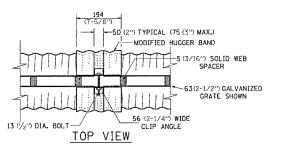
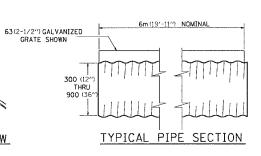
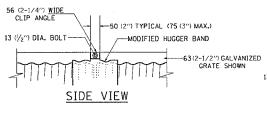
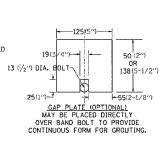
SLOTTED DRAIN PIPE

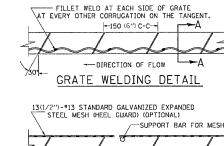












STANDARD DETAIL

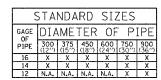
SECTION A-A

DETAIL WITH MESH

(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

STEEL MESH (HEEL GUARD)

-FILLET WELD



CRATE TYPE "A" VERT | 63(2-1/2") | 44(1-3/4") VERT | 150 (6") | 44(1-3/4") (FAP | 63(2-1/2") | 56(2-1/4") (FAP | 150 (6") | 75 (3")

SECTION B-B

SLOTTED DRAIN NOTES

- 1. GRATING IS AVAILABLE IN DEPTHS OF 63(2-1/2") AND 150(6").
- 2. VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
- 3. FOR 150 (6") VERTICAL & TRAPIZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 100 (4") TECHCO BAND ANGLE.
- 4. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.

*4A, BARS AT 750 (30) CTS. COST INCLUDED IN COST OF SLOTTED DRAIN.

 REFERENCE CONTECH BAND MANUAL DWG. NO. 1008466 FOR BAND DETAILS.

MANUFACTURING TOLERANCES

- 1. VERTICAL BOW ± 10 (3/8")
- 2. HORIZONTAL BOW ± 16 (5/8")

TYPE A CUTTER (MODIFIED)

61.2

3. TWIST ± 13 (1/2")



NOTES

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

5 (3/16") BEARING BAR-

HEL-COR PIPE-

THE SLOTTED DRAIN SHALL BE CORRUGATED PIPE CULVERT WITH INTEGRAL SLOTTED DRAINS. BEFORE PLACING THE CONCRETE ADJACENT TO THE PIPE, THE SLOT SHALL BE COVERED BY EITHER THIN, FLAT METAL SHEETING OR BY A BOARD NOTCHED TO FIT OVER THE GRATE BARS. THIS COVERING MUST FIT CLOSELY IN THE SLOT TO PREVENT ENTRY OF CONCRETE INTO THE PIPE. PAVING OVER THE SLOTTED DRAIN WILL THEN BE ONE CONTINUOUS OPERATION OVER THE PROTECTED DRAIN. THE PROTECTION FOR THE DRAIN SLOT SHALL THEN BE REMOVED. THE PIPE SHALL DRAIN INTO THE SIDE OF THE INLET. THE OPENING WHERE THE SLOT IS REMOVED SHALL BE COVERED TO PREVENT CