



The **UNIVERSITY** *of* **OKLAHOMA**
Environmental Concerns Committee

Minutes

ENVIRONMENTAL CONCERNS COMMITTEE MEETING 12/7/2017

Call To Order

A meeting of the Environmental Concerns Committee was held in Gould Hall on December 7th, 2017. It began at 9:06 AM and was presided by Burr Millsap, with Alex Nongard as secretary.

Attendees

Voting Members in Attendance: Alex Nongard, Jeff Widener, Allyson Wiley, Michelle Burke

Ex-Officio Members in Attendance: George Ahmadi, Liz Ross, Jeremi Wright, Burr Millsap, Brian Holderread, Sarah Ballew, Jason Hancock, Kolt Vaughn

Agenda Items

I. Presentation by Brian Holderread

Brian: I lead University Architectural and Engineering services. Our job is to get capital projects in place for the university and then pass them off to Facilities Management. Our largest sustainability effort is to make all new buildings LEED certified. We now shoot for Silver on all of them. We have 6 certified LEED buildings, 3, 4, and 5 Partners Places, Zarrow, the RADAR Innovation Lab, and Headington Hall. It takes quite a bit of time to get certified – at least 2.5 years after completion of any project.

We also work with other departments on things they need when designing things – Facilities Management, H&F, etc. How will they use the building? That's important to make sure people use the building in the way they need. A lot of what we do goes beyond just LEED.

The handout has the point breakdown for all of our LEED buildings except 2PP, which was built under a different scoring system. We are expecting the new Residential Colleges to go Gold. We may need to appeal for points, but that's par for the course and we've done it before.

The scoring is different for north/south campus in general because of different layouts – North Campus has the bus station, transportation corridor, etc. We pick up a lot of points for things like smartcar signage, etc. That can't be easily replicated on different parts of campus. Each project is in that sense unique, although we learn a lot each time.

Most of the time we "hire up," bringing in third party consultants to make sure the designs are going to work. LEED does cost the university in upfront capital costs, up to \$1/sqft additional. It's a cost, but it's the right thing to do. We need to make it work, and we ensure all construction does work.

We don't try to get LEED for existing buildings right now, because it's a different kind of challenge, but we will be doing that in the future. It's hard to convince folks how we are going to do this, but luckily we are establishing strong precedent here at the University for doing things the LEED way, so future renovations should have that impetus behind them.

The Energy and Optimization section of the LEED report is pretty astounding for us, and all over the place – we got 19 points for the Headington Hall, which is incredible. We are hoping to replicate that for the Res Colleges, and we know how to do it now. This is a “main campus” item because of how the system is set up, it would be hard to do the same on south campus.

We want to do more “Enhanced Commissioning” on new buildings, which is a very long process. Commissioning is the process of bringing a building online, and enhanced commissioning is basically fine tuning the building once we turn it on to get it to an optimal level. That gives us additional points for LEED certification. This is primarily done through the mechanical engineer, but we work with them quite a lot.

We get a few points from how we work with the contractors, who have to do very specific things and paperwork, and that costs us in overhead. We do a lot of construction waste management / recycling. It looks strange when people walk by, but it's a very specific process.

We are going for LEED Silver on Gallogly, which will be difficult because the construction site is so tight. We require quarterly updates in our contracts to make sure we're doing things correctly.

One of the things is Certified Wood, which can get us a point, but which we don't get a lot of but I'd like to. We need 50%+ sustainable certified wood, which is difficult for our contractors / bidders. Working on it.

Sometimes we have to do a point tradeoff when we look at cost – sometimes we leave points on the table because we can get more in another area that is much better dollar value for us.

We can get points from bringing in 10%+ of the materials in construction from 500 mile radius. We've used some Oklahoma granites and mesquite woods for that, but it's difficult to do, say, terra cotta.

Oklahoma is often 2 years behind what the other coasts are doing. As we move forward, we are seeing more specialty contractors come online to do this work with us. LEED is becoming almost daily now, and that makes it easier on us – when we were the only people doing it in the area, it was a lot harder.

We also now work with our upholstery/furniture/etc. vendors to get certified materials. We had problems early on with low quality materials as the industry hit a learning curve, but it's better now.

The Innovation and Design category is interesting. It's another south vs. north campus thing, because of different land areas. We pick up points where we can.

We have a few regional priority credits – onsite renewable and waste management are two for Oklahoma that we work on.

We're shooting for Silver on the next three buildings, and hopefully one Gold.

We work with Parking to get a lot of points as well, because that helps promote where we put transportation services in a site. We're trying to get more project-specific ADA parking, as well as LEED points.

I wish we could win a few more points, but it's difficult. We don't get points for using well water in irrigation, and our energy is all wind-bought, which are two good things that are sustainable and happening here, but we simply don't get credit for them.

We want to get on-site solar, which is difficult. We have hail in Oklahoma, which makes things challenging. We are checking the market to make sure we can take that on, and are very interested in doing it when we can.

Any questions?

Allyson: You mentioned it could cost \$250,000 extra to get LEED certification. Do you ever see a return on that?

Brian: We should, long-term. We put all LED light fixtures in all our buildings, and that's something that we see a return on. The potential energy savings cost will eventually pay it back, but it's a long time. There is a cost for LEED, but we should get it back eventually.

Geothermal is a good example – I know a few people who put those systems into their buildings and eventually get a payback, but it's volatile.

Burr: Are there certain geographic areas that are better for geothermal?

Brian: Yes, but we don't need it with our cogeneration plant onsite.

Jason: It's not like Icelandic geothermal vents, it's pretty simple and not a huge energy saver for us.

