

Staci,

After further examination of the applicants documents for the project, viewing the presentation given to the Design Commission on 6/11, and reviewing the conversation between the Design Commission and the applicant on 6/11 we have the following comments/concerns/remaining questions that we'd like to submit on the record. Can you please pass these along to the applicant, Design Commission, and staff if or when appropriate.

Thank you.

**LIGHTING**

NOTE: All lighting in and adjacent to the greenway area should be fully shielded to reduce light trespass and according to the South Waterfront Design Guidelines to *"shield light from nearby residential windows, wildlife habitat areas and the sky, to avoid excess and/or vertical spill light.* *Fixtures adjacent to ecological or habitat-enhancement areas should employ a hidden-source design, to avoid the creation of unwanted glare and/or light pollution into these areas. In addition, lighting should be carefully designed and directed to avoid impacts to birds, bats and fish.* This means that lighting should be fully shielded, aimed down, no brighter than necessary, should be warm CCT (under 3000K) to minimize the emission of blue-rich white light, and should be dimmed or extinguished during low use times. Newer greenway requirements in the CCP address exterior lighting and apply to lighting within the greenway setback and permanent exterior lights within 25 feet landward of the greenway setback. These requirements include full top and side shielding, spacing at least 25 feet apart; CCT below 3000K or within an S/P ratio range of 1- 1.2; and must not project directly into the Willamette River. All of these greenway standards should be met in this project.

No manufacturer product specification sheets are included in Vol 1-3. In order to adequately comment, we need to see product spec sheets for each of the fixtures, including total lumen output and CCT or Kelvin Temperature of specified lamps.

**--Ground floor lighting plan**

What is the total lumen output and CCT of each fixture?

Does the Wall Sconce C project light only from the bottom and not from the top?

**--Lighting plan amenity deck**

What is the total lumen output and CCT of each fixture, especially the recessed wall light?

Does the Wall Sconce C project light only from the bottom and not from the top?

**--Lighting described in Volume 3 Landscape, Civil, Greenway & General**

Is the Decorative Pedestrian light the same as Path lighting?

The Selux Ritorno LED Lighting is described as shielded, but appears to have the lamp itself atop the light pole, pointed up to the disc, which does not fully shield the light. Need more information.

What is the total lumen output and CCT of the B 41 & 44-Hess Linea S900 Light Bollard?

What is the total lumen output and CCT of the Landscape ROW Light Bollard Ferrara 900 LED?

What is the total lumen output and CCT of the LED Down Light Mounted in Niche at each side of posts at overlook  (described in the Construction Details Greenway sheet)

Will structural lounge seating at Bonus Plaza have undermount lighting? It is not described, but photo insets of structural lounge seating (on the High Line?) shows undermount lighting. If this is intended, what is the total lumen output and CCT of this lighting?

**GLAZING**

NOTE: All glazing poses a collision hazard. Windows from the ground floor up to 60 feet and within the first 12 feet adjacent to vegetated podium roof areas pose some of the highest risk because they reflect trees and/or are adjacent to areas of highest bird activity (flying, foraging and nesting). Glazing that meets at corners is especially deceptive as it can either reflect vegetation or create a fly through mirage because of the proximity of glass. Glass curtain walls systems as described in Kawneer specifications create a "monolithic appearance" and an "uninterrupted sightline," which are especially hazardous for birds. All of these areas should be treated with bird safe glazing.

We will focus our concerns on the following highest risk areas:

**--West Elevation**

Glass balcony railings shown projecting north and south from the north and south aspects of the lower building and tower create areas of free standing glass that represents an irresponsibly deceptive and deadly hazard for birds in their airspace. At minimum, the north-south oriented portions of the balcony railings on the north and south aspects of the tower should use marked glass or cable wire or other material that does not pose a collision hazard

--The green wall depicted in the west aspect ground floor area may pose an additional risk by drawing birds into the courtyard area for foraging and nesting opportunities; glass in this courtyard area should be treated with a bird safe pattern.

 **--South Elevation**

Glass balcony railings shown projecting east and west from the east and west aspects of the first four floors of the building create areas of free standing glass that represents an irresponsibly deceptive and deadly hazard for birds. At minimum, the east-west oriented portions of the balcony railings on the east and west aspects of the building should use marked glass or cable wire or other material that does not pose a collision hazard

**--East Elevation**

As noted in the West Elevation, glass balcony railings shown projecting north and south from the north and south aspects of the lower building and tower create areas of free standing glass that represents an irresponsibly deceptive and deadly hazard for birds in their airspace. At minimum, the north-south oriented portions of the balcony railings on the north and south aspects of the tower should use marked glass or cable wire or other material that does not pose a collision hazard.

**--North Elevation**

Glass balcony railings shown projecting east and west from the east and west aspects of the first four floors as well as from the west aspect of the tower create areas of free standing glass that represents an irresponsibly deceptive and deadly hazard for birds. At minimum, the east-west oriented portions of the balcony railings on the east and west aspects of the building should use marked glass or cable wire or other material that does not pose a collision hazard.