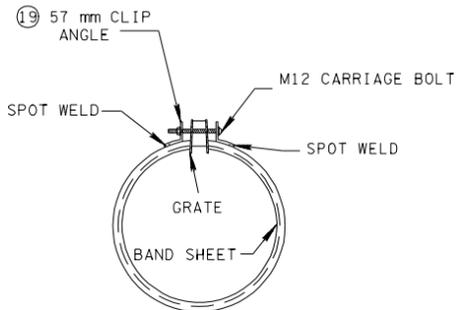
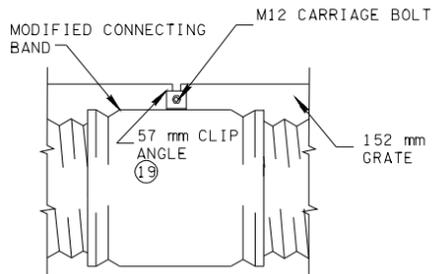


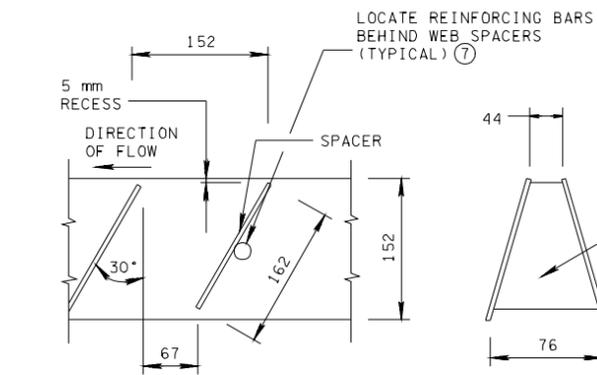
MODIFIED CONNECTING BAND TOP VIEW



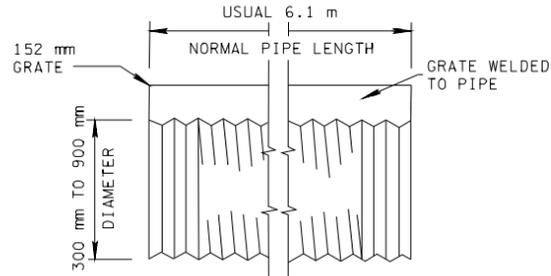
MODIFIED CONNECTING BAND END VIEW (SECTION C-C)



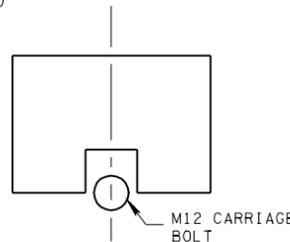
MODIFIED CONNECTING BAND SIDE VIEW



SLANTED WEB SPACERS DETAILS SIDE VIEW (FOR USE WITH TRAPEZOIDAL GRATES ONLY)

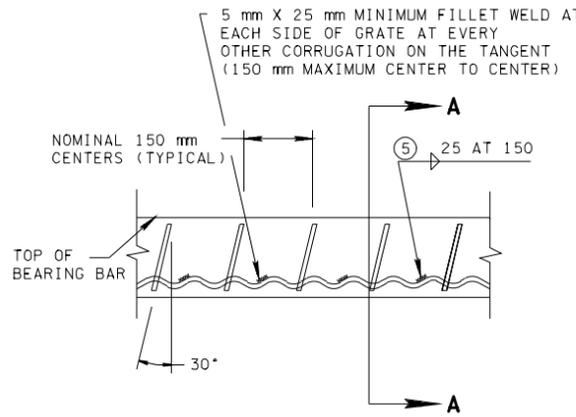


TYPICAL PIPE SECTION

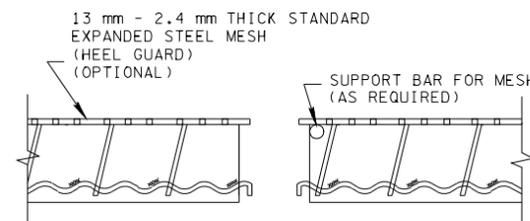


GAP PLATE (OPTIONAL) MAY BE PLACED DIRECTLY OVER BAND BOLT TO PROVIDE CONTINUOUS FORM FOR GROUTING.