Brian: We really don't need a system like that, although if we tried we would lose some LEED points because of the required chemicals.

Alex: Will you get points for the Crimson Cruisers?

Brian: We will, but it's a multifaceted process and we don't have a whole lot to do with it. We all talk together at different times, and we can eventually pick these things up, but it's not our thing. We hope to use bike credits on all of the new buildings and regional credits, but it's hard because they require bike racks, changing rooms, and a shower for each building. It's hard with the Res Colleges, because there are already showers in the buildings. We're hoping they wouldn't require any additional showers because it's residential, rather than commercial or educational.

Allyson: It seems like a lot of the points are low-hanging fruit, which makes sense to try to get to. Why aren't we going for more sustainable things?

Brian: Well, we are, but we do also try to get the low-hanging fruit. We do a lot on the energy management side. We got an astounding 19 points for Headington, and we're hoping to do that again. We already have wind, for instance, so it's mildly useless to do more on campus. It's hard with solar because we have to find ballistic impact resistant panels.

Allyson: How did we get 19 points for Headington for optimized energy and performance?

Brian: We optimized the energy consumption with the heating/cooling system and efficiency. It's difficult to do this the same way between north/south campus, because they're very different places.

Burr: Does this have to do with the temperature of water coming in/out of the building?

Brian: That's a large part of it, and optimizing that gives us points, but it's difficult. We did not get the 100% wind energy credits because the utilities will not give us certification.

Alex: Why?

Jason: They do not subscribe to the third-party service that certifies wind energy credits.

Sarah: What we receive are "confirmation of ownership of renewable attributes," which LEED will not accept any more.

Brian: I would love to see them do that.

Jeff: We earned points for brownfield remediation. What brownfield site was where Headington was, and how did we get 2 points for the maximum 1?

Brian: There was a gas station on the site many years ago, and we had to remediate / remove tanks / modify portions of the earth when we did that.

Burr: On the commissioning process, how does that work? Is it a several months long period? Do you focus on one system, or all together? Who are the parties who are involved in the process, because at some point it has to be turned over from you to facilities, so how does that handoff work?

Brian: It is a very long process, and they eventually all have to work together. We sit down with Facilities before a project starts to decide who the commissioning agents are going to be. We work often with ABS/OES/ES2, and have a full request for proposals to get the right group. Then, they work with us and the mechanical engineer to get all of the guidelines and paperwork in order to do this. We confirm with FM that we are in agreement with the commissioning guidelines to make sure all of the systems are functioning at their current design on startup.

Commissioning can take months – the systems have to run on their seasonal cycles – winter and summer – before we can call it finished or certify the paperwork. It takes a year on our end, and then up a year (or more, like in Headington's case) for them to certify.

Burr: How are the forms? How long is the paperwork for a project

Brian: Some of it is very short, and some of it is very long. Some requires mechanical engineering documents, but mostly just certification form other parties. It's all digital.

Jeff: What are your hopes for landscaping points, and what are they looking for?

Brian: They actually just changed the standards, and now they want a lot of native plants, drip irrigation, and no turf. There are 16-18 species of stuff that's native to this area that we could use. For those who have been to the RADAR innovation lab, they have a native planting setup with drip lines that would be perfect to replicate. We also put a retention pond down there for storm water management, but we turfed the whole thing so we don't get points.

Jeff: Is the plan for Gallogley to cut off Felgar and make it a promenade?

Brian: No, it'll still have street access and be a pickup/dropoff one way lane.

Brian: When we did the American Indian Cultural Center, there was a huge native grass project, that required a lot of certification. We know it can be done, but very uniquely done.

I think we can do this in some areas, but it's got to be the right areas. Gallogly and Physics are perfect examples of areas with low grass footprints, so we could find the way to put the right native grasses into. The Res Colleges are a little different because they have interior courtyards, intentionally. We probably couldn't do different grasses there, but we could on other portions of the site. It also has to do with what's "on-site" and what's not our site, which is a hard question to answer.

II. Closing

Burr: That's all we had planned for this month. I will be talking to Suchi about calls for nominations. Are there any other updates before we adjourn?

Liz: I'm standing in for Dave to talk about Earth Month really quickly – here's a schedule (found on OU Earth Month website). If you have any more contacts to fill in some of the gaps on the calendar, we'd love to have more speakers/events. We'd like to work with the Electric Vehicle Ride and Drive folks as well.

We are also proposing a student panel on different things, and would like to find more students to talk. We've got a guest speaker who is interested in the idea.

The Housing and Food Sustainability/Responsibility fair is on April 19th. All of our reservation marked for Beard lounge are being switched to the Scholars room.

Allyson: Green Week is underway, and we are now formally affiliated with DGES, who are our full sponsor. We're planning stuff starting next semester. It's April 16th-20th, and we'll be working with Earth Month.

Burr: How's Freight Farm going?

Allyson: I kind of passed that off to new Our Earth folks and volunteers, and haven't been affiliated so much this semester. I've heard it's going well.

Burr: Next time, I do plan to have Printing Services come speak.

Allyson: Can we have Landscaping come speak?

Burr: I can do that. Sarah, anything on the website?

Sarah: Yes, I've got lots of great content and am now just trying to learn how to run and maintain it.

Because of the shortened month of January due to the winter holiday and the lack of student participation at that scheduled meeting, the committee has decided to skip the January meeting and adjourn until February. The next meeting will be February 1st at 9am in Gould.

Future Agenda Items

I. February Meeting Topic

Printing services, and potentially Landscaping after that.

Adjournment

Burr: Move to adjourn.

So passed, meeting adjourned 10:12am