

BOLTS - HEX HEAD, INTEGRAL FLANGE CONFORMING TO
ASTM A354. SIZE IS 8 mm -18 UNC X 44 mm, GRADE BC
FOR 4.5 kg/m POSTS AND 8 mm -18 UNC X 51 mm,
GRADE BD FOR 6.0 kg/m POSTS.

NUTS - 8 mm -18 UNC HEX HEAD, INTEGRAL FLANGE
CONFORMING TO ASTM A563, GRADE DH.

LOCKWASHERS - 10 mm HEAVY DUTY EXTERNAL TYPE.

RETAINER-SPACER STRAP 435 mm LONG X 25 mm WIDE
X 10 mm THICK WITH 10 mm OFFSET. STRAP TO BE
GALVANIZED TO ASTM A 123.

BREAKAWAY TYPE I INSTALLATION - FOR 4.5 & 6.0 kg/m POSTS

32 mm X 102 mm HOT DIPPED
GALVANIZED BACK-UP PLATE (TYP.)

8 mm LOCK WASHERS (TYP.)

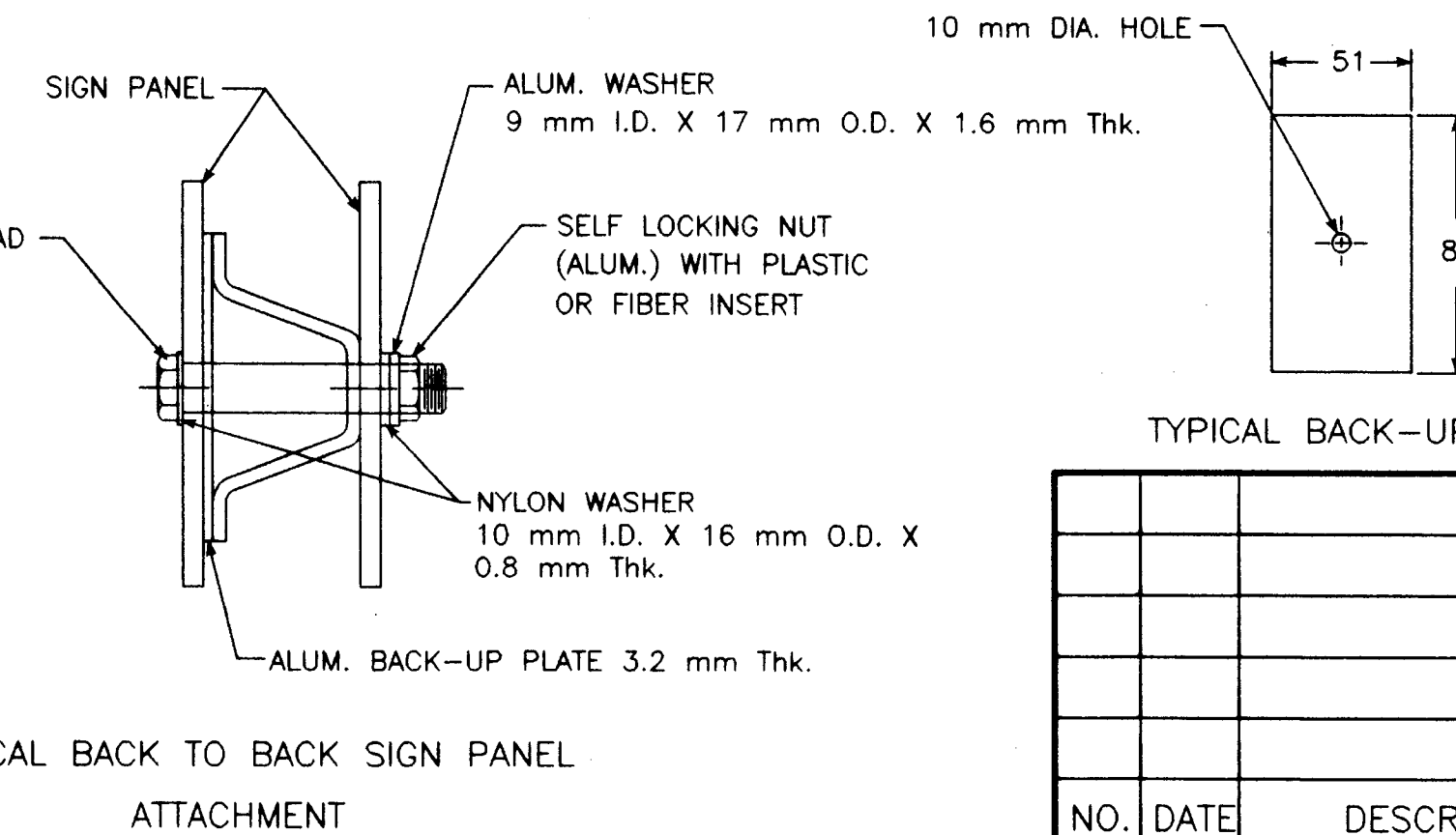
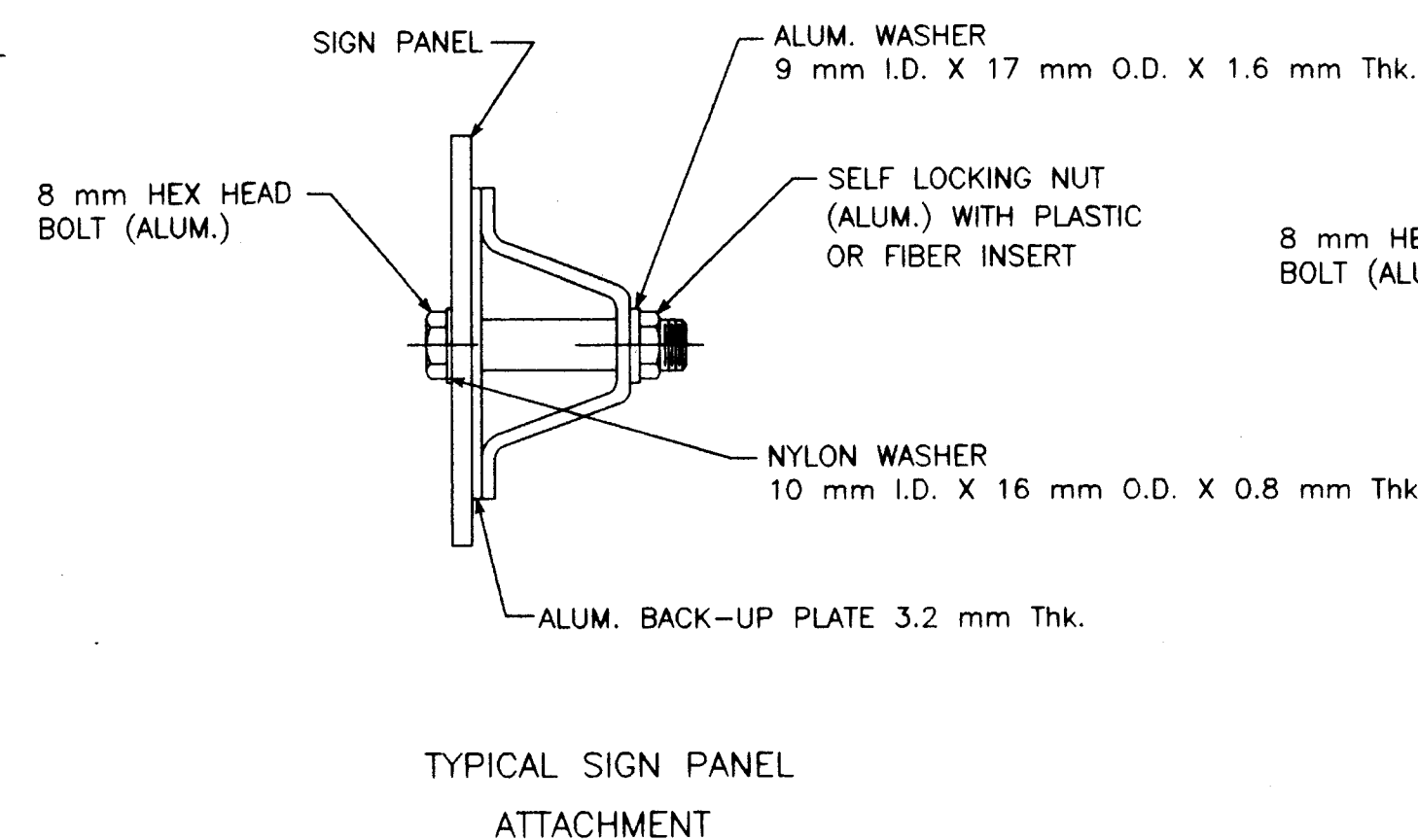
BREAKAWAY TYPE III INSTALLATION - FOR 4.5 kg/m POSTS

BREAKAWAY TYPE II INSTALLATION - FOR 4.5 & 6.0 kg/m POSTS

TYPICAL METAL SIGN POSTS

NOTES:

