; Powder Mountain within one week of hearing it that flew somebody to New York because they were going to save a bundle and it makes this wonderful experience because you're going through this glowing and it gets rids of that glare.

Chair Warburton said so then Nordic who still hasn't complied would have to change. Mr. Ewert replied not necessarily, he called them and they are giving him their calculations. They know what their skiable terrain is, and what their desired light able area is, they just need to figure out what their bulbs are, and someone is going to get in touch with them. He suspects that both ski resorts are well within the standards here.

Charlie Ewert said the next one is Lighting for Signs. What we are saying no internally laminating signs. You can have back lit signs, you can have reversed pan channel, but If the light goes through a translucent surface that is refracted or defused by a translucent surface, it wouldn't be permitted. So you look at White Line, all the lights are downward directed at the signage. Miller has some good backlighting, but that's almost blue, and it's too high on the Kelvin temperature scale. Public Storage, that's all backlit and has gone through a translucent surface, Lucien is not the right color, and you look at Bridal, that's all going through a translucent surface, and then the Yogurt would be compliant. Of all those pictures you have White Line and Yogurt and the others are not compliant. You can turn internal lumination way down and still get less brightness. That's just a policy prospective if that's what you want to do. Looking at different colors, we are saying 3,000 Kelvin or less, we're saying yellow light or less. You have the reds, the yellows, and the oranges; and anything above that spectrum wouldn't be permitted. There are pro's and con's on the tradeoffs; and we lose a little bit of the ability for people to choose their own colors on their signage. But we get a little bit more consistent signage which speaks a lot more to community character. It just depends on how consistent we want it to be.

Chair Warburton said so certain colors should be, like the white light or opaque. Ms. Fullmer replied yes, and that's a classic example of misinterpretation of the earlier ordinance. Most of those are around the Four Corners, Family Market, that are grandfathered and it's not a white light source Clermont Cabinet, those are the worst and ironically our ordinance encouraged those because it's a white light with opaque, and opaque was interpreted as translucent so we got exactly the white size which is exactly what you don't want. That when we thought that Yesco had film to alleviate that and it turned out to not be economically viable, and all those people in good faith and she didn't know and that is a tough one, and we had someone come and look at every one of them and they said we were basically better off raising the signs. You can do what Jackson did, and she always thought that a reverse pan channel was internally illuminated. If you are going to go community character; community character you banded internally illuminated signs, and they only do eternally gooseneck. What Jackson did they banded in affect because they were required by an engineering report for an internally illuminated signage that said no more than 5% of the sign face could you exceed light through, so the businesses said the heck with that, they turned off the internal illumination from gooseneck. So when you drive in you see Exxon, you see everything up like an externally illuminated sign by day, but at night it's got goosenecks, that's how they vary inexpensively and simply retrofitted all of their signs and I think that's clear. I mean reverse pan channel is more of an upscale mall look. That's what they had to go to because of the glare bombs nobody wants. I am just not sure that's cool and the world has shifted in the last year with lighting and signage, and we have places that she would never thought would go Dark Sky like Moab, and Kanab are Dark Sky and the competition now is somewhat different. With all of these 21 Dark Sky parks here, people are pushing it further, and I do think that if we take a suburban standard, that's exactly the level of lighting that will lose us the accreditation in the parks is what the XQM's read suburban. In terms of compliance and everybody having it be simple; it's much simpler to say just external illumination, so even Iverson all they would have to do is put two goosenecks on each side of that sign and it would be fine. Because I truly thought that Jewel is an internally illuminated sign even though it's reverse pan channel.

Charlie Ewert said it would be, so basically our ordinance currently says on this that reverse pan channel is prohibited. So I am fine if we change it to only externally illumination which would eliminate the reverse pan channel. Ms. Fullmer said we don't have reverse pan channel in the valley now, we have the cabins stuff and we would do a Jackson on it.

Commissioner Lewis said I am trying to decide on this design right now for one of my neighborhoods and it could be anything at this point. So we want to do it as Dark Sky sensitive as possible, but I honestly don't see how reverse pan channel or even like the Canal, that sign there, that seems a whole lot less lit up than a sign with three goosenecks lighting up the whole five foot of sign itself. In terms of lumens given off by that surface, wouldn't that be a lot less offensive as you are driving up to the neighborhood. Jan Fullmer replied if it's shielded and they're directed right at their face.

Commissioner Lewis said it looks a lot more lit up to me. Ms. Fullmer replied that's why a lot more people like it because you can see it, but the point is if there is the glare isn't bouncing other places and that's the point of it. You actually often get better signage that way because you can see it more because the light is directed specifically but it's not.

Commissioner Lewis asked isn't there's more glare like that picture there? Mr. Fullmer replied no because it's not; in Jackson you see those ones on the end pointed in so you see that it's pointed very specifically and no, you don't get the feeling that the signs are at the top which you do with reverse pan channel. Some of it is if our community character like for real estate to keep that rustic look its exterior. Reverse pan channel is a much scale mall; it's what Kraken Barrel looks like and I don't think the valley looks like Kraken Barrel.

Charlie Ewert said reverse pan channel is a fad; I think 20 years from now we'll come back and look at it. It happened back then but I don't know that I have a strong preference one way or another.

Ron Fullmer said you asked what businesses mainly affected by this you're not sending four-way that stop a lot; and so you go up to the Huntsville side we think of Chris's, and you think of the art sign near there, wouldn't that be another one that would be effected by that. The Chevron is another one that we talked about but that's difficult because that is part of the town of Huntsville. That's going to be hard getting them on board and when I think of Huntsville, I think about Chris's that would be effected just by the definition.

Chair Warburton said whenever she looks at those when she is driving up to Summit, it's almost like I can't see the sign. The glare of the whole thing but it bothers me and it's not very clear to me, but I like the gooseneck and it's always easier for me to see. Director Grover said on those reverse pan channel lighting that you are seeing there is white, the yellow softens it somewhat, there's pros and cons with both but sometimes it nice to have a little variety as you go through a community, but getting consistency to a certain extent and sometimes when you have all the same it becomes a little cumbersome.

Chair Warburton said she likes giving people like some owners of businesses some flexibility is important too. Character of business is important those people own as well. Director Grover said all in all it is better to have this gooseneck lighting, and it's so much better.

Commissioner Taylor said on gooseneck lighting, it shows off the design of the sign, you looked at the one on the brick building; it was kind of showing off the design. Director Grover replied you get variety with the designs of the signs. Commissioner Taylor said I still think there's some diversity even if you just did just gooseneck.

Charlie Ewert said the current ordinance say, "External Illumination: Signs may be unlighted or lighted externally provided that the light is shielded, that the light source causes no glare, and does not encroach upon the neighboring properties or oncoming traffic. No exposed light sources are permitted. Color flashing light is prohibited. All lighting shall be shielded and directed only at the sign surface; illuminated lights shall be included with the Master Sign Plan." With an image like this, we need to figure out what the area of the sign face is. Is it tight around the letters or is it further out. Is that light directed only at the sign face? This picture may not be in compliance depending where we say that sign is and the wall begins. For example something like this, provided that the gooseneck only illuminates the sign face here. If it goes outside the sign face there is some degree of flexibility, if it goes outside the sign face and starts illuminating outside on parts of the building, then it's architectural lighting as opposed to sign lighting. This is the new sign on Mad Moose Café, the gooseneck comes down, if they did it

right it should be only illuminating the sign face. If it starts illuminating the side, then you turn that gooseneck in just a little bit. You aren't able to see any of those direct light sources either.

Charlie Ewert said reverse pan channel, especially if there is no overhead shielding can produce a lot more reflective light upwards. We try to steer away through the rest of the code from specifically regulating reflective light. If you look at direct light source, reverse pan channel conflicts with the definition at direct light source speed, because you are turning that wall surface into an intended reflection for the light. Where the definition says, *"any wall surface that is intended to reflect light is part of the direct light."* That by itself would say no reverse pan channel. That is why I wrote the sign illumination section the way that I did, to say that it's okay. I only did it because our current code says it is okay. There was a discussion and it was suggested that there needed to be some sort of lumen formula and restrict it under a certain lumen or whatever it is, and requiring an overhang of some sort so that it's shielded and prevent the light from going up to the sky.

Director Grover said this is going to be a lot easier to enforce if we just stick with gooseneck. Mr. Ewert said that is another valid point about the entire ordinance. Just because we as the county don't have the resources, technology, or education to enforce a code, doesn't mean we can't get enforcement of the code. After discussion it was suggested to allow people to have options whether to have gooseneck or reverse pan channel. Mr. Ewert said that he would come up with some lumens per square foot and come back with something.

Charlie Ewert said he would go section by section. Section 101-1-7 – Definitions: Dark Sky: the term "dark sky" means a night-time sky that is substantially free of interference from artificial light.

Glare: the term "glare" means light originating from a direct artificial light source or any light reflected off a reflective surface that causes visual discomfort or reduced visibility.

It was suggested to revisit "glare" and get a better definition. Mr. Ewert gave an example of an applicant that came in with a CUP and conditions set to prevent glare which the applicant used anti-reflect film on the windows to prevent glare.

Light, Direct Artificial: the term "direct artificial light" means any illumination resulting from an artificial light source, as defined by this section, or from an artificial light source's luminar...of the artificial light source.

Light Pollution: the term "light pollution" means any artificial light that is emitted either directly or indirectly by reflection that alters the appearance of the night-time sky.

The following were added: Light Source Artificial, Light Trespass, Lighting Outdoor, and Light, Recreation facility.

Chapter 16 (Ogden Valley Lighting)

Section 108-16-1 – Purpose and Intent: Under the purpose and intent there are eight different purposes and intent.

