

July 5, 2017

Deborah Bent
Community Development Director
City of Kenmore
18120 68th Avenue N.E.
Kenmore, WA 98028

Subject: St. Edwards Park
Athletic Field Lighting
Audubon Society Lighting Questions

Dear Deborah,

I have reviewed the questions provided by the Audubon Society regarding the proposed athletic field lighting system at St. Edwards Park.

The proposed lighting system utilizes the most effective shielding of LED sports lighting systems currently available in the industry. The LED floodlights are designed as "cutoff" floodlights that are aimed and oriented to reduce up-light that approaches "full cutoff" performance. Internal shielding is provided to reduce spill light and glare. External shielding is provided to reduce spill light, glare and "sky glow". The shielding provided meets recommendations by both the International Dark Sky Association and recent AMA report on outdoor LED lighting.

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Since the lighting system dramatically reduces the amount of up-light delivered into the atmosphere there is a safety issue with tracking fly balls during baseball\softball play. Fly balls disappear when travelling into the zone of darkness that exists above the height of the floodlights. To properly light fly balls there will be one floodlight on four of the poles that will be directed up to provide the minimum amount of light necessary for safe play. All other floodlights are aimed down within the athletic field boundaries.

The LED color temperature for the floodlights is 5,700K. The use of 5,000K and 5,700K LED's is typical for outdoor athletic field lighting systems throughout North America. Although there are recent studies regarding use of lower temperature LED's to reduce amounts of blue light; these reports do not analyze impacts of sports lighting systems that do not operate from dusk to dawn. Existing research address how indoor lighting systems and outdoor dusk to dawn lighting systems affect human circadian rhythms.

Please give me a call with any comments or questions.

Sincerely,



Christopher Fote, P.E.
Project Manager