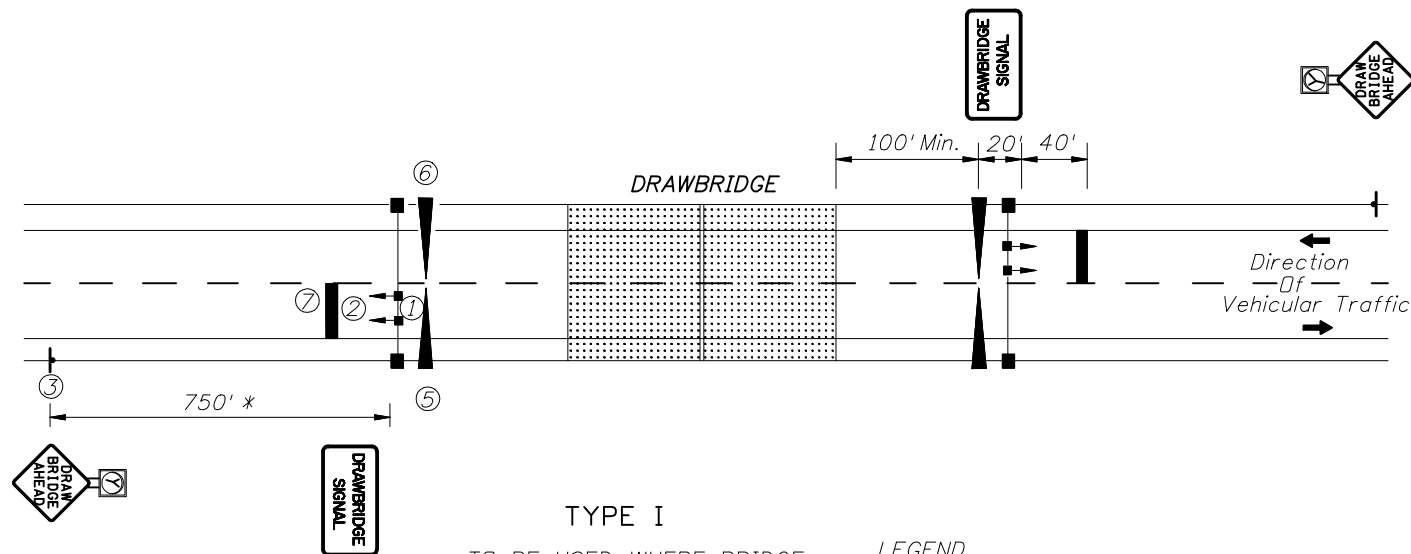


TYPICAL BRIDGE MOUNTS



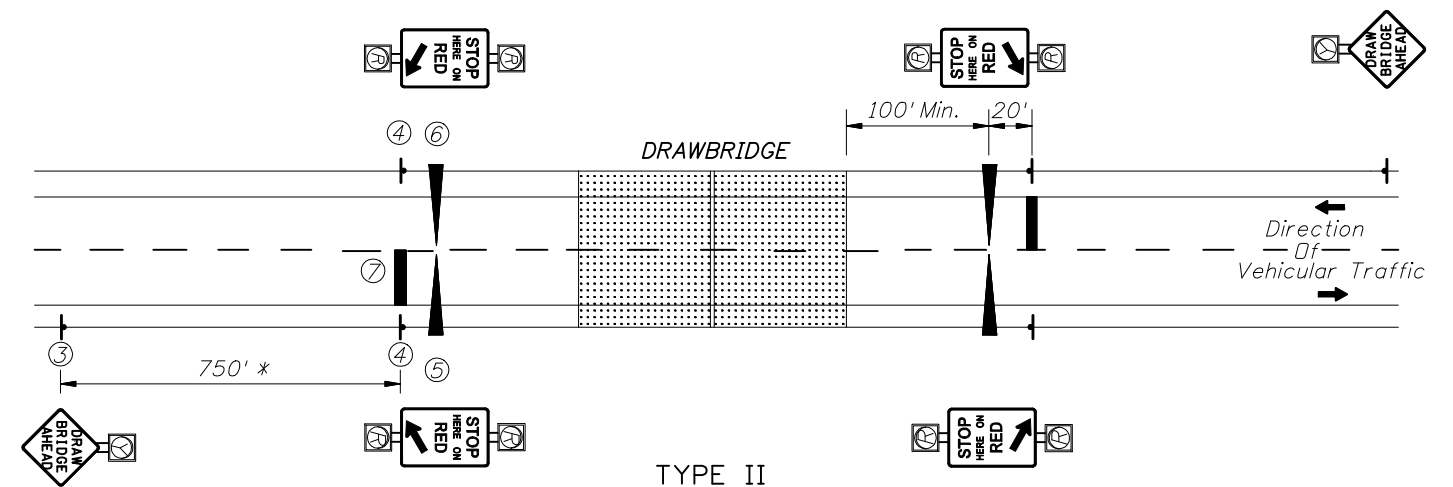
TYPE I

TO BE USED WHERE BRIDGE OPERATORS ARE FULL TIME OR A DAILY BASIS.

