

## USE

- a) Type 4 barriers shall be used for short span modular bridge structures using the Ministry's standard precast concrete bridge stringers requiring a barrier meeting the PL-1 performance level with or without an approach safety barrier being provided.
- b) At locations where approach safety barriers are not provided, an end treatment shall be used to lessen the potential for spearing. See Plan 28844.
- c) Refer to SKS 3.1.6-A.2 for criteria to determine need for an approach safety barrier.

## DESIGN LOADS

1. Design of the type 4 steel traffic barrier conforms to the requirements of CAN/CSA-S6-06.

## MATERIAL SPECIFICATIONS (RAILS AND POSTS)

1. All structural steel, except tubing, shall conform to the requirements of CAN/CSA-G40.21, Grade 300W.
2. All hollow structural sections shall conform to the requirements of CAN/CSA-G40.21-M, Grade 350W.
3. 3/4"  $\phi$  threaded anchor rods shall conform to the requirements of A.S.T.M. Specification A193, Grade B7.
4. Nuts for anchor rods shall be heavy hex nuts conforming to requirements of A.S.T.M. Specification A563, Grade DH.
5. All railing, posts, blocks and hardware shall be galvanized according to the requirements of CSA Standard G164.
6. All welding shall conform to the requirements of CSA Standard W59.
7. Galvanized surfaces damaged during shipping or erection shall be given two coats of zinc rich paint.
8. All bolts shall conform to the requirements of A.S.T.M. Specifications A307. Bolts, nuts and washers shall be cadmium plated or galvanized.
9. The threads of all galvanized nuts shall be tapped in accordance with A.S.T.M. Specifications A563.



# BRIDGE BARRIER TYPE 4

## USE, DESIGN LOADS AND MATERIAL SPECIFICATIONS

|                 |  |                                             |      |            |                     |        |
|-----------------|--|---------------------------------------------|------|------------|---------------------|--------|
| RECOMMENDED BY: |  | DIRECTOR<br>DESIGN & TRAFFIC ENG.           | DATE | June 13/13 | STANDARD<br>PLAN NO | 28841  |
| APPROVED BY:    |  | EXECUTIVE DIRECTOR<br>TECHNICAL STDS BRANCH | DATE | June 24/13 | SHEET               | 1 of 1 |