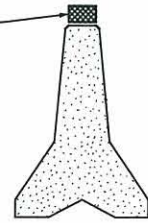


BARRIER DELINEATOR SHALL BE PLACED AT 50' o/c (MAX). DELINEATOR SHALL HAVE 6" (MIN.) REFLECTIVE AREA. SEE THE 2009 STANDARD SPECIFICATIONS FOR DETAILS. DELINEATOR TO BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER. ALL DELINEATION WILL BE EITHER JD-2/JD-1 MANUFACTURED BY VEGA CORPORATION OR ASTRO OPTICS OR APPROVED EQUAL.

BARRIER DELINEATORS
 50' o/c



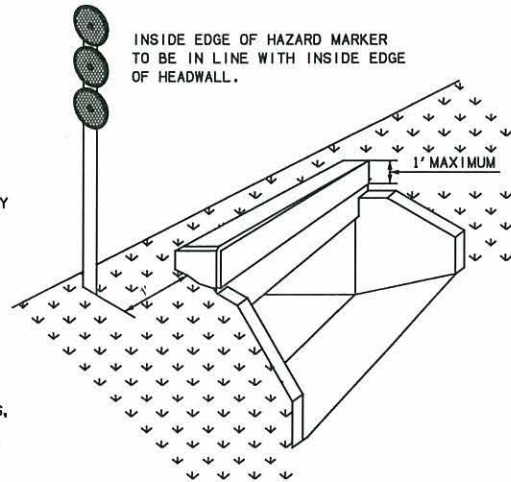
BARRIER DELINEATORS FOR PERMANENTLY INSTALLED CONCRETE MEDIAN BARRIER

- TYPE 1 (CRYSTAL)
- TYPE 1 (AMBER)
- TYPE 2 (CRYSTAL/CRYSTAL)
- TYPE 2 (AMBER/AMBER)

NOTE 1:
 FASTENING DEVICES MAY BE ALUMINUM BOLTS, NUTS, AND WASHERS OR ALUMINUM OR STEEL FASTENERS UTILIZING A SWEDGED COLLAR OR ALUMINUM OR STEEL BLIND OR PULL RIVETS OF THE SELF PLUGGING TYPE (PULL PIN, CLIPPED FLUSH, REMAINS IN RIVET WHEN FINISHED). ALL NUTS SHALL BE SELF LOCKING.

NOTE 3:
 WHEN BOLTS AND NUTS ARE USED FOR DELINEATOR ASSEMBLIES, THE BOLT ENDS ARE TO BE SUFFICIENTLY DEFORMED TO RESIST VANDALISM. SEE NOTE 1 FOR FASTENING DEVICES.

WHEN HEADWALL IS 2'-3" OR LESS FROM EDGE OF SHOULDER, USE MONODIRECTIONAL CODE 3 AMBER HAZARD MARKER FOR ONE-WAY ROADWAY (NON-EXPRESSWAY) AND FOR TWO-WAY ROADWAY, USE BI-DIRECTIONAL CODE 3 AMBER HAZARD MARKERS PLACED AT APPROACH END OF HEADWALL.



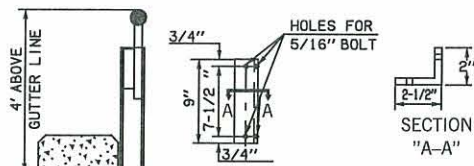
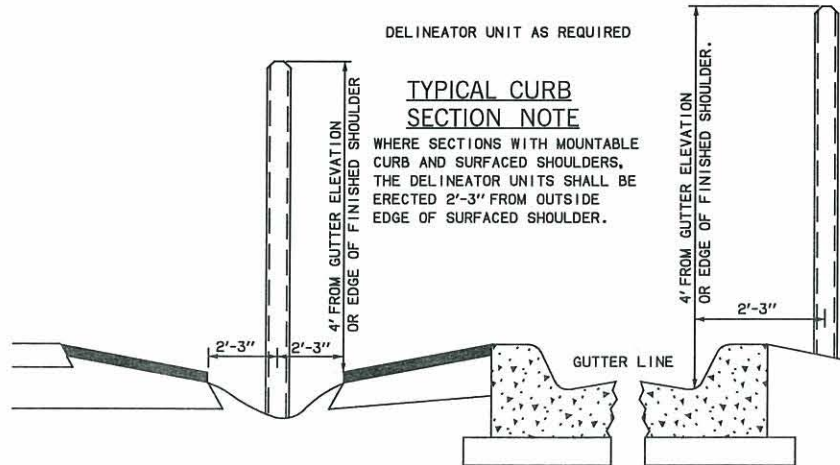
INSIDE EDGE OF HAZARD MARKER TO BE IN LINE WITH INSIDE EDGE OF HEADWALL.