\* Field conditions may require adjustment of this standard distance.

LEGEND

- ① TRAFFIC SIGNALS } Mast Arm Mounted (Off Bridge)
- ② DRAWBRIDGE SIGN } Monotube Support Mounted (On Bridge)
- ③ DRAWBRIDGE AHEAD SIGN WITH YELLOW FLASHING BEACON } Ground Mounted
- ④ STOP HERE ON RED SIGN WITH RED FLASHING BEACONS }
- ⑤ ENTRANCE GATE
- ⑥ EXIT GATE
- ⑦ 24" THERMOPLASTIC STOP BAR



TYPE II

TO BE USED WHERE TYPE I IS NOT APPLICABLE (USUALLY WHEN THE BRIDGE OPERATOR IS "ON CALL").

NOTES:

1. A bypass switch shall be installed to override each timing interval in case of a malfunction.
2. "STOP HERE ON RED" is omitted in Type I operation and "TRAFFIC SIGNALS" are omitted in Type II operation.
3. The time between beginning of flashing yellow on "Drawbridge Ahead" sign and the clearance of traffic signal to red, or beginning of flashing red should not be less than the travel time of a passenger car, from the sign location to the stop line, traveling at the 85 percentile approach speed.
4. Beginning of operation of drawbridge gates shall not be less than 15 seconds after steady red or 20 seconds after flashing red (Actual time may be determined by the bridge tender.)
5. Time of gate lowering and raising is dependent upon gate type.
6. Time of bridge opening is determined by the bridge tender.
7. Each gate shall be operated by a separate switch.
8. On each approach (Type II), all four red signals shall be on the same two circuit flashers, with the two top signals on one circuit, and the two bottom signals on the alternately flashing circuit.
9. A Drawbridge Ahead sign is required for both types of signal operation, However a flashing beacon shall be added to the sign when physical conditions prevent a driver traveling at the 85% approach speed from having continuous view of at least one signal indication for approximately 10 seconds.
10. Requirements on gate installation are contained in Section 4I of the "Manual on Uniform Traffic Control Devices".
11. "In accordance with Traffic Engineering Manual (Topic Number 750-000-005) Section 2.1, SLIPPERY WHEN WET SIGNS shall be placed in advance of all MOVABLE and NONMOVABLE STEEL DECK BRIDGES."

SIGNALS & SIGNS {  
 SIGNAL SWITCH  
 FLASHING BEACON  
 DRAWBRIDGE AHEAD (See Note 9) SIGN  
 STOP HERE ON RED (Type II only)  
 TRAFFIC SIGNALS (Type I only)  
 GATES {  
 ENTRANCE GATES  
 EXIT GATES

TIMING

OFF	ON						OFF
BLANK	FLASHING YELLOW						BLANK
BLANK	FLASHING RED						BLANK
GREEN	YELLOW	RED	GREEN	Per Note 7			
RAISED			LOWERED			RAISED	
RAISED			LOWERED			RAISED	
Variable Time (See Note No.3)	5 Sec. Min.	15 Sec. Min. (See Note No.4)	Variable Time (See Note No.5)	Variable Time Bridge Open (See Note No.6)	Variable Time (See Note No.5)	Variable Time (See Note No.5)	
Normal Operation			Operation During Bridge Preemption				



W8-5  
 SLIPPERY WHEN WET SIGN  
 See Note 11.

