

20

DAT

PLACE

REF

DRAWING

32″

7" [178] Hinge Bars-[00] 24" [610] VIEW B-B

2" [5]]

NOTES

GENERAL: This barrier may be manufactured with reinforcing steel or with welded wire fabric as shown in the ELEVATION and SECTION A-A details. See CMS 622 for additional information. The minimum design strength of the concrete is 4,000 psi and meets the requirements of CMS 499.

PORTABLE CONCRETE BARRIER (PCB): Do not use the PCB detailed here on bridge deck edges, or similar dropoffs. PCB, Bridge Mounted, shall be used at those locations in accordance with Structural Engineering's Standard Drawing PCB-91.

HINGE AND REINFORCING BARS: Use ASTM A 36 for the $\frac{3}{4}$ " [19] hinge bars. Use rebars meeting the requirements of CMS 509 (ASTM A 615 Grade 60). Wire mesh shall meet CMS 709.10. Black steel is permitted.

CONNECTING HARDWARE: Bolts, washers and hex nuts are to be galvanized after fabrication per CMS 711.02 and meet the requirements of CMS 711.09 except that the Rotational Capacity test specified in ASTM A 325 shall be waived.

ALTERNATE BARRIER: In lieu of the pin and loop connections detailed on this SCD, barrier sections with "J-J Hooks" end connections may be utilized.

Connect runs of J-J Hooks barriers to other permitted barrier type by use a Transition barrier transition sections shall be the same as the barrier runs being connected.

"J-J Hooks" is a trademark of Easi-Set Industries, P.O. Box 300, Midland, VA 22728, (540) 439-8911 or (800) 547-4045.

HANDLING DEVICES: Such devices may be used in lieu of the lifting slot for moving the barrier. They may be of any design sufficient to safely handle the weight of the section being lifted. No handling devices shall protrude from the surface of the barrier when in place.

MARKINGS: All barrier segments are to be marked on the top, as shown, where XX indicates the year the year cast. If the barrier is cast using welded wire fabric instead of the rebar, add "WWF" to the end of the notation. Permanently impressed these markings in the barrier usign a minimum of 2" [50] high lettering. The tapered end section is not required to be marked.

On the top of each barrier segment, including tapered end sections, permamently mark a unique identification as to its manufacturer. And somewhere on the barrier, permamently mark the day and month the barrier was manufactured.

REFLECTORIZATION: Install barrier reflectors in accordance with Traffic Engineering Standard Drawing MT-101.70, when specified in the plans.

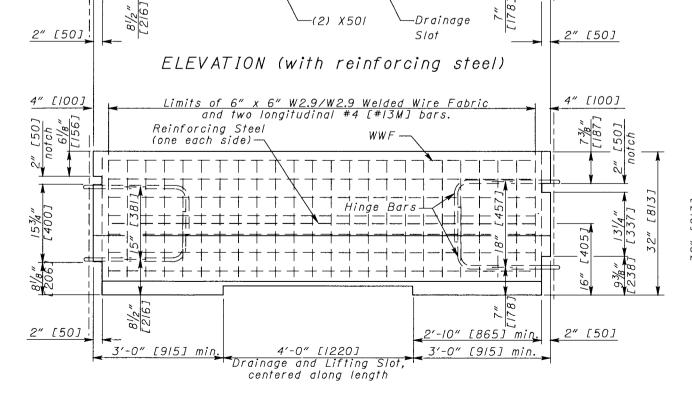
LEGEND

- I" [25] radius or $\frac{3}{4}$ " [19] chamfer, all top and end corners.
- 2 Permissible 10" [250] radius.
- 3 Permissible I" [25] radius.

Typical Barrier Reflector

location, when specified

in the plans.



& Joint

%" [22]

6" [150]

Typ.

4" [100]

153/4"

6/8" [156]

& Joint

7/8" [22]

4" [100]

73/8" [187]

131/4"

6" [150] Typ.

¾″ [19] dia. Ĥinge Bar (Typ.)