1' MAXIMUM

DELINEATOR UNIT AS REQUIRED

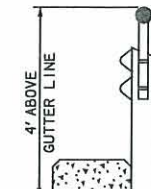
TYPICAL CURB SECTION NOTE

WHERE SECTIONS WITH MOUNTABLE CURB AND SURFACED SHOULDERS, THE DELINEATOR UNITS SHALL BE ERECTED 2'-3" FROM OUTSIDE EDGE OF SURFACED SHOULDER.



CHANNEL BEAM HANDRAIL
 "H" BEAM POST

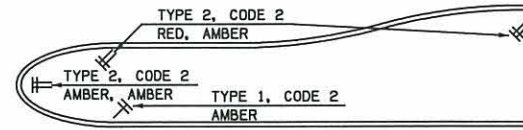
GALVANIZED STEEL ANGLES
 5/16" MINIMUM THICKNESS
 WEIGHT PER M = 2.75 lbs/ft.



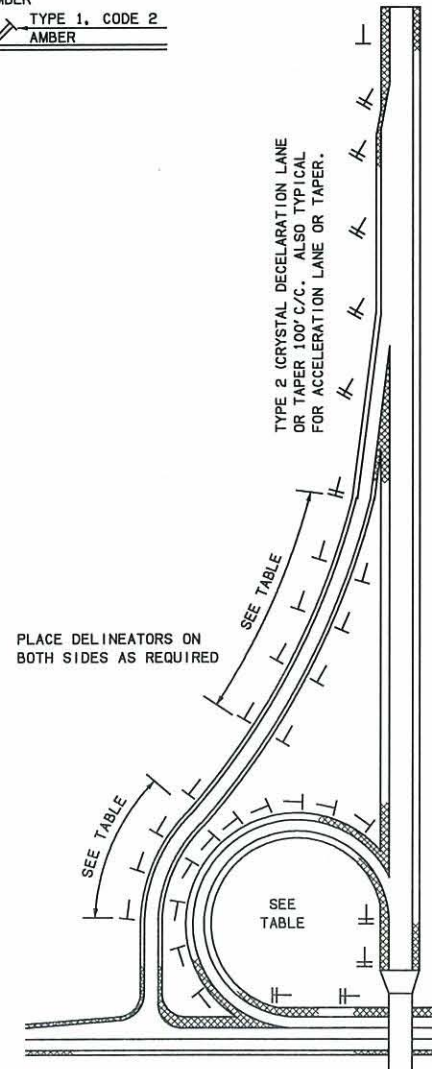
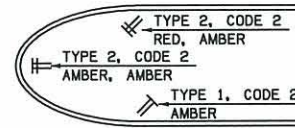
CHANNEL BEAM GUARD RAIL
 "H" BEAM POST

NOTE 2:
 FOR ATTACHING DELINEATOR POSTS TO GALVANIZED STEEL ANGLES, USE 5/16" X 3/4" GALVANIZED STEEL BOLTS. FOR ATTACHING DELINEATORS POST OR GALVANIZED STEEL ANGLES TO ALUMINUM OR "H" BEAM HANDRAIL POST, USE 5/16" X 1" GALVANIZED STEEL BOLTS. FOR ATTACHING GALVANIZED STEEL ANGLES TO CONCRETE POSTS, USE TWO 5/16" X 2" GALVANIZED STEEL EXPANSION SLEEVES AND WASHERS FOR EACH BOLT.

TYPE 2 DELINEATORS SHALL BE THE SAME AS SHOWN ABOVE EXCEPT THAT REFLECTORS ARE MOUNTED ON BOTH SIDES OF THE POST. COLOR OF THE REFLECTORS SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST REVISION.



TYPICAL DELINEATOR PLACEMENT AT MEDIAN OPENINGS



TYPICAL DELINEATOR SPACING FOR INTERCHANGE RAMP

DELINEATORS SHALL NORMALLY BE PLACED ON THE RIGHT SIDE OF RAMPS EXCEPT WHEN REQUIRED OUTSIDE OF CURVE.

WHEN RADIUS ON RAMP CURVES IS LESS THAN 2500', DELINEATORS SHALL BE PLACED ON OUTSIDE OF CURVE AND SPACED AS SHOWN ON TABLE FOR "SPACING ON CURVES", OR OMIT DELINEATORS WHEN W1-8 CHEVRON SIGNS ARE SPECIFIED.

MAXIMUM SPACING OF DELINEATORS ON RAMPS SHALL BE 100'.

RADIUS IN FEET UP TO AND INCLUDING	SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVES		
		FIRST	SECOND	THIRD
2500'	100'	200'	200'	200'
1000'	90'	150'	200'	200'
900'	85'	150'	200'	200'
800'	80'	150'	200'	200'
700'	75'	100'	200'	200'
600'	70'	100'	150'	200'
500'	65'	75'	125'	200'
400'	55'	50'	100'	200'
300'	50'	50'	100'	175'
250'	40'	50'	100'	150'
200'	35'	30'	50'	125'
150'	30'	20'	50'	90'
50'	20'	20'	50'	90'

ON ONE-WAY ROADWAY (NON-FREEWAYS), CONSTRUCT MONO-DIRECTIONAL TYPE 1, CODE 1 DELINEATORS ON OUTSIDE OF CURVES HAVING A RADIUS OF 2500' OR LESS.

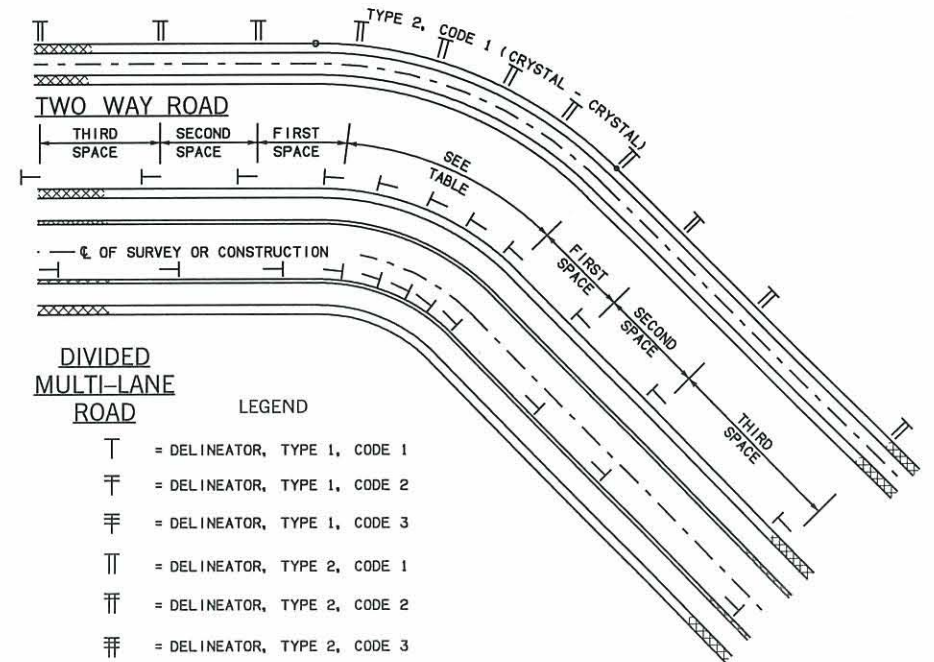
ON TWO-WAY ROADWAYS, CONSTRUCT BI-DIRECTIONAL TYPE 2, CODE 1 DELINEATORS ON OUTSIDE OF CURVES HAVING A RADIUS OF 2500' OR LESS.

ON FREEWAYS, CONSTRUCT MONO-DIRECTIONAL TYPE 1, CODE 1 DELINEATORS ON RIGHT SIDE OF ROADWAYS AT 528' SPACING ON THROUGH LANE.

EXCEPT ON FREEWAYS, DELINEATOR SPACING ON THRU LANE CURVES SHALL BE BASED ON CENTERLINE OF SURVEY OR CONSTRUCTION BASE LINE. PLACEMENT SHALL BE EVENLY SPACED AS REQUIRED IN TABLE.

MATERIALS SPECIFICATIONS

THE WEIGHT OF EACH POST BEFORE GALVANIZING & PUNCHING SHALL BE 1.12 lbs/ft. THE WEIGHT TOLERANCE SHALL BE ±3-1/2%.



DIVIDED MULTI-LANE ROAD

LEGEND

- ⊥ = DELINEATOR, TYPE 1, CODE 1
- ⊥ = DELINEATOR, TYPE 1, CODE 2
- ⊥ = DELINEATOR, TYPE 1, CODE 3
- ⊥ = DELINEATOR, TYPE 2, CODE 1
- ⊥ = DELINEATOR, TYPE 2, CODE 2
- ⊥ = DELINEATOR, TYPE 2, CODE 3

LENGTH OF CURVE / REQUIRED SPACING + 7 = TOTAL POSTS REQUIRED FOR CURVE AND RUNOUT SPACINGS

BASIS OF PAYMENT

ITEM NO.	ITEM	UNIT
853	DELINEATORS	EA



APPROVED BY TRAFFIC ENGINEER: *David Smith* DATE: 8/5/10

TRAFFIC STANDARD

STANDARD DELINEATOR UNITS

2009 SPECIFICATIONS

DESCRIPTION	REVISIONS	DATE
ELIMINATE NORMAL DELINEATOR WHEN CODE 3 IS WITHIN 1/4 SPACING DISTANCE		