SEQUENCE CHART

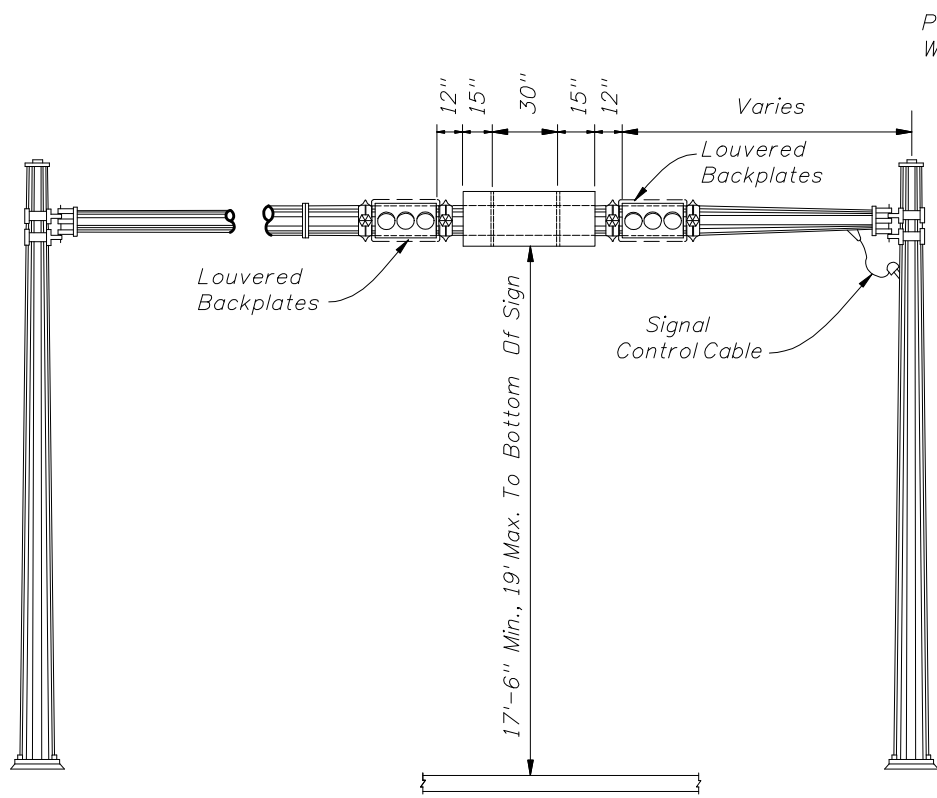


FIGURE - A  
MONOTUBE SUPPORT MOUNTING

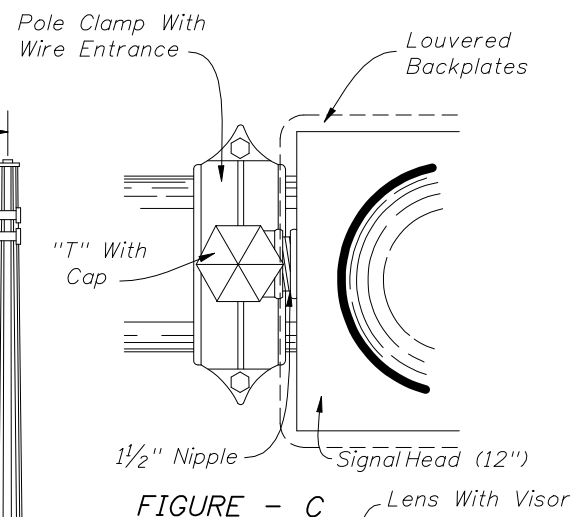


FIGURE - C