- METRIC EQUIVALENT OF ENGLISH HARDWARE FOR BREAKAWAY ELEMENTS IS SHOWN. ENGLISH HARDWARE SHOULD BE USED UNTIL METRIC HARDWARE IS AVAILABLE.
- STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 420 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A1-76 CARBON STEEL TEE RAIL HAVING NOMINAL MASS OF 45 kg OR GREATER PER LINEAR METER. STEEL FOR DELINEATOR POSTS SHALL BE A-36 STEEL.
- AFTER FABRICATION, ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A 123.
- ALL SIGN POSTS SHALL HAVE "BREAKAWAY" FEATURES THAT MEET AASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS." THE "BREAKAWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGNS SHOWN IN THE PLANS AT 97 km/h WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- TYPE A POSTS - 4.5 kg/m TYPE B POSTS - 6.0 kg/m



TYPICAL BACK-UP PLATE

NO.	DATE	DESCRIPTION

CITY OF HARTFORD

PEDESTRIAN BRIDGE OVER COLUMBUS BOULEVARD

MISCELLANEOUS DETAILS 3 TYPICAL METAL SIGN POSTS AND SIGN MOUNTING DETAILS

ENGINEER: MACCHI ENGINEERS, LLC

DESIGNER: DKH

DRAFTER: DKH

CHECKER: JB

APPROVED

James Brochman

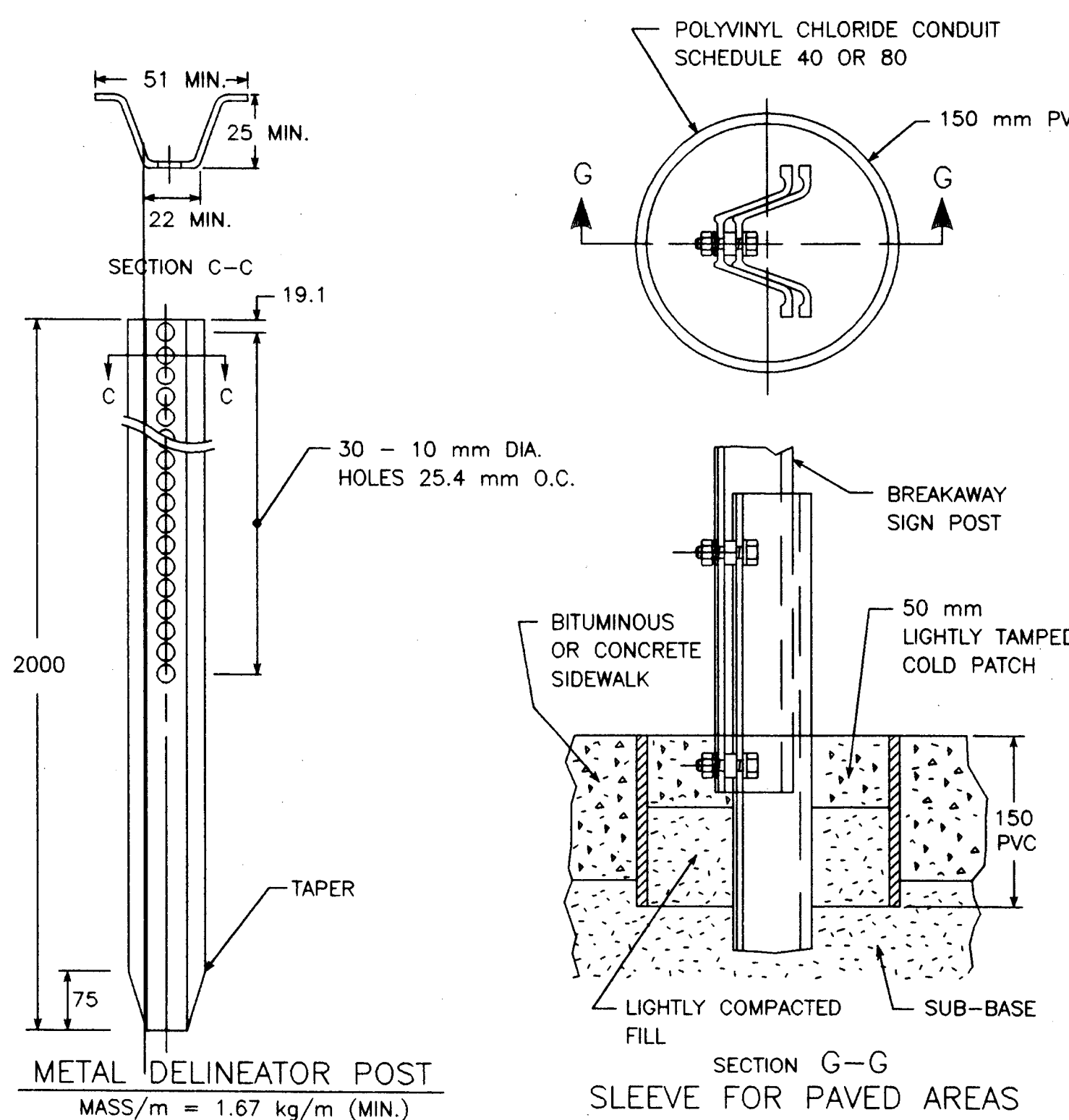
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STRUCTURE NO.

