

FIGURE 1

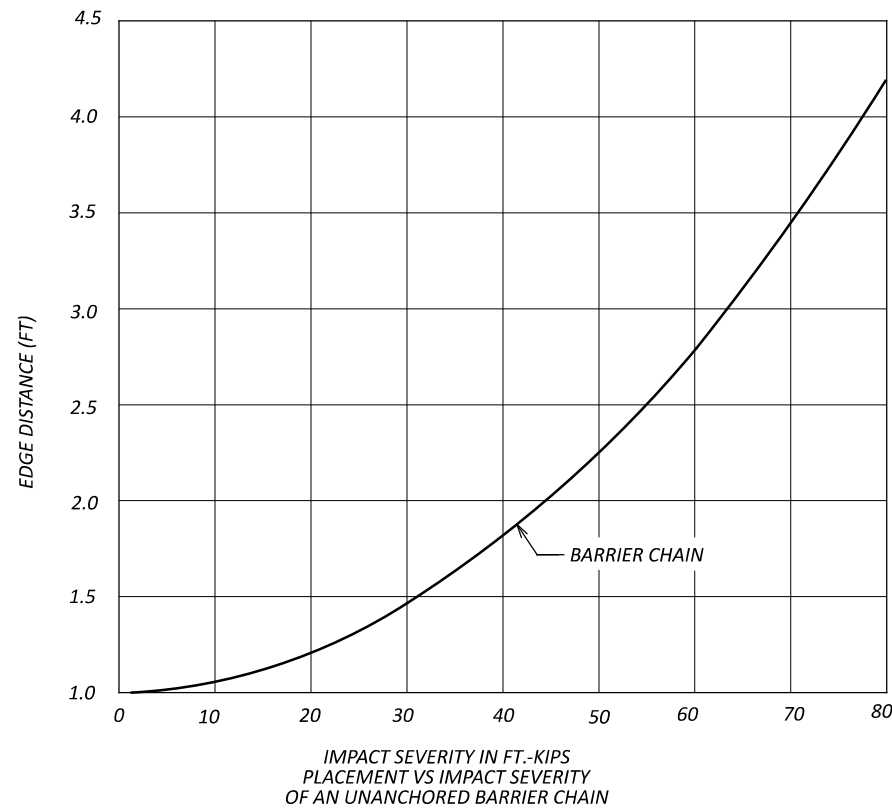


FIGURE 2

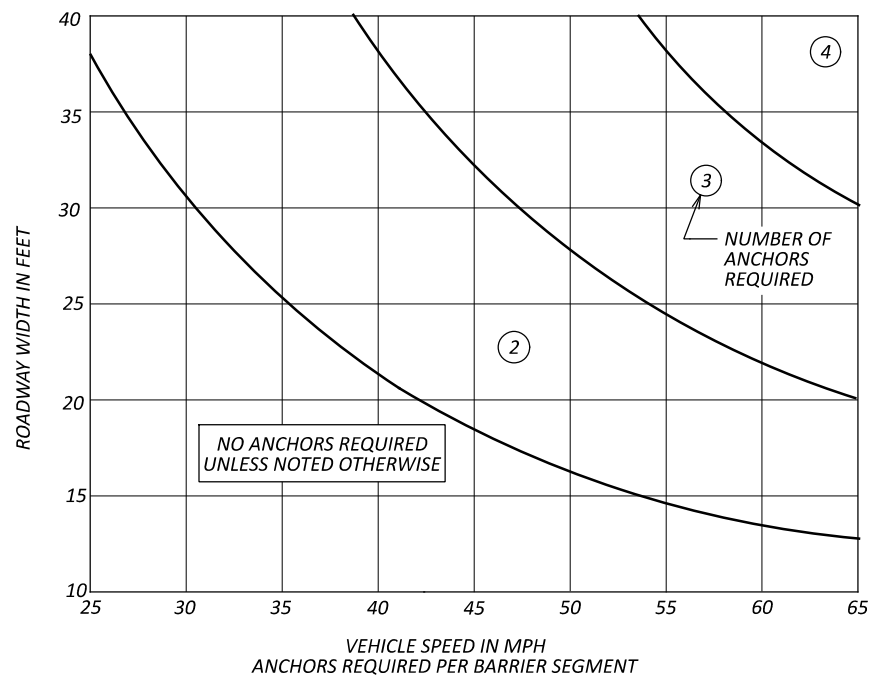


FIGURE 3

**GENERAL**

THIS DRAWING PROVIDES:

- THE MINIMUM EDGE DISTANCE FOR UNANCHORED PCB-91 AND RM-4.2 PORTABLE CONCRETE BARRIER SYSTEMS ON ANY ROADWAY SURFACE.
- THE NUMBER OF ANCHORS REQUIRED FOR EACH SEGMENT OF A PCB-91 BARRIER SYSTEM ANCHORED 6½" INTO A CONCRETE BRIDGE DECK OR CONCRETE PAVEMENT WITH OR WITHOUT ASPHALT OVERLAYS. THIS DRAWING DOES NOT APPLY TO THE PCB-91 PORTABLE CONCRETE BARRIER SYSTEM ANCHORED INTO ASPHALT OR OTHER SUBGRADE MATERIAL.

