# **Index 21220 Navigation Light System Details (Fixed Bridges)**

### **Design Criteria**

Structures Design Guidelines (SDG); Code of Federal Regulations Title 33, Chapter 1, Part 118; United States Coast Guard Bridge Lighting and Other Signals manual.

## **Design Assumptions and Limitations**

If actual conditions differ from the typical configurations shown on the standard and/or it is a movable bridge, design a project specific Navigation Light System to comply with **Code of Federal Regulations Title 33, Chapter 1, Part 118** and United States Coast Guard **Bridge Lighting and Other Signals** manual.

Project specific designs are required for structures supporting Green Center Channel and Red Channel Margin Lights.

Provide design of RFL locations and configurations in Fender System drawings if applicable.

Provide design of CGL locations as shown in the Standard Drawing.

Include the height of Green Center Channel and Red Channel Margin Lights when establishing superstructure heights to comply with vertical clearance requirements.

Use this standard with Indexes 21210, 21900 and 21930, and/or project specific details as required.

# **Plan Content Requirements**

In the Structures Plans:

Show fully detailed project specific designs of structures supporting Green Center Channel and Red Channel Margin Lights. Specify requirement for automatic lock positions for service and operating. Specify light and Service Chain mounting locations.

Show fully detailed project specific designs for Red Pier / Fender and Red Channel Margin Lights.

Prepare supplemental designs as required showing locations and details of conduit runs, power sources and other electrical components and incidental items.

# **Payment**

Item number	Item description	Unit Measure
510-1	Navigation Lights - Fixed Bridge	LS