-See MARKINGS Note

PCB-RXX-350-TL3

PLAN (reinforced casting option shown)

Spacing Varies to 1'-7" [483] max. (4 spaces at 19" [483] for 10' [3050],

6 spcs. @ 16.7" [423] for 12' [3650], or

Il spcs. @ 17.8" [452] for 20' [6100])

-X501

-Y301 (Typ.)

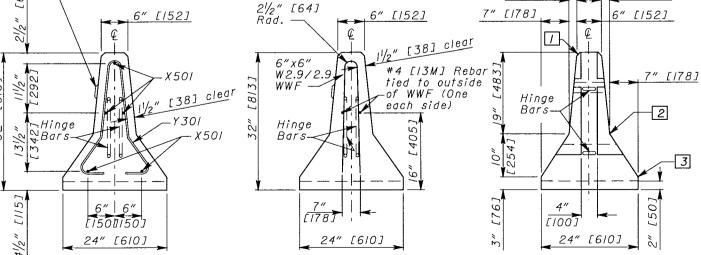
10'-0" [3050] minimum, 20'-0" [6100] maximum.

Hinge Bars-

- X501 Y301 (Typ.)

ELEVATION (with wire mesh)

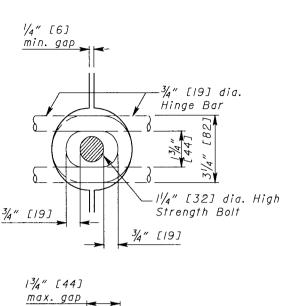
32" [813] BARRIER SECTION



Vertical edges on Lifting Slot may be battered. Depth $2"\pm \frac{1}{4}"$ [50±6].

SECTION A-A Rebar casting option SECTION A-A WWF casting option

THIS





Barriers shall initially be placed close together so that Bolts can be easily inserted through Hinge Bar loop.

6" [152] [813] -Hinge Bars 4" [100] 24" [610]

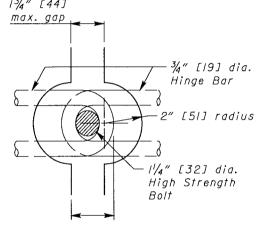
SECTION C-C

The Tapered End section is not a crashworthy terminal and should not be used on the approach end of temporary barrier unless it is

fully located beyond the clear zone.

OPEN JOINT

Barrier joints shall be fully open before the Nut is tightened onto Bolt.



$1\frac{3}{4}$ " [44] max. gap (Open Joint) 2'-2" [660] Typ. 4" [100] [150] [150] [150] ¾″ [19] dia. Hinge Bar X501 X501 Y301 (Typ. Y301 (Typ.) (2) X501 (2) X501 13051 Typ. (2) X501 -Connecting Pin Assembly: 11/4" [32] dia. High Strength Bolt with Plate Washers (2) X501 (2) and High Strength Heavy Hex Nut.

X502

X501

3" [75]

radius

[152]

Hinge Bars

Hinge Bars

PLAN

4'-0" [1220]

Lifting Slot permitted

32" [813] TAPERED END

ELEVATION

2″ [50] clear —

(2) X501

10'-0" [3050]

2" [50]

4" [100]

2½" [64] dia. 21/2" [64] dia. 21/2" 5″ [125] [64] dia. Y301 BENDING DIAGRAM

JOINT CONNECTION DETAILS

REINFORCING BAR LIST							
	Mark	Bar	Bar Length	Shape	Quantity 10′ [3050]	per typ 12' [3660]	. length 20′ [6/00]
BARRIER SECTION (reinforced)	X501	#5 [#/6M]	9′-4″ [2850]	Str.	5		
			11'-4" [3450]	Str.		5	
			19'-4" [5890]	Str.			5
	Y301	#3 [#/OM]	5′-5″ [1650]	Bent	11	13	18
TAPERED END	X501	#5 [#16 M]	9′-6″ [2900]	Str.	2		
	X502	#5 [#16 M]	9′-8″ [2950]	Str.	1		

DETAIL AT HINGED CONNECTION

Shown with reinforcing.

D.

-01

CONCRETE PORTABLE