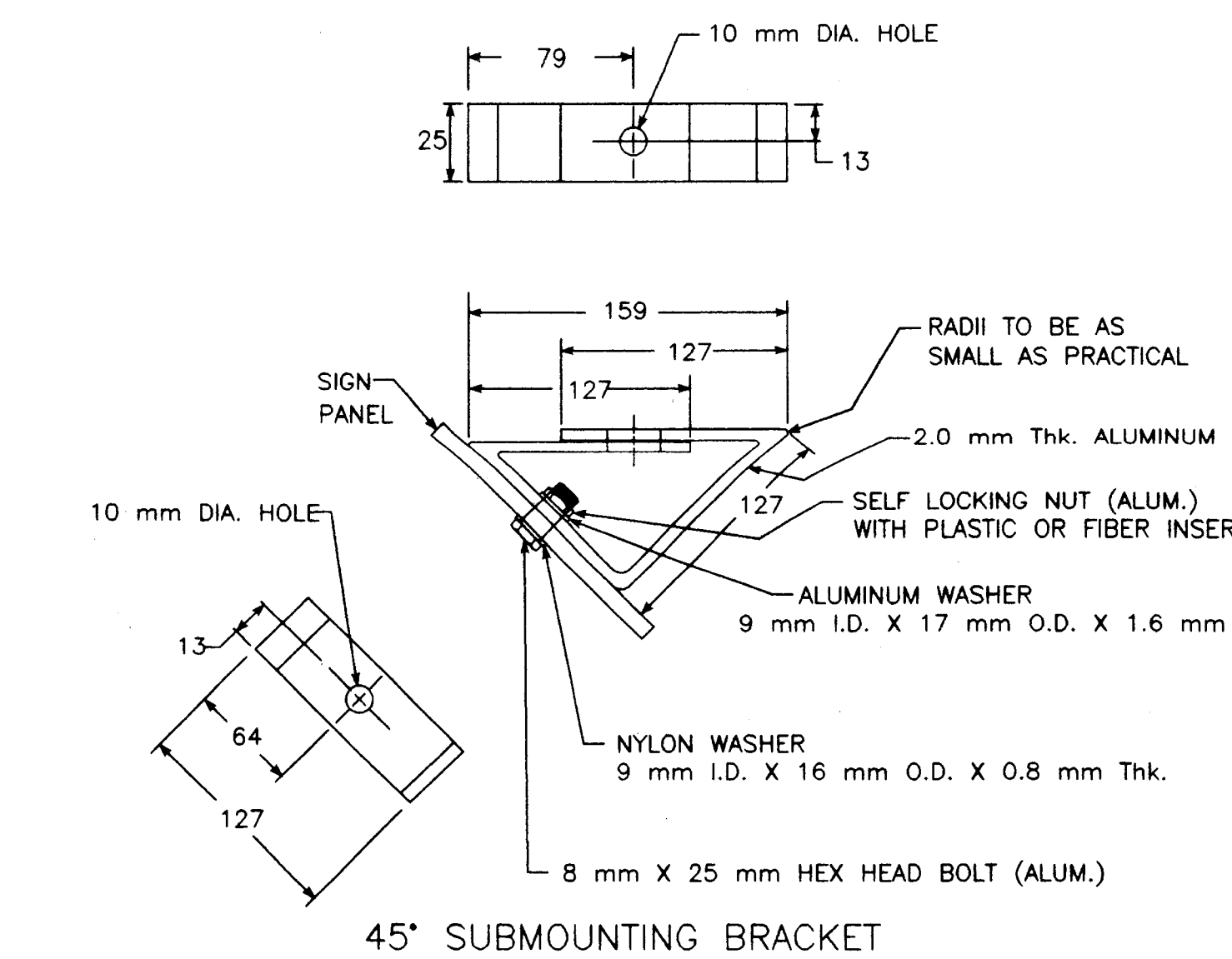
BRIDGE LOG NO.

STRUCTURE SHEET NO.

