AGENDA # 2

City of Madison, Wisconsin

REPORT OF: URBAN DESIGN COMMISSION	**PRESENTED:** April 24, 2019
TITLE: 929 E. Washington Avenue – New Development of a Commercial/Office Mixed-Use Building Located in UDD No. 8. 6th Ald. Dist. (54198)	**REFERRED:**
	REREFERRED:
	REPORTED BACK:
AUTHOR: Janine Glaeser, Secretary	**ADOPTED:** **POF:**
DATED: April 24, 2019	**ID NUMBER:**

Members present were: Cliff Goodhart, Acting Chair; Jessica Klehr, Craig Weisensel, Tom DeChant, Rafeeq Asad, Christian Harper, Shane Bernau and Syed Abbas.

SUMMARY:

At its meeting of April 24, 2019, the Urban Design Commission **RECOMMENDED APPROVAL** of new development of a commercial/office mixed-use building after reviewing a requested glare study. Registered in support of the project were Curt Brink, Matt Brink, Doug Hursh, Ryan Danks and Andy Laufenberg, all representing Archipelago Village, LLC; and Mark Sheskey. Registered in opposition to the project was John Jacobs.

Danks gave a telephone presentation as the senior engineer and subject matter expert for the reflection related study. Any contemporary building will reflect light. They used a tool and a set of criteria developed internally with a survey that is very conservative. They have made two assumptions in this study: they've ignored the effect of cloud cover, and they've neglected the attenuation of light caused by the street trees, particularly along E. Washington Avenue and the areas to the north and south. They looked at several key areas in detail: E. Washington Avenue itself would experience glare 11-31 hours a year (0.7% of the daytime) that could impact drivers. Many of those are glancing reflections. Reflections on other buildings are assigned a lower risk. On the Lyric they see between 0.3-0.8% of the daytime reflection with high frequency occurring at the lowest level and decreasing as you go up the building. The street trees on Brearly Street will provide some attenuation and reduce that impact. They also looked at Breese Stevens field and found a small percent of the year where reflections would fall on the field (between 1-2.5%, mainly in summer evenings). The playing field itself is exposed less than 1% a year. The northwest façade as faceted in such a way that there is the potential for multiple reflections to converge; in this case while they did see multiple reflections converging, the times of day when that was possible is when the sun is starting to set making it less intense. The actual energy that the reflections contain at that time are well below the thresholds for risks related to heat gain and well below what Madison would naturally experience over the course of a day. Overall their conclusions are that they do not expect any thermal effects on people or property, and the visual impacts we are seeing are generally very brief, very infrequent and not atypical for any modern urban setting.

John Jacobs spoke in opposition to the project, noting concerns with low energy efficiency glass curtain walls. Madison requires a single-family residence to use R21 with up to 15% windows; this proposes R4 glass all around the building. Here we are with another glass box. You should be concerned with energy efficiency and the carbon footprint.

The Commission discussed the following:

- I commend you for having done the "test pilot" case on the glare study. I would feel comfortable with the conclusion that this is not above and beyond what other urban buildings do. This was a precedent-setting study for us. Can you address the energy efficiency of this building?
    - It's not really an all glass building. When you look at the front three façades of the large volume that sits on top, there's glass that runs from 30" above the floor to about 10-feet. The floor-to-floor heights are 13-foot and between that is a spandrel panel insulated like a typical wall using spandrel as the finishing material. In essence it's a ribbon window continuous around between floors 5-11 on three sides. The south side of the building has a lot more solid insulated panels and punched windows; the first 3 floors are not all glass, there's maybe less than 30% on those floors. It's an expensive glass with a low E.
- What is the percentage of glass versus solid of this particular building?
    - I don't know that number off the top of my head.
- Did you do an energy analysis, did you share those values with Plan Commission or UDC?
    - We have not shared those values. We've run a simple energy analysis and it does meet that. There's not energy model for this project.
    - We have to prove energy analysis is high enough or we won't get a permit. Each floor has its own separate HVAC unit. We meet the commercial code.
- Could you speak to the south side of the building in reference to the letter from a neighbor?
    - (Danks) We found that once you get south of the Capitol City Trail, the frequency of reflections drops to essentially none. The reason is that when the sun is in the southeast sky it's much higher up. That means the reflections from this building can't travel as far. Reflections on E. Washington Avenue travel much father because the sun is lower in the sky. We aren't concerned about any reflections south of the building, not the least of which because there's less glass on the southeast elevation, and is further back from the street because it's on top of the podium.
- Could you please also tell me what building codes did you use as a baseline? Did you go above and beyond those baselines for energy efficiency? Or did you only follow the baseline?
    - I don't think we're going above and beyond what's required by ASHRAE.
- I'm not disputing the observations and conclusions, but I don't think we should lightly gloss over some of these values they came up with, particularly on the street level on E. Washington Avenue. D1-D15 values are high. I'm not entirely comfortable that this is acceptable or normal.
- We should ask developers for an energy efficiency analysis.

ACTION:

On a motion by Weisensel, seconded by DeChant, the Urban Design Commission **RECOMMENDED APPROVAL** based on the thorough analysis presented by RWDI. The motion was passed on a vote of (4-2).