

SUSTAINABILITY CHARRETTE MEETING NOTES

PROJECT: University of Wisconsin – La Crosse
PRAIRIE SPRINGS SCIENCE CENTER – PHASE II
La Crosse, WI

DFD PROJECT NO: 19G1J
RA PROJECT NO: 1290E

MEETING DATE: January 21, 2021

MEETING TIME: 9:00am-12:00pm

ATTENDANCE:

Scott Schumacher	UW-La Crosse	sschumacher@uwlax.edu
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OVERVIEW:

1. Lana Zoet provided an overview of the ten sustainable design measures as outlined in the new State of Wisconsin Sustainability Guidelines. The group viewed a recorded presentation prior to the charrette to become familiar with the guidelines, the measures, their intent, and the mandatory strategies. The charrette took place in a virtual collaborative workspace, Mural.
 - a. Recorded Presentation: <https://vimeo.com/500553205/e3a12f181e>
 - b. Mural Board #1:
<https://app.mural.co/t/smithgroup1662/m/smithgroup1662/1609953997970/6696b342cf28793781b340d404e9ffdda9021adf>
 - c. Mural Board #2:
<https://app.mural.co/t/smithgroup1662/m/smithgroup1662/1609947553757/4e90b056f916f0784450c8f56c220992b4a19cf4>
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MEASURE PRIORITIES:

1. The participants viewed the synergies between measures matrix within Mural #1. The group then ranked the top project opportunities from their perspective, then focused on these highly-ranked opportunities to brainstorm strategies, followed by a discussion.
 - a. Daylighting
 - Not something they currently have in Cowley Hall
 - Daylighting reduces electrical/artificial lighting costs and energy usage
 - Daylight harvesting technologies could be explored (Skylight, Skywell, Sun-tracking)
 - b. Social Equity = Resilience
 - "Scavenger Hunt" in natural (and former) spaces – engage people with the facility, more welcoming.
 - Exposing the activity of the space through video streaming displays of other activities
 - Integrated museum idea – biophilia attraction to draw people in – combine science and art – desire to learn more
 - Interactive teaching elements
 - Science on Display – where can it be most effective? Not all spaces are equally active, for example labs when they are not in use, so be intentional about what to display – lots of activity, interesting tools, etc.
 1. Museum prep space – opportunity to display this area (although it was noted some processes related to preparation of animals for display could be disturbing)
 - Student-faculty and student support intimidation factor reduced through more collaborative areas.
 - c. Climate Appropriate Landscape, Rainwater Harvesting
 - Collect rainwater and divert it from city storm water systems – cost savings and environmentally conscious.

- Water feature? Retention areas?
 - Controlling water from flash floods
 - Natural sandy soils provide good opportunity for water filtration
 - More permeable surfaces and semi-pervious materials for hardscapes where possible are desirable
 - Area between PSSC and Cowley constantly filled with water/ice
 - Accent path of water “on-display” where it goes/what it's feeding. (not specifically external drains) – a teaching tool and educational opportunity
 - Prairie Restoration people on campus: Scott Cooper, Tim Gerber, Meredith Thompson—also in terms of instruction. Possibly design natural habitat useful for course experiments
 - Move away from high-maintenance lawn and implement more native vegetation that doesn't require herbicides and watering.
 - Learning opportunities of plantings and pollination as well as other things. Microclimate activities, plant identification, etc.
 - Large sized tree removals are difficult
- d. Occupant Productivity
- Interactive teaching elements
 - interactive displays (Barrett knows resources who do this)
 - Shared/open work spaces
 - Science & art—relevant and compelling - public art can facilitate productivity
- e. Connection to Nature
- Desire to feel less like a sterile office building
 - Sterile surroundings are detrimental to biologists—chemically treated monocultures are antithetical
 - Dark labs where faculty spend time, and dark and dreary offices faculty spend time would benefit from physical and visual connections to nature
 - Biophilia and connection to nature
 1. Bee Hotels
- f. Future Adaptability
- Structural module which allows different space types within bays from lab to office space
 - Setting up MEP systems for future flexibility (room layouts, usage, etc.)
 - Flexible instructional spaces to flex up or down in size to accommodate various modes of teaching
 - What is a science/academic building in 50 years? Make sure value extends beyond and can adapt to future uses/formats/technology
- g. Energy
- Active solar energy generation potential – new guidelines do require building be PV-ready
 - Offset of energy usage to compensate for devices running even when building is unoccupied?
 - Battery storage opportunities? Pushing unused power back to the main grid may be more beneficial.
2. Aaron provided a recap of survey results to new DFD sustainability guidelines
- a. Top surveyed priorities: Energy, Integration, Ecosystems, Equitable Communities
 - b. Lower ranked priorities: Change, Economy, Resources
3. The group reviewed measure-by-measure mandatory requirements to be met in Mural #2.
Additional comments:

