

GEOMETRY (Continued)

Bottom Vertical Haunch Dimension, in.	8.0
Concrete Cover Over Steel, in.	
Top Slab - Outside Face	1.00
Bottom Slab - Outside Face	1.00
Side Wall - Outside Face	1.00
Top Slab - Inside Face	1.00
Bottom Slab - Inside Face	1.00
Side Wall - Inside Face	1.00

REINFORCING DATA

LOCATION	AREA (in. ² /ft)	STIRRUPS REQUIRED?
TRANSVERSE		
Side Wall - Outside Face (AS1)	1.012	No
Top Slab - Inside Face (AS2)	1.643	No
Bottom Slab - Inside Face (AS3)	1.574	No
Side Wall - Inside Face (AS4)	0.240	No
Top Slab - Outside Face (AS7)	0.288	No
Bottom Slab - Outside Face (AS8)	0.288	No

Notes:

- 1 Sidewall outside face steel (AS1) is bent at the culvert corners and extended 27 in. from the bend point into the top slab. The top slab outside face steel (AS7) must lap the AS1 steel in accordance with AASHTO provisions for tension lap splices. To obtain the total AS1 extension into the top slab, the tension lap splice length must be calculated and added to the 27 in. extension length.
- 2 Sidewall outside face steel (AS1) is bent at the culvert corners and extended 27 in. from the bend point into the bottom slab. The bottom outside face steel (AS8) must lap the AS1 steel in accordance with AASHTO provisions for tension lap splices. To obtain the total AS1 extension into the bottom slab, the tension lap splice length must be calculated and added to the 27 in. extension length.
- 3 There may be negative moment from the outside corner of the box to 34 in. across the top slab
- 4 There may be negative moment from the outside corner of the box to 37 in. across the bottom slab.
- 5 BOXCAR does not check for differential deflection of the top slab between adjacent box sections for service live load.