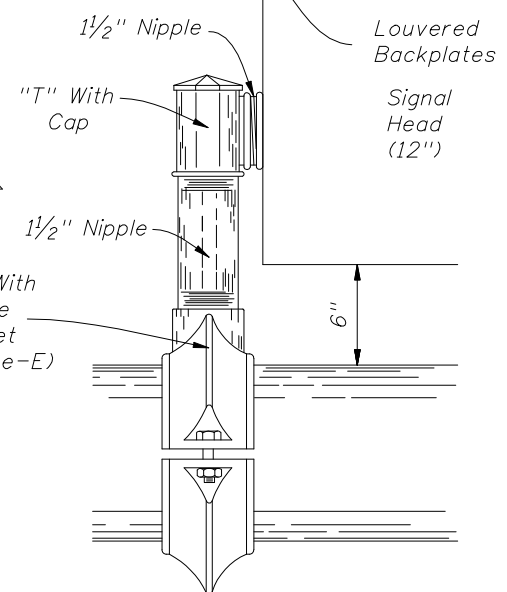


FIGURE - D

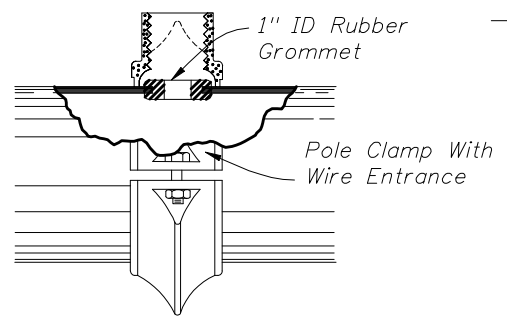


FIGURE - E  
SIGNAL HEAD MOUNTING ASSEMBLY

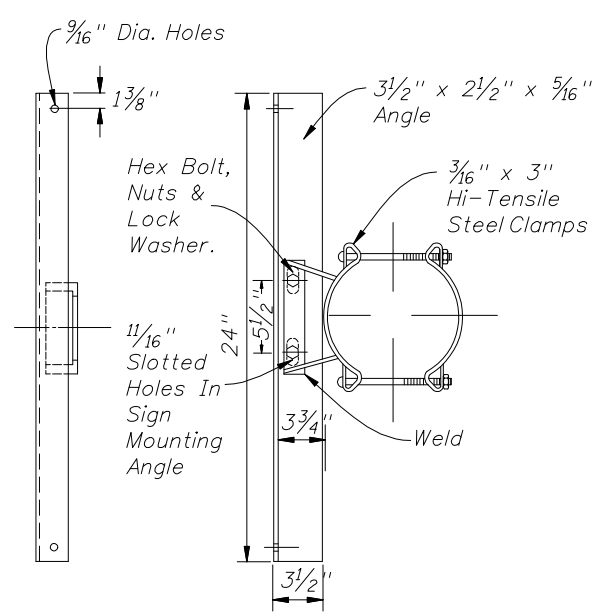