THIS DRAWING DOES NOT APPLY TO ODOT APPROVED PROPRIETARY TEMPORARY BARRIER SYSTEMS. ANCHORING FOR APPROVED PROPRIETARY TEMPORARY BARRIER SYSTEMS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.

**DEFINITIONS:**

- BARRIER CHAIN:** CONNECTED SEGMENTS OF PORTABLE CONCRETE BARRIER. THE MINIMUM BARRIER CHAIN LENGTH IS 120-FT.
- EDGE DISTANCE:** THE DISTANCE BETWEEN THE EDGE OF THE DECK OR SIMILAR DROP-OFF AND THE NEAREST TOE OF THE PORTABLE CONCRETE BARRIER.
- POSTED SPEED:** THE PRECONSTRUCTION REGULATORY SPEED LIMIT OR, WHERE APPLICABLE AND APPROVED IN ACCORDANCE WITH TEM TABLE 1297-7, THE HIGHEST WORK ZONE SPEED LIMIT WHILE THE PORTABLE CONCRETE BARRIER WILL BE IN PLACE.
- ROADWAY WIDTH:** THE DISTANCE BETWEEN THE TRAFFIC SIDE TOE OF THE PORTABLE CONCRETE BARRIER AND THE TOE OF PERMANENT BRIDGE RAILING, TOE OF PORTABLE TRAFFIC BARRIER, FACE CURB/GUARDRAIL OR EDGE OF PAVEMENT AT THE OPPOSITE SIDE OF THE TRAVELED WAY.
- SIMILAR DROP-OFF:** A VERTICAL DROP OF GREATER THAN 2-FT IN SURFACE ELEVATION WITH FORESLOPES STEEPER THAN 3:1 LOCATED SOMEWHERE OTHER THAN AT THE EDGE OF A BRIDGE DECK.
- TRAFFIC FACILITY:** FEATURE BENEATH A ROADWAY THAT CARRIES VEHICULAR, RAIL, PEDESTRIAN, BICYCLE, COMMERCIAL OR RECREATIONAL WATERCRAFT.

**ANCHORING ANALYSIS:**

USE THE FOLLOWING PROCEDURE TO DETERMINE IF THE PCB-91 OR RM-4.2 BARRIER SYSTEMS MAY REMAIN UNANCHORED BASED ON THE EDGE DISTANCE.

- STEP 1:** ANCHORING IS NOT REQUIRED FOR EITHER A PCB-91 OR RM-4.2 BARRIER SYSTEM WITH AN EDGE DISTANCE OF 6-FT OR MORE.
- STEP 2:** WHERE THE EDGE DISTANCE IS LESS THAN 6-FT, DETERMINE THE IMPACT SEVERITY USING FIGURE 1 UTILIZING THE ROADWAY WIDTH AVAILABLE DURING CONSTRUCTION AND THE POSTED SPEED.
- STEP 3:**
- IF THE PORTABLE CONCRETE BARRIER IS LOCATED ON A ROADWAY NOT OVER A TRAFFIC FACILITY, DETERMINE THE MINIMUM EDGE DISTANCE FOR UNANCHORED PCB-91 OR RM-4.2 BARRIER USING FIGURE 2. EDGE DISTANCE IN FIGURE 2 ON OR ABOVE THE BARRIER CHAIN CURVE MAY REMAIN UNANCHORED.
  - FOR LOCATIONS NOT COVERED UNDER STEP 1 OR STEP 3(A) OR LOCATIONS REQUIRING ANCHORING UNDER STEP 3(A), PROCEED TO STEP 4 TO DETERMINE THE ANCHORING REQUIREMENTS FOR THE PORTABLE CONCRETE BARRIER SYSTEM.
- STEP 4:**
- FOR THE RM-4.2 PORTABLE CONCRETE BARRIER SYSTEM, REFER TO THE ANCHORING REQUIREMENTS SHOWN ON SHEET 4 OF 5 OF THE STANDARD CONSTRUCTION DRAWING.
  - FOR THE PCB-91 PORTABLE CONCRETE BARRIER SYSTEM, DETERMINE THE NUMBER OF ANCHORS REQUIRED PER BARRIER SEGMENT USING FIGURE 3. IF THE EDGE DISTANCE IS LESS THAN 1-FT, PROVIDE TWO TIMES THE NUMBER OF ANCHORS SPECIFIED IN FIGURE 3 WITH A MINIMUM OF 2 ANCHORS PER SEGMENT. IF A BRIDGE SUPPORTING THE BARRIER SYSTEM IS OVER A TRAFFIC FACILITY, THEN THE MINIMUM NUMBER OF ANCHORS SHALL BE 2 PER SEGMENT.