Section 108-16-2 – Applicability:

- (a) New Outdoor Lighting: All outdoor lighting installed after January 1, 2017, shall conform to the requirements established by this chapter. This chapter does not apply to indoor lighting except as defined by "outdoor lighting" in Section 108-1-7.
- (b) Existing Outdoor Lighting: All existing outdoor lighting that does not meet the requirements of this chapter and is not exempted by this chapter shall be considered a nonconforming use and as such shall be scheduled for amortization as outlined in Section 18-16-7 of this Chapter.
- (c) Conflict: Should this chapter be found to be in conflict with other sections of this code, the more restrictive shall apply.

Section 108-16-3 – General Standards:

- (a) Light Shielding and Direction: Under Light Shielding and Direction there are four standards of compliance.
- (b) Light Color: Unless specifically exempted in Section 108-16-5, the color of any artificial light source shall be equal to or less than 3000K, in accordance with the standard Kelvin temperature chart as graphically depicted in Section 108-16-12.

Section 108-16-4 – Specific Standards: Under standards there are six specific standards and substandard that applies

Section 108-16-5 – Exemptions: The following artificial light sources are exempt from the requirements of this chapter:

- (1) Federal and State Facilities Lighting: Federal and State facilities are exempt from the requirements of this chapter, however they are encouraged to cooperate and coordinate with the County the construction of their facilities in compliance with this chapter.
- (2) Fossil fuel Lighting: Fossil fuel light produced directly by the combustion of natural gas or other utility-type fossil fuels.

The following were added: (3) Historic Antique Lighting: (4) Holiday Lighting: (5) Low Output Light Source: (6) Motion Sensor Controlled Light Source: (7) Outdoor Lighting Projected from Indoors: (8) Public Art Lighting: (9) Safety or Security Lighting Exemptions: (10) Underwater Lighting: (11) Temporary Lighting: (12) Tower Lighting: (13) Traffic Control Devices:

Section 108-16-6 – Procedures for Compliance:

- (a) Applications: Any application for a permit or approval required by this Land Use Code shall contain evidence that the proposed work complies with this chapter.
- (b) Contents of Application or Submittal:
 - (1) In addition to the specific application requirements elsewhere in this Land Use Code. The application submittal shall contain the following:
 - a. Plans indicating the location of all artificial light sources on the premises, including their height above the ground.
 - b. Description of each artificial light source device and support. This description may include, but is not limited to, device specifications from the manufacturer, drawings, details, and cross section when available.
 - (2) The required plans and description set forth in subsection (b) (1) of this section shall be complete and shall be presented in a manner that clearly demonstrates compliance with this Chapter. The Land Use authority may require the applicant to submit attestation from a qualified professional that the submittal complies with this chapter.

Section 108-16-7 – Amortization of Nonconforming Outdoor Lighting: After the effect of this Chapter which is January 1, 2017, all outdoor lighting that does not comply with the requirements of this chapter shall be considered nonconforming outdoor lighting. All nonconforming out lighting shall be amortized in accordance with the following schedule:

The following were added: (1) Lighting Conversion: (2) Lighting Replacement: (3) Building Expansion: (4) Building Exterior Modification: (5) Site Improvements:

Section 108-16-8 – Violations and Enforcement:

- (a) Violations: The following constitute violations of this chapter: Under this chapter are three subsections that applies
- (b) Enforcement: Violations of this chapter are subject to enforcement and penalties as outlined in this Land Use Code. Additionally, the final approval of current or future plans, the issuance of a certificate of occupancy, or the acceptance of new applications authorized by this Land use Code may be withheld until compliance with this Chapter is demonstrated.

Section 108-16-9 – Graphic Depictions of Direct Artificial Light: Mr. Ewert showed six different lighting with shielding.

Section 108-16-10 – Graphic Depictions of Unshielded and Shielded Light Sources: Mr. Ewert showed three different sources of unshielded, unshielded, and fully shielded sources. He also showed other pictures of Unshielded Lighting and Fully shielded Lighting.

Section 108-16-11 – Graphic Depiction of Light Trespass: Mr. Ewert showed three homes with light trespass and no light trespass.

Section 108-16-12 – Graphic Depiction of Standard Kelvin Temperature Chart: Mr. Ewert spoke about the Kelvin Chart.

Section 108-16-13 – Graphic Depiction of Canopy Lighting: Mr. Ewert calculated the Lumens per Square Foot Ratio.

Section 108-16-14 – Graphic Depiction of Parking Lot Lighting: Mr. Ewert explained calculated parking lot lighting.

Section 108-16-15 – Graphic Depiction of Recreation facility Lighting: Mr. Ewert indicated direct artificial light source only visible on recreation activity area. No spill-over from the recreation light source.

7. Adjournment: There being no further business, the meeting was adjourned at 8:30 p.m.

Respectfully Submitted, 1 Serrano Jar

Kary Serrano, Secretary; Weber County Planning Commission