FIGURE - B  
SIGN PANEL MOUNTING ASSEMBLY

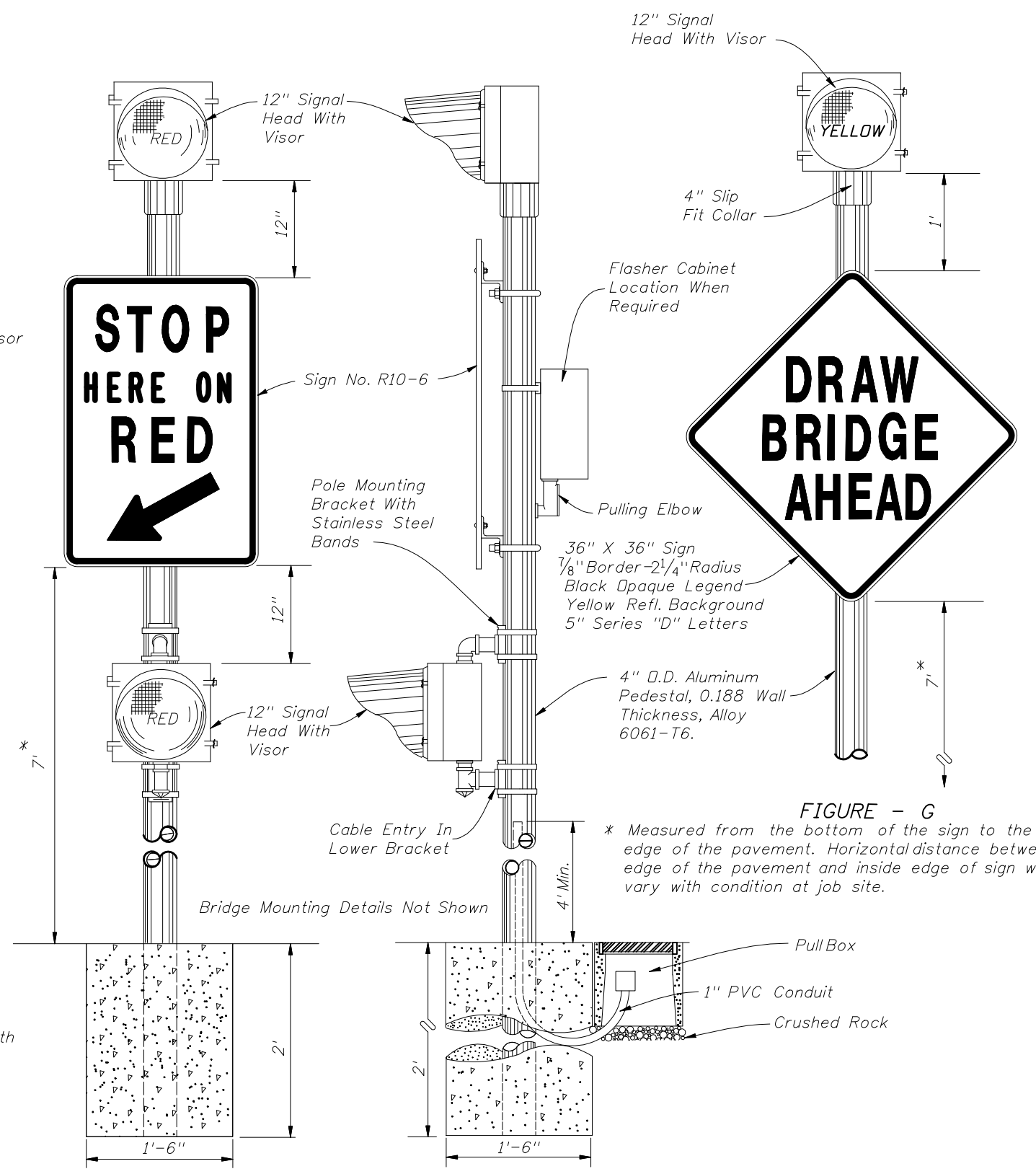
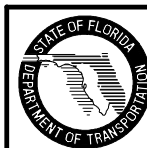
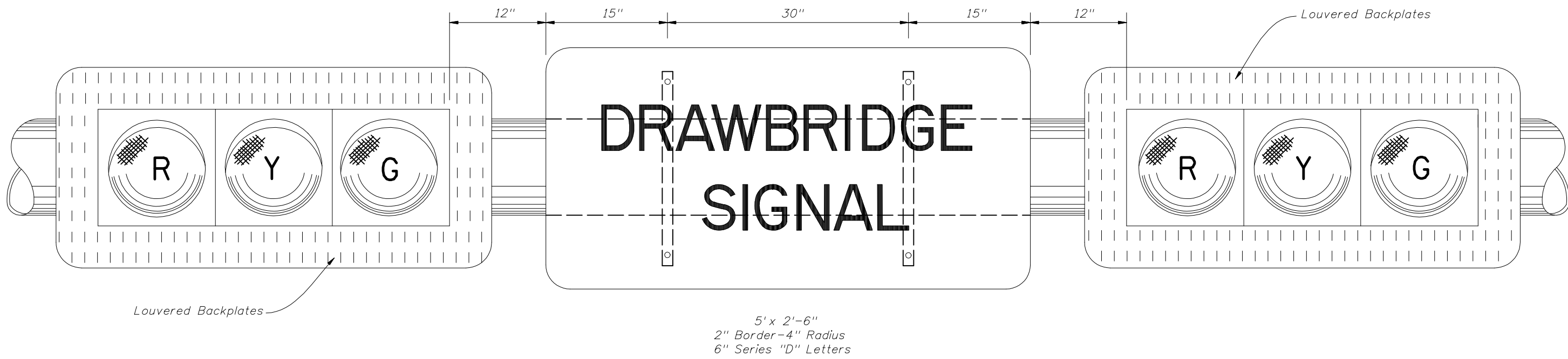


