**NAVIGATION LIGHT SYSTEM SCHEMATIC FOR SINGLE BRIDGE WITH FENDERS**

**NAVIGATION LIGHT SYSTEM SCHEMATIC FOR DUAL BRIDGES WITH FENDERS**

**NAVIGATION LIGHT SYSTEM SCHEMATIC FOR SINGLE BRIDGE WITHOUT FENDERS**

**NAVIGATION LIGHT SYSTEM SCHEMATIC FOR DUAL BRIDGES WITHOUT FENDERS**

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**NAVIGATION LIGHT NOTES:**

1. Provide Navigation Light System in compliance with Specifications Section 510.

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**NOTE:**

Use RFL when Pier is at Channel Edge and see CFR, Title 33, part 118 for Mounting Height restrictions. Use RCL otherwise.

*** Mounted only on the Pier that defines CM, otherwise does not apply.

RFL to be located at mid length of straight portion of fender.

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**LEGEND**

- **LC** Lighting Contactor
- **PC** Photocell Control
- **Xmer** Transformer (if Required)
- **RFL** Red Pier/Fender Light (180° visibility)
- **RCL** Red Channel Margin Light (180° visibility)
- **GCL** Green Center Channel Light (360° visibility)
- **CGL** Clearance Gauge Light
- **CM** Channel Margin or Pier inner surface whichever defines Channel Edge.

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**TYPICAL ELECTRICAL SCHEMATIC DIAGRAM**

**POWER CONDUCTORS**

<table>
<thead>
<tr>
<th>DISTANCE (feet)</th>
<th>VOLTS</th>
<th>CONDUCTOR</th>
<th>TRANSFORMER</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 75</td>
<td>120</td>
<td>#12 AWG</td>
<td>N/A</td>
</tr>
<tr>
<td>75 - 500</td>
<td>120 or 240</td>
<td>#10 AWG</td>
<td>N/A</td>
</tr>
<tr>
<td>500 - 1000</td>
<td>240</td>
<td>#10 AWG</td>
<td>2 KVA</td>
</tr>
<tr>
<td>1000 - 2000</td>
<td>480</td>
<td>#8 AWG</td>
<td>2 KVA</td>
</tr>
<tr>
<td>2000 - 5000</td>
<td>480</td>
<td>#6 AWG</td>
<td>2 KVA</td>
</tr>
<tr>
<td>5000 - 10000</td>
<td>480</td>
<td>#4 AWG</td>
<td>2 KVA</td>
</tr>
<tr>
<td>Over 10000</td>
<td>480</td>
<td>#4 AWG</td>
<td>2 KVA</td>
</tr>
</tbody>
</table>

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**NAVIGATION LIGHT SYSTEM DETAILS (FIXED BRIDGES)**

**FY 2017-18**

**DESIGN STANDARDS**

**INDEX NO.**

**NO.**

**SHEET NO.**

**01/01/12**