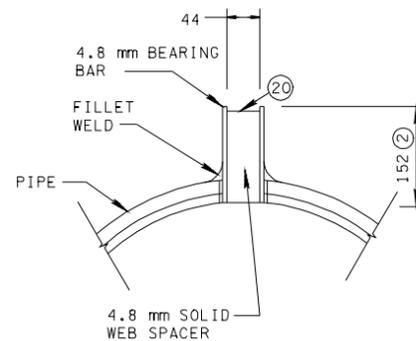
* SLOTTED DRAIN PIPE EXTENSIONS TO BE PAID FOR UNDER ITEM NO. 607M37 THROUGH ITEM NO. 607M37.05



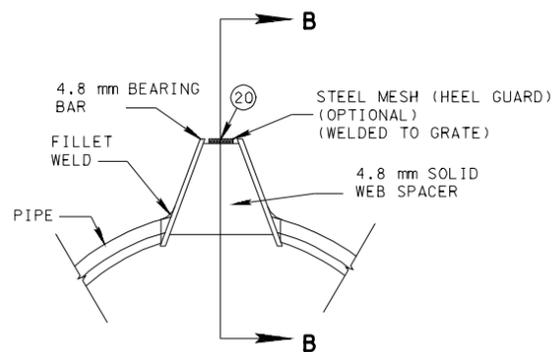
GRATE (BEARING BAR) WELDING DETAIL (WITH SLANTED WEB SPACERS)



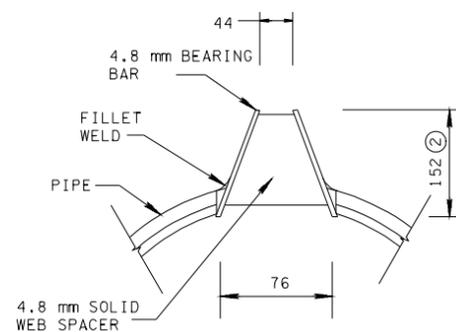
SECTION B-B



STANDARD PARALLEL (VERTICAL) SIDE GRATE DETAIL (SECTION A-A) (WITH VERTICAL WEB SPACERS)



ALTERNATE TRAPEZOIDAL GRATE DETAIL WITH MESH (SECTION A-A)



ALTERNATE TRAPEZOIDAL GRATE DETAIL (SECTION A-A)

MANUFACTURING TOLERANCES FOR 6.1 m CMP SECTION

1. VERTICAL BOW ± 10 mm
2. HORIZONTAL BOW ± 16 mm
3. TWIST ± 13 mm

SLOTTED DRAIN PIPE ITEM LISTING *

ITEM NO.	DESCRIPTION	UNIT
607M45	300 mm SLOTTED DRAIN PIPE	METER
607M45.01	375 mm SLOTTED DRAIN PIPE	METER
607M45.02	450 mm SLOTTED DRAIN PIPE	METER
607M45.03	600 mm SLOTTED DRAIN PIPE	METER
607M45.04	750 mm SLOTTED DRAIN PIPE	METER
607M45.05	900 mm SLOTTED DRAIN PIPE	METER

MISCELLANEOUS ITEM LISTING

ITEM NO.	DESCRIPTION	UNIT
204M07	BEDDING MATERIAL (PIPE) (CLASS B)	m ³
204M08.01	BACKFILL MATERIAL (FLOWABLE FILL)	m ³
702M03	CONCRETE COMBINED CURB AND GUTTER	m ³
703M02.05	CEMENT CONCRETE DITCH PAVING (SLOTTED DRAINS)	m ³

GENERAL NOTES

- (A) DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- (B) SLOTTED DRAIN SHALL BE GALVANIZED CORRUGATED METAL PIPE AND GRATE, CORRUGATED ALUMINUM PIPE AND GRATE OR ALUMINUM COATED STEEL PIPE AND GRATE MEETING THE REQUIREMENTS OF SECTION 607 (PIPE CULVERTS AND STORM SEWERS) AND SECTION 915 (METALLIC PIPE). 2.0 mm THICK PIPE SHALL BE USED.
- (C) BACKFILL MATERIAL (FLOWABLE FILL) SHALL BE USED IN LOCATIONS SUBJECT TO TRAFFIC LOADS. BEDDING MATERIAL CLASS "B" MAY BE USED IN ALL OTHER LOCATIONS.