- a. Bike parking weather protection (canopy structure) would be ideal, as would some interior bike storage for faculty, if possible. Scott noted unused bike lockers located near Murphy were removed.
 - Shower facilities would be desirable for commuters. Faculty are unable to use shower facilities in Rec unless they pay a fee.
 - b. Mother's Rooms and Wellness Rooms will be provided. Wellness rooms distributed throughout for a single user would be desirable, rather than one larger space. These could also be used as Prayer Rooms which there has been a need for.
 - c. All-Gender Restrooms will be provided; it can be explored whether greater quantities of single-user all-gender restrooms can be provided in lieu of single-user all-gender restrooms to supplement multi-stall gendered restrooms for a more holistically inclusive approach.
 - d. Universal Design – beyond ADA.
 - 'Deaf space' and design for low hearing - transparency, good view angles to faces, etc.
 - Blind and low-vision friendly design (tactile wayfinding, high contrast elements, etc.)
 - e. Energy
 - Focus on Energy involvement.
 - Energy usage. Metering
4. The group did a voting exercise in Mural #2 on Sample Precedent images (Work, Lab, Classroom, Connect) which best align with important project drivers:
- a. Daylighting
 - b. Biophilia
 - c. Science on Display
 - d. Inclusive & Welcoming
5. Departmental Offices – the group reviewed daylighting studies and interior concept imagery of two approaches to officing; the 10% report basis which featured a double-loaded corridor with a row of offices at the exterior wall and a row of offices inbound, and an alternate scheme which aligned offices perpendicular to the exterior wall to allow more equitable daylight penetration to more offices, introduced small-scale open collaborative spaces at corridor ends, and provided circulation paths along exterior wall with views.
- a. Following the discussion, the departmental representatives will share images with faculty, and the images will be shared with department chairs
 - b. Barrett – some faculty cover windows to get privacy, and will block the light regardless of how obscure the glass is. In the scheme where offices are located at the exterior wall, this will stop borrowed daylight from getting to the inbound spaces.
 - c. Shelly – racetrack (double-loaded corridor version) is claustrophobic and annoying. Sunlight VS privacy concerns.
 - d. Shelly – appreciates the additional collaboration spaces provided in the equity scheme
 - e. Mike – Asked whether the scheme would have ceilings vs open like Phase I, and noted the higher floor heights would help with light penetration deeper into the space. Lana noted there would likely be a light/reflective and acoustic finished ceiling, and transom glass could help ensure daylight access.
 - f. Mike – writable wall surfaces have maintenance issues – who cleans them? There would have to be a process in place.
 - g. Colin – can wall within the office be a writable surface?
 - h. Soundproofing at walls and glazing at office environment is a consideration.

- i. Colin – could windows be located at the north and south offices at the ends of the corridors in the perpendicular scheme, such as at corners and transoms?
- j. Tony – concerns of glass to floor level – raise if at all possible
- k. Mike – efficiency in the floor plan?
- l. Shelly – concerned about offices on east end – 5 bays deep – inner office would get limited daylight
- m. Scott – administrative concern is additional cost of the floor plate size. Faculty putting up window coverings a concern.
- n. Scott – faculty doors are always an issue and will need further discussion. More complete the images shared with faculty would be helpful so that there is no misunderstanding of the design interpretation.
- o. Tony – active shooter situation and amount of glass?
- p. People will complain that no offices have windows, and no privacy (can't get away when you want to) (blinds may help)

Note: This constitutes our understanding of the issues presented. Contact River Architects, Inc. via phone at (608) 785-2217, or e-mail m.adler@river-architects.com if there are any discrepancies.

Select Mural imagery for reference included on the following pages

"Good design elevates any project with a thoughtful process that delivers both beauty and function in balance. It is the element that binds all the measures together with a big idea."



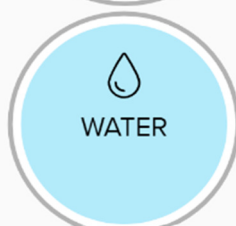
"Good design positively impacts future occupants and the larger community."



"Good design mutually benefits human and nonhuman inhabitants"



"Good design conserves and improves the quality of water as a precious resource."



"Every project presents a unique opportunity to apply lessons learned from previous projects and gather information to refine the process"



"Good design supports human, community, and environmental health, regardless of project size and budget. Design choices must add value for owners, occupants, community, and planet."



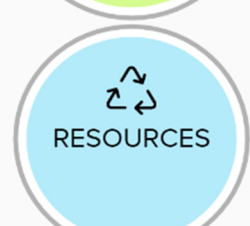
"To promote the design and operation of energy-efficient buildings to reduce expenditures on imported fuel, reduce the impacts associated with greenhouse gas emissions, minimize negative impacts on refrigerant selection, and ensure readiness for next-generation energy infrastructure."



