Beverley Park
Lighting Discussion

Department of Recreation, Parks and Cultural Activities

March 9, 2016
Beverley Park

2015 Park Improvement Plan

- Park is currently unlit

- Feedback received November-December 2015 during the Park Design process to add lighting to improve security and safety

- Recommendation added to the Beverley Park Concept Plan dated December 29, 2015 (Neighborhood Parks Improvement Plan):
  Improvement #14: Add park security lighting

  The park is closed at dark and currently unlit. Recent incidents have occurred at the park during nighttime hours. Pursuant to an approved Special Use Permit, the addition of security lighting can improve Police surveillance and park security during evening hours. Security lighting is not intended to increase nighttime use of the park, and will be designed to minimize spillover into adjacent properties. The park will continue to remain closed at dark.

- Plan endorsed by the Park and Recreation Commission
City Lighting Requirements

- Special Use Permit (SUP) required for lighting on property zoned Public Open Space (POS), ie. Beverley Park
- Planning Commission and City Council approves SUP. Three months for processing application and public hearings.
- Lighting must be shielded to mitigate impacts to adjoining properties
- Light levels at adjacent properties cannot exceed .25 footcandles
- Lighting must meet minimum City light levels: Typically .60 - 1.0 footcandles for walkways in residential and office areas
- Pole lights cannot exceed 15 feet in POS zones, may be increased to 30 feet with an SUP
Potential Lighting Impacts

- Park Operating hours: Currently sunrise to sunset
- Hours can be changed to 5:00am to 10:00pm with approval by City Manager
- Could attract unintended nighttime use if lights are left on throughout the night
- May require additional Police capacity to enforce park operating hours
- May improve natural surveillance by neighborhood due to longer operating hours, if park hours are extended
- May not prevent every crime from occurring
Area to be Lighted
Area to be Lighted
2015 Improvement Plan
# Light Fixture Types

## Pole Lights

<table>
<thead>
<tr>
<th>Pole Light Fixtures—Intermediate Height</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixture Height</strong></td>
<td>15’ maximum for POS zones, with SUP 30’</td>
</tr>
<tr>
<td><strong>Illumination Characteristics</strong></td>
<td>Due to height, illuminates a larger area more evenly with minimum fixtures, higher lamp wattages</td>
</tr>
<tr>
<td><strong>Special Features</strong></td>
<td>Ornamental fixtures, programmable lighting schedules, LED and traditional sodium vapor and halide lamps, double sided heads</td>
</tr>
<tr>
<td><strong>Relative Cost</strong></td>
<td>Higher costs due to magnitude of scale, materials, and structural requirements of poles</td>
</tr>
<tr>
<td><strong>Constructability</strong></td>
<td>Installation must meet codes for structural stability</td>
</tr>
<tr>
<td><strong>Long term Sustainability</strong></td>
<td>Lamps/repairs may require special equipment. Taller height less susceptible to vandalism</td>
</tr>
</tbody>
</table>
Light Fixture Types
Pole Lights
Light Fixture Types
Pole Lights
## Light Fixture Types
### Bollard Lights

<table>
<thead>
<tr>
<th>Bollard Light Fixtures—Low Level Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixture Height</strong></td>
</tr>
<tr>
<td><strong>Illumination Characteristics</strong></td>
</tr>
<tr>
<td><strong>Special Features</strong></td>
</tr>
<tr>
<td><strong>Relative Cost</strong></td>
</tr>
<tr>
<td><strong>Constructability</strong></td>
</tr>
<tr>
<td><strong>Long term Sustainability</strong></td>
</tr>
</tbody>
</table>
Light Fixture Types

Bollard Lights
Light Fixture Types

Bollard Lights
LED vs. Incandescent
LED vs. Incandescent
Photometric Concept 1

- 21 Bollard fixtures, LED, 30’ spacing
- 2 Pole Lights, 18’ H, LED
- 1 LED light mounted to picnic shelter
- Illumination limited to pathways
- Does not illuminate grass areas or slopes
- Estimated cost: $52,000, NIC
  Power transformer
Photometric Concept 2

- 8 Pole Lights, 18’ H with double fixtures, LED, 55’ spacing
- 5 LED bollard lights at entrance paths
- Illumination of turf area
- Partial illumination of slope
- Estimated cost: $70,000-85,000

NIC Power transformer
Feedback from North Ridge Civic Association Lighting Sub-Committee
February 2, 2016

- Light areas of the park that are darkest and furthest away from the street, such that a person could be seen
- Do not light entrances or pathways which could attract nighttime use, or be perceived as “park is open at night”
- Keep lights on throughout the night; and keep park closed at dark
- Bollard fixtures are preferred over pole fixtures
- Lighting level to range from .50 -.60 foot candles
- Warm color temperatures preferred over cool blue temperatures
Photometric Concept 3

- 3 Pole Lights, 18’ H single fixtures, LED
- 2 Poles located behind play area, 1 Pole located near picnic shelter
- Light intensity shown as 1.0 footcandle, but can be lowered to .50 footcandle.
- Partial illumination of new play areas, and areas furthest away from street
- Costs are substantially lower than Concept 1 and 2
Photometric Concept 3

Proposed Light Pole layout
Photometric Concept 4

- 5 LED bollard lights located behind play areas
- 1 Pole light located near picnic shelter
- Costs are substantially lower than Concept 1 and 2
Photometric Concept 4

Proposed Bollard and Pole Light layout
Photometric Concept 4

Light levels of Proposed Bollard fixtures
Next Steps

- Obtain feedback on lighting and a preferred concept
- Submit SUP application in March to Planning and Zoning. Planning Commission and City Council hearing anticipated for June 2016
- If approved, install lighting as part of the park renovation construction, anticipated to begin fall 2016.