FOOTNOTES

- (1) TYPICAL DETAIL ONLY; DIMENSIONS AND CURB TYPE WILL VARY.
- (2) TYPICAL GRATING SHALL BE 152 mm IN DEPTH. 76 mm DEPTH GRATING IS AVAILABLE FOR SPECIAL CASES IF NEEDED AND AS SPECIFIED IN THE ROADWAY PLANS.
- (3) FOR USE IN CURB AND GUTTER, PAVED AREA, OR MEDIAN SECTIONS WHICH ARE SUBJECT TO TRAFFIC LOADS.
- (4) BACKFILL MATERIAL (FLOWABLE FILL) SHALL MEET THE REQUIREMENTS OF SECTION 204 OF THE STANDARD SPECIFICATIONS AND SHALL BE PAID FOR UNDER ITEM 204M08.01, BACKFILL MATERIAL (FLOWABLE FILL) BY THE CUBIC METER.
- (5) MAXIMUM SIZE FOR USE WITH CURB AND GUTTER.
- (6) RECESS TOP OF SLOTTED DRAIN GRATE 3 mm TO 13 mm BELOW FINISHED SURFACE OF THE CONCRETE GUTTER.
- (7) REINFORCING STEEL SHALL BE EPOXY COATED IN ACCORDANCE WITH SECTION 907 OF THE STANDARD SPECIFICATIONS. DRILLING THROUGH THE GRATE SHALL BE DONE IN THE SHOP.
- (8) EXAMPLE ONLY; PAVEMENT DESIGN REQUIRED TO SET ACTUAL PROJECT MATERIAL THICKNESS.
- (9) VARIABLE 150 mm MAXIMUM FOR 450 mm CMP, 75 mm MINIMUM FOR 600 mm CMP.
- (10) TO BE PAID FOR AS ITEM NO. 703M02.05 "CEMENT CONCRETE DITCH PAVING (SLOTTED DRAINS)" (CUBIC METER).
- (11) A 3-PIECE 90° ELBOW MAY BE USED AS APPROVED BY THE ENGINEER.
- (12) REQUIRED AT ALL JUNCTIONS OF LATERALS AND AT ALL ENDS OF LINES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- (13) SLOTTED DRAIN SHALL BE INSTALLED IN 6.1 m LENGTHS WHEREVER PRACTICAL TO MINIMIZE THE NUMBER OF JOINTS REQUIRED.
- (14) LATERAL CONNECTION SLIP JOINT SHALL BE BACKED WITH A SUITABLE COMPRESSIBLE MATERIAL TO RETAIN GROUT IN PLACE DURING CURING. SLIP JOINTS SHALL BE GROUTED WITH BACKFILL MATERIAL (FLOWABLE FILL), AS REQUIRED.
- (15) LATERALS MAY BE A SERIES OF PIPE JOINTS PLACED AT ANGLES AS DETERMINED BY MANUFACTURING AVAILABILITY.
- (16) DESIRABLE MINIMUM SLOPE = 0.40 PERCENT FOR FLATTER SLOPES, AS MAY BE REQUIRED. INCREASE PIPE DIAMETER AND/OR THE NUMBER OF OUTLETS (LATERALS).
- (17) UNIT PRICE PER LINEAR METER FOR SLOTTED DRAINS SHALL INCLUDE TEES, WYES, ELBOWS, PLUGS, BANDS, JUNCTIONS, ANGLE/TEE COMBINATIONS, GRATES, PLATE REDUCERS, END CAPS, STRUCTURAL EXCAVATION, HEEL GUARD GRATE, AND PLATES.
- (18) IN AREAS WHERE THE SLOTTED DRAIN PIPE PROFILE GRADE IS LESS THAN 0.40 PERCENT, THE GRATE DEPTH MAY VARY AS SHOWN TO MAINTAIN A STEEPER PROFILE GRADE OF THE PIPE. THE MANUFACTURER SHALL CONSTRUCT THIS IN THE SHOP.
- (19) FOR 152 mm VERTICAL AND TRAPEZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH A 102 mm BAND ANGLE.
- (20) VERTICAL GRATE EXTENSIONS ARE AVAILABLE FOR FUTURE RAISING OF THE PAVEMENT GRADE DUE TO RESURFACING.



ALL UNITS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

SLOTTED DRAINS

NOT TO SCALE

NOTE: SEE SHEET DM-SLD-1 AND DM-SLD-2 FOR ADDITIONAL DETAILS