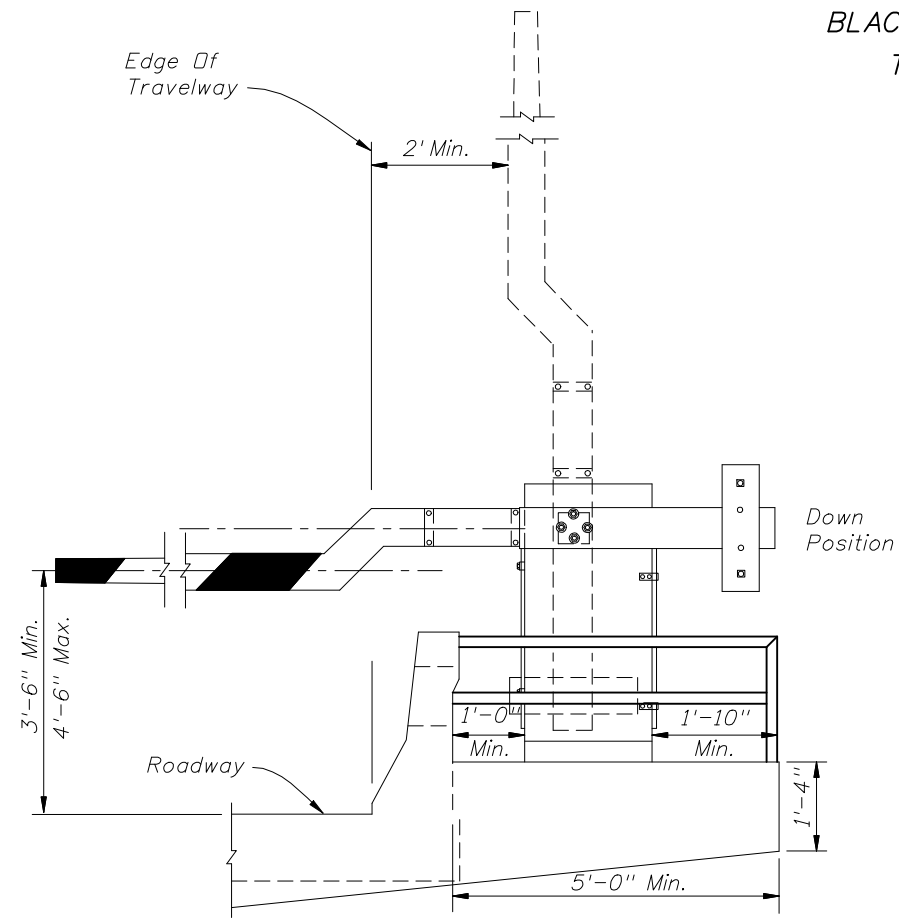
FIGURE - F

FIGURE - G

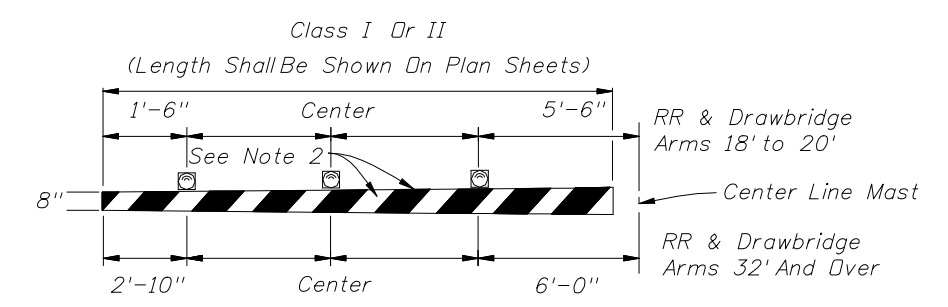
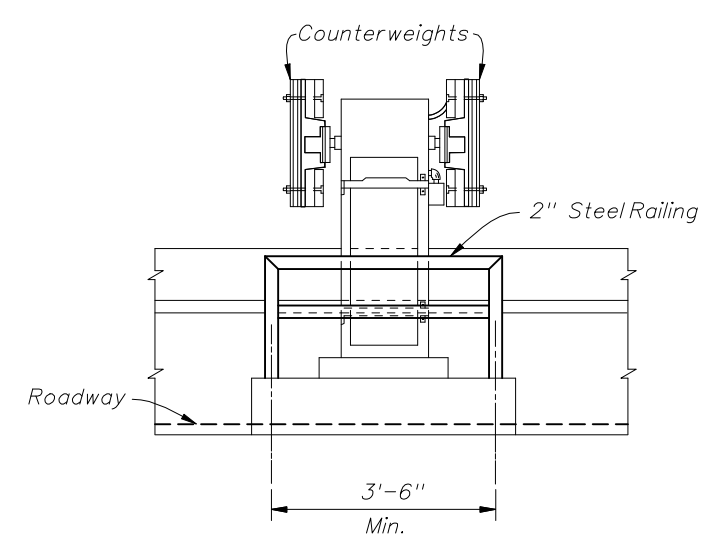




BLACK OPAQUE LEGEND AND BORDER ON REFLECTORIZED YELLOW BACKGROUND  
 TO BE USED WITH TYPE I OPERATION, AS SHOWN ON PREVIOUS SHEET  
 MONOTUBE SUPPORT MOUNTING



GATE & ARM DETAIL



TYPICAL LAMP PLACEMENT

- NOTES:
- 12 volt flashing red lights shall be mounted on gate arm and shall operate in the flashing mode only when gate arm is in the lower position or in the process of being lowered. The number of lights shall vary accordingly to length of the gate arm.
  - 16" alternate diagonal fully reflectorized red and white stripes.

