JOSE PATIO RESIDENCE

STINSON BEACH, CA
ENTITLEMENTS CALCULATION REPORT
JULY 27, 2022
22-025
# Preliminary Fixture Schedule

**Luminaire Schedule**

<table>
<thead>
<tr>
<th>Type</th>
<th>Image</th>
<th>Description</th>
<th>Installation</th>
<th>Manufacturer</th>
<th>Model</th>
<th>Product Code</th>
<th>BUG Rating</th>
<th>Finish</th>
<th>Watts</th>
<th>CCT</th>
<th>CRI</th>
<th>Volt.</th>
<th>Efficacy</th>
<th>Dimming</th>
<th>Qty</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td><img src="image1" alt="Image" /></td>
<td>Exterior Sconce</td>
<td>Exterior Wall Mounted</td>
<td>Sonneman</td>
<td>Angled Plane Downlight Led Sconce</td>
<td>2363.72-WL</td>
<td>B1-U2-G1</td>
<td>Bronze OR TBD</td>
<td>13 W</td>
<td>3000K</td>
<td>90</td>
<td>TBD</td>
<td>50.8 LM/W</td>
<td>ELV</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td><img src="image2" alt="Image" /></td>
<td>Exterior Downlight</td>
<td>Exterior Ceiling W/ JBOX</td>
<td>BK Lighting</td>
<td>Versa Star LED</td>
<td>TBD-VS-LED-E100-MFL-A9-TBD-12-11</td>
<td>B1-U0-G0</td>
<td>TBD</td>
<td>5 W</td>
<td>2700K</td>
<td>80</td>
<td>12 VAC</td>
<td>60.2 LM/W</td>
<td>MLV</td>
<td>26</td>
<td>Only IES File Available for Calc WAS VNSP Optic</td>
</tr>
<tr>
<td>E3</td>
<td><img src="image3" alt="Image" /></td>
<td>Exterior Bollard</td>
<td>Exterior Ground Mounted</td>
<td>BK Lighting</td>
<td>Litestick Style 'L' LED</td>
<td>LT-L-18-LED-E70-TBD-A18-TBD</td>
<td>B0-U1-G0</td>
<td>TBD</td>
<td>3 W</td>
<td>2700K</td>
<td>80</td>
<td>12 VAC</td>
<td>10.3 LM/W</td>
<td>NONDIM</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>E4</td>
<td><img src="image4" alt="Image" /></td>
<td>Exterior Signage Light</td>
<td>Exterior Fence Mounted</td>
<td>MP Lighting</td>
<td>L394-2-W27H-MK1-SMA</td>
<td>B0-U1-G0</td>
<td>ANODIZED</td>
<td>2 W</td>
<td>2700K</td>
<td>90</td>
<td>120-277 VAC</td>
<td>105.8 LM/W</td>
<td>ELV or 0-10V</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes**

1. Luminaire Schedule should be read in conjunction with Architectural & Services drawings
2. Before ordering, it is the Contractor’s responsibility to ensure lead times of luminaires are within programme
3. Catalogue Numbers / Order codes are indicative only. Where there is a discrepancy between the specified luminaire information and the catalogue number provided clarification MUST be sought from Electrolight before ordering.
4. All Luminaire Finishes to be confirmed by Architect before ordering.
Per our findings, Stinson Beach does not have its own Dark Sky ordinance, nor does Marin County. That being said, we checked for Dark Sky compliance against the regulations of another coastal neighborhood in California, which should be a suitable comparison.

The important points are paraphrased as follows:
- Fixtures are fully shielded and directed downwards
- Color temperature is no greater than 3000K
- Light trespass levels from any residential property onto another residential property, or beaches, or the Pacific Ocean cannot exceed 0.1 foot-candles.
- Per Title 24 2022, all outdoor lighting must be controlled by a manual ON and OFF control switch and one of the following automatic control types:
  - Photocontrol and either a motion sensor or an automatic time switch control
  - Astronomical time clock control
- Each fixture shall not exceed 850 lumens output.
- Outdoor lighting fixtures shall not be mounted higher than 18 feet above ground level.

On the following pages, calculation renderings are shown for a maximum of both 0.1 foot-candles and 10 foot-candles to confirm Dark Sky compliance.
CALCULATION RESULTS (PLAN SOUTH)

Red line: Property border
Orange line: 10 feet from Property border
Yellow highlight: Light trespass area
EXISTING CONDITIONS
For the purposes of calculation, we chose three fixtures to represent three different types of existing fixtures on-site. We believe these are suitable representations, and would need specifications of the existing fixtures to confirm.

<table>
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<tr>
<th>Type</th>
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<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>BULB</td>
<td><img src="image1.jpg" alt="BULB Image" /></td>
<td>EXTERIOR SCONCE</td>
<td>PHILIPS</td>
<td>A-SHAPE LED</td>
<td>10A19/LED/927/FR/P/N D 4/1FB</td>
<td>10 W</td>
<td>2700K</td>
<td>90</td>
<td>120 V</td>
<td>100 LM/W</td>
<td>11</td>
</tr>
<tr>
<td>FLOOD</td>
<td><img src="image2.jpg" alt="FLOOD Image" /></td>
<td>EXTERIOR ROOF FLOODLIGHT</td>
<td>PHILIPS</td>
<td>STONCO GENERAL PURPOSE FLOODLIGHT</td>
<td>FL20-NW-G1-FL-8-BZ</td>
<td>20 W</td>
<td>4000K</td>
<td>80+</td>
<td>120-277 V</td>
<td>109 LM/W</td>
<td>2</td>
</tr>
<tr>
<td>SECURITY</td>
<td><img src="image3.jpg" alt="SECURITY Image" /></td>
<td>EXTERIOR FLOODLIGHT</td>
<td>PHILIPS</td>
<td>STONCO LED SECURITY LIGHT</td>
<td>SL20-SCT-G1-8-BK</td>
<td>20 W</td>
<td>3000K</td>
<td>70+</td>
<td>120-277 V</td>
<td>110 LM/W</td>
<td>2</td>
</tr>
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</table>
EXISTING CALCULATION RESULTS (PLAN NORTH)

- **Red line**: Property border
- **Orange line**: 10 feet from Property border
- **Yellow highlight**: Light tresspass area
- **Pink highlight**: Tresspass points above 0.1 fc
EXISTING CALCULATION RESULTS (PLAN SOUTH)

Red line: Property border
Orange line: 10 feet from Property border
Yellow highlight: Light trespass area
Pink highlight: Tresspass points above 0.1 fc
NEW CALCULATION RESULTS (ADJACENT PROPERTY WALL TO EAST, 60 FC MAXIMUM ON RENDER SCALE)

Pseudocolor rendering. Indigo color indicates low footcandle reading.
EXISTING CALCULATION RESULTS (ADJACENT PROPERTY WALL TO EAST, 60 FC MAXIMUM ON RENDER SCALE)

Pseudocolor rendering. Indigo color indicates low footcandle reading.
NEW CALCULATION RESULTS (60 FC MAXIMUM ON RENDER)

Pseudocolor rendering. Indigo color indicates low footcandle reading.
EXISTING CALCULATION RESULTS (60 FC MAXIMUM ON RENDER)

Pseudocolor rendering. Indigo color indicates low footcandle reading.