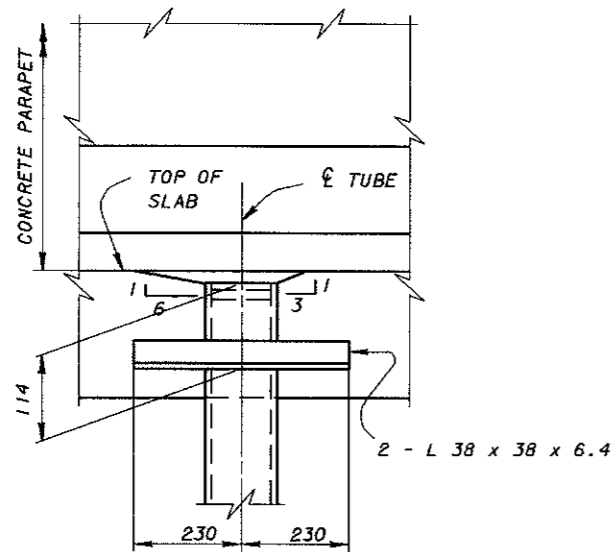
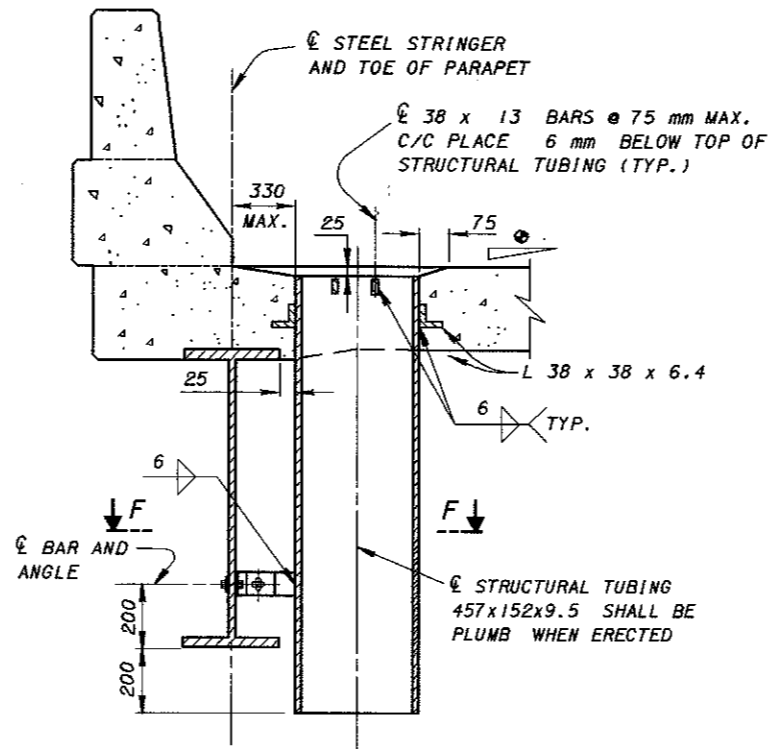


PLAN

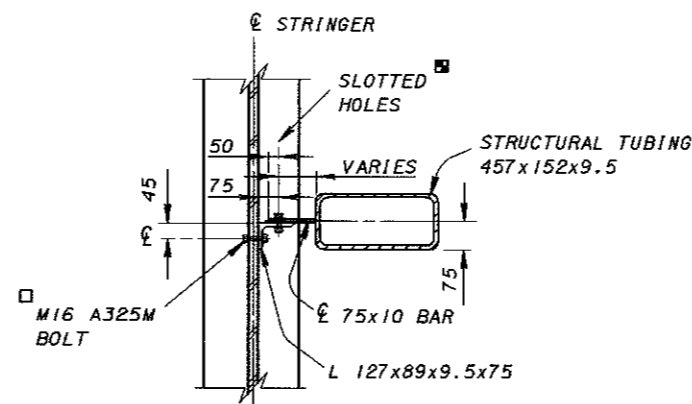
⊕ DIMENSION 'A' SHALL NOT EXTEND BEYOND THE LIMITS OF THE SHOULDER (SHALL NOT FALL IN THE TRAFFIC LANE)



SECTION E-E



SECTION D-D



SECTION F-F

THE SCUPPERS SHALL BE LOCATED ON THE BRIDGE DECK BASED ON BRIDGE GEOMETRY AND THE CONTRIBUTING DECK DRAINAGE.

THE CONCRETE DECK, AT THE TWO SCUPPER CORNERS AWAY FROM THE CURB LINE, SHALL BE REINFORCED BY 900 mm LONG #13M BAR, ONE BAR AT EACH CORNER, ORIENTED AT 45° TO THE SCUPPER.

◆ SQUARE CUT TOP OF TUBE UNLESS DESIGNER SPECIFIES CROSS SLOPE GREATER THAN 13 mm PER 305 mm IN WHICH CASE THE TOP IS TO BE CUT PARALLEL TO THE CROSS SLOPE.

■ SLOTTED HOLES SHALL BE 17 mm x 39 mm. THE SLOT SHALL BE HORIZONTAL IN THE 75 mm x 10 mm BAR AND VERTICAL IN THE ANGLE. USE A M16 A325M HIGH STRENGTH HEX HEAD BOLT WITH HEX NUT AND WASHERS, TIGHTEN AS PER CMS 513.15.

□ M16 A325M TYPE 1 GALVANIZED FOR A GALVANIZED OR PAINTED BRIDGE AND A325M TYPE 3 FOR A588M WEATHERING STEEL BRIDGE. EACH ASSEMBLY SHALL INCLUDE A BOLT, NUT AND TWO (2) WASHERS, TIGHTENED PER CMS SECTION 513.15. FOR A GALVANIZED BRIDGE SYSTEM PROVIDE A 88 mm x 88 mm x 3 mm PREFORMED BEARING PAD WITH A 20 mm Ø HOLE AS PER CMS 711.21 BETWEEN THE BEAM WEB AND THE ANGLE. FIELD DRILL 20 mm DIAMETER HOLE IN THE WEB AFTER THE DECK CONCRETE HAS BEEN POURED.

THE SUPPORT ANGLES, BARS, SUPPORT BOLTS AND RELATED HARDWARE ARE INCLUDED WITH SCUPPERS FOR PAYMENT.

SCUPPERS INCLUDING SUPPORT ANGLES, BARS, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH CMS 711.02.

DESIGN AGENCY	OFFICE OF STRUCTURAL ENGINEERING
STATE OF OHIO DEPARTMENT OF TRANSPORTATION	11-21-97
DATE	11-21-97
ADMINISTRATOR	Brad Fogwell
REVISIONS	
DESIGNED	JCR
CHECKED	JS
REVIEWED	WTL
DRAWN	JFF/FO
DATE	GSD-1-96M
STANDARD	GENERAL STEEL DETAILS
3	3