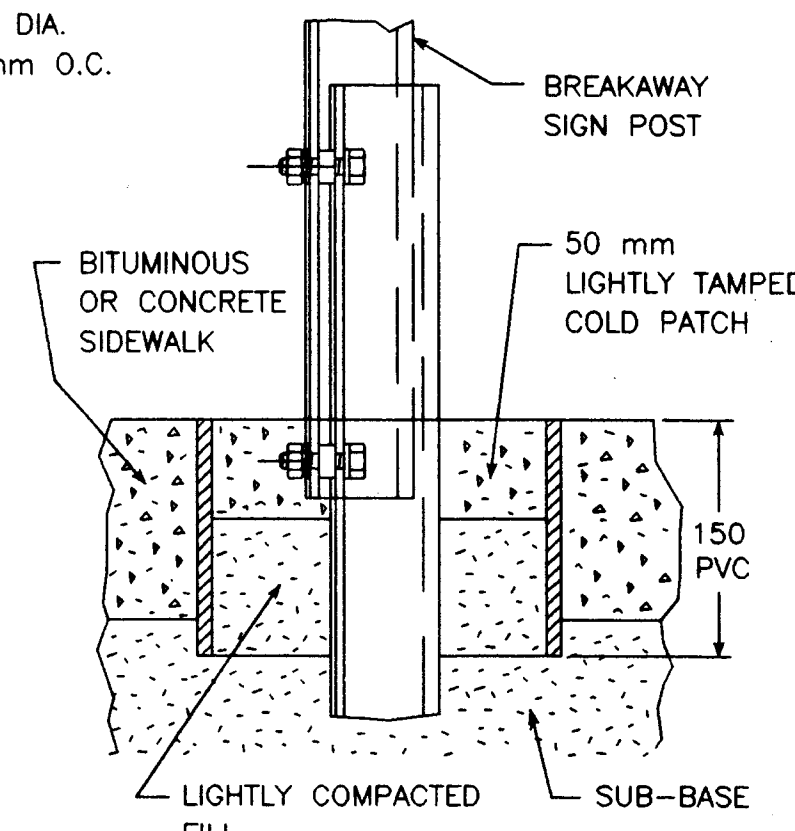
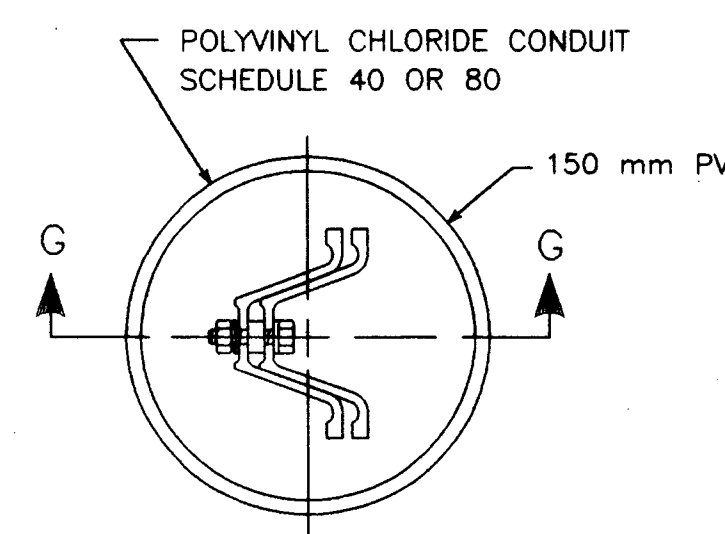
METAL DELINEATOR POST
MASS/m = 1.67 kg/m (MIN.)



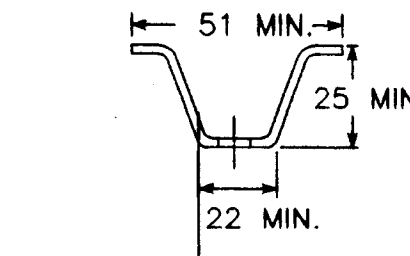
ALL DIMENSIONS ARE IN MILLIMETERS (mm) EXCEPT AS NOTED.



45° SUBMOUNTING BRACKET



SECTION G-G
SLEEVE FOR PAVED AREAS



SECTION C-C

19.1

2000

75

30 - 10 mm DIA. HOLES 25.4 mm O.C.

TAPER

51 MIN.

25 MIN.

22 MIN.

SECTION C-C

19.1

2000

75

30 - 10 mm DIA. HOLES 25.4 mm O.C.

TAPER

51 MIN.

25 MIN.

22 MIN.

SECTION C-C

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TAPER