

## **INTENDED USE**

This aluminum post-and-beam on curb system has been crash-tested and satisfies the criteria for AASHTO Performance Level one. This system is similar to the AASHTO BR2 (aluminum) Type B bridge railing. The rail shall be continuous over at least three posts and splices may be located at any point that does not interfere with post-to-rail fasteners.

This drawing and specification address only the bridge railing and not the design or detailing of the bridge deck. Only reinforcement directly related to the bridge rail is shown. Bridge decks should be designed to develop the full strength of the bridge railing.

## **COMPONENTS**

Concrete shall develop a minimum 28-day strength of not less than 28 MPa. The concrete shall use a cement conforming to AASHTO M85 (ASTM C150) Type I or II. Reinforcing steel shall be Grade 400 MPa and shall conform to either of the following:

- (a) Epoxy-coated deformed bars as specified in AASHTO M284M (ASTM D3963M).
- (b) AASHTO M31M (ASTM A615M) deformed and plain billet steel reinforcing bars for use with calcium nitrite corrosion inhibitor (30% calcium nitrite solution).

Unit Length = 7200

	Designator	Component	Number
	FBT12	Toggle bolt	6
	FPB05	Bearing plate	3
	FRS12b	Anchor stud (500 mm) and nut	6
or	FBX12b	Anchor bolt (475 mm) and nut	6
	FRS24b	Anchor stud (500 mm) and nuts	6
or	FBX24b	Anchor bolt (475 mm) and nut	6
	FWC12b	Washers	12
	FWC24b	Washer	12
	PAF07	Cast aluminum post	3
	RAE02	End Cap (end of rail only)	
	RAM02	Tubular aluminum rail	2
	RAS02	Splice for RAM02	2

## **REFERENCES**

B.G. Pfeifer and R.K. Faller. <u>Safety Performance of the Foothills Parkway Bridge Rail</u>. University of Nebraska, Transportation Research Report TRB-03-41-94, Lincoln, NB, January, 1994.

## **BR2 TYPE A ALUMINUM BRIDGE RAILING**

SBA02a

SHEET NO.	DATE		
2 of 2	03-05-06		