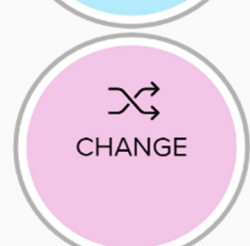
"Good design supports health and wellbeing for all people, considering physical, mental, and emotional effects on building occupants and the surrounding community"

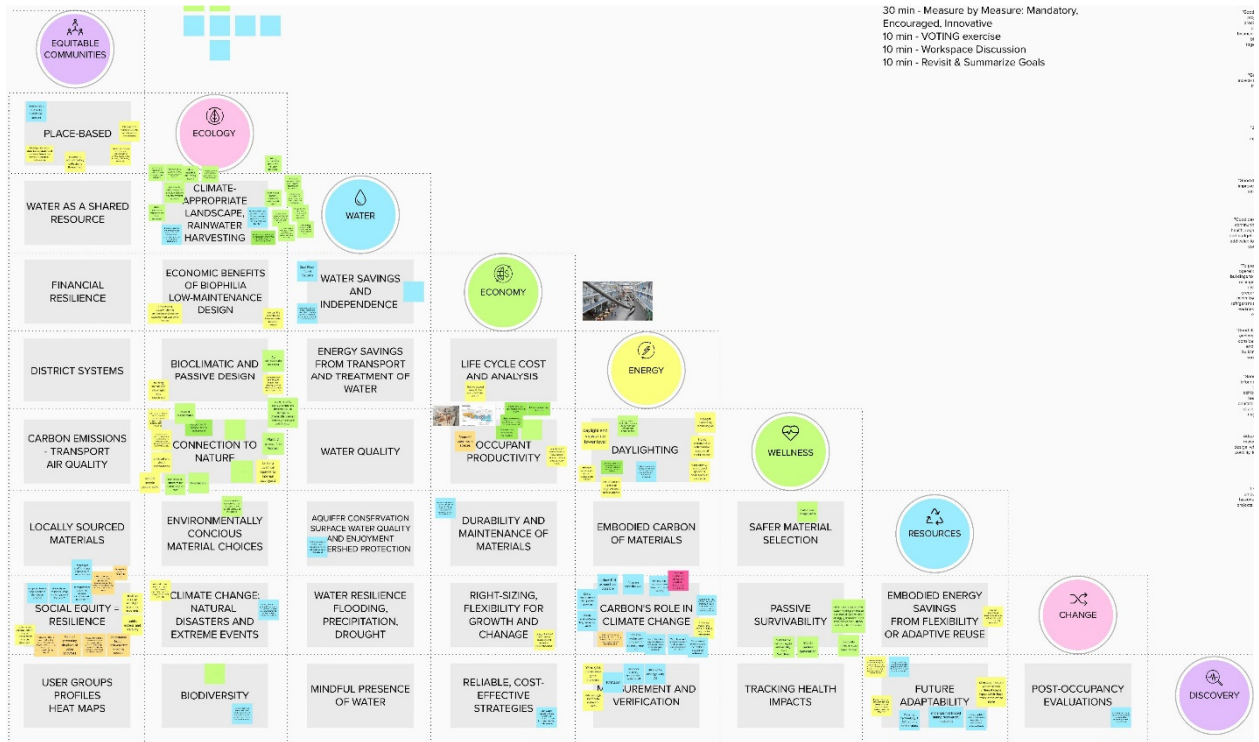


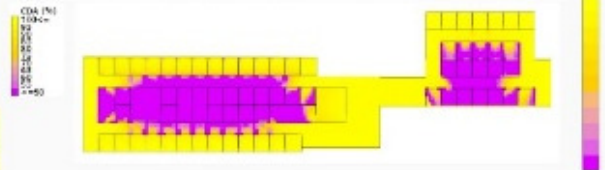
"Good design depends on informed material selection, balancing priorities to achieve durable, safe, and healthy projects with an equitable, sustainable supply chain to minimize possible negative impacts on the planet."



Adaptability, resilience, and reuse are essential to good design, which seeks to enhance usability, functionality, and value over time."







Workstations are arranged around the perimeter of the office.

The office is a large open-plan office.

Workstations are arranged around the perimeter of the office.



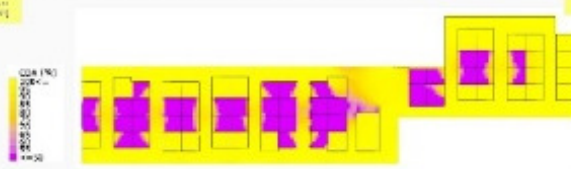
Meeting rooms are arranged around the perimeter of the office.



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Some people would consider a small meeting room to be a good idea. It would be a good idea to have a small meeting room in the office. It would be a good idea to have a small meeting room in the office. It would be a good idea to have a small meeting room in the office.

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