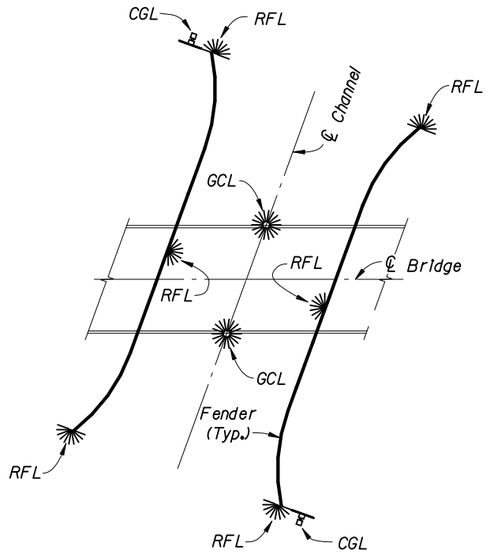
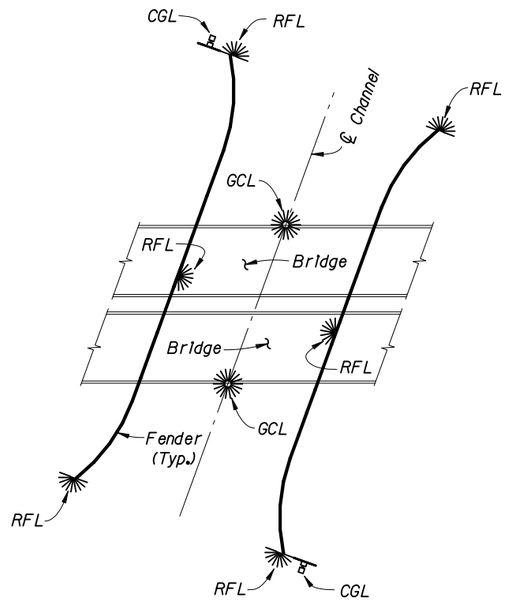


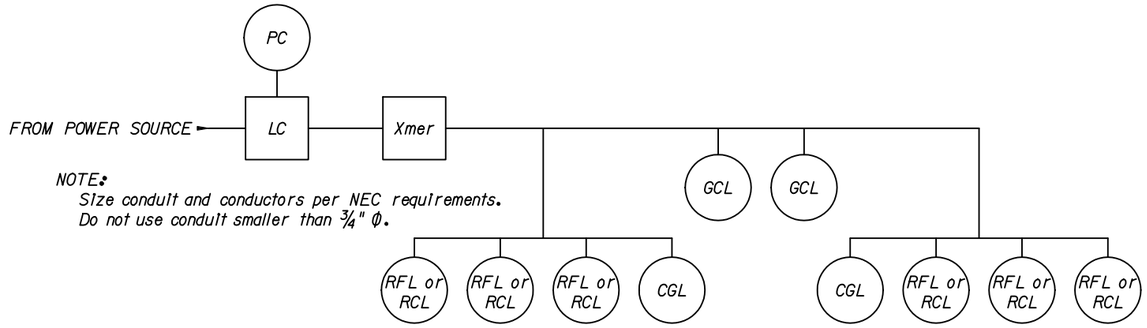
NAVIGATION LIGHT SYSTEM SCHEMATIC
FOR SINGLE BRIDGE WITH FENDERS



NAVIGATION LIGHT SYSTEM SCHEMATIC
FOR DUAL BRIDGES WITH FENDERS

NAVIGATION LIGHT NOTES:

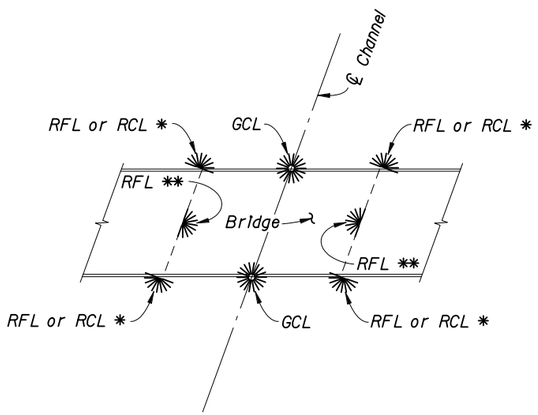
1. Provide Navigation Light System In compliance with Specifications Section 510.



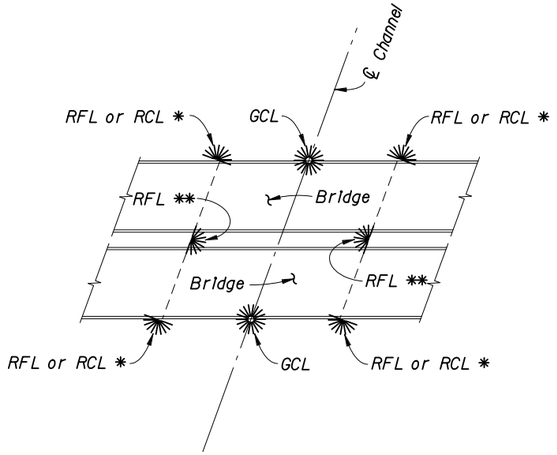
NOTE:
Size conduit and conductors per NEC requirements.
Do not use conduit smaller than 3/4" ϕ.

TYPICAL ELECTRICAL SCHEMATIC DIAGRAM

POWER CONDUCTORS			
DISTANCE (feet)	VOLTS	CONDUCTOR	TRANSFORMER
0 - 75	120	#12 AWG	N/A
75 - 500	120 or 240	#10 AWG	N/A
500-1000	240	#10 AWG	N/A
1000-2000	480	#10 AWG	2 KVA
2000-5000	480	#8 AWG	2 KVA
5000-10000	480	#6 AWG	2 KVA
over 10000	480	#4 AWG	2 KVA



NAVIGATION LIGHT SYSTEM SCHEMATIC
FOR SINGLE BRIDGE WITHOUT FENDERS



NAVIGATION LIGHT SYSTEM SCHEMATIC
FOR DUAL BRIDGES WITHOUT FENDERS

LEGEND

SYMBOL	DESCRIPTION
LC	Lighting Contactor
PC	Photocell Control
Xmer	Transformer (If Required)
RFL or RCL	Red Pier/Fender Light
	Red Channel Margin Light
GCL	Green Center Channel Light
CGL	Clearance Gauge Light
CM	Channel Margin or Pier Inner surface whichever defines Channel Edge.

INSTRUCTIONS TO DESIGNER:

1. Provide design of CGL locations, configurations and its supporting structures.
2. Provide design of RFL locations and configurations in Fender System drawings if applicable.
3. If actual conditions differ from the typical configurations shown on this sheet, design Navigation Light System to comply with Code of Federal Regulations Title 33, Chapter I, Part 118.
4. Provide automatic lock positions for service and operating.
5. Specify Service Chain mounting location.

* 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.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
01/01/06	CEB	Changed Mid Fender RFL light location.			

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

2006 Interim Design Standard

NAVIGATION LIGHT SYSTEM DETAILS (FIXED BRIDGES)

Interim Date 01/01/06

Sheet No. 1 of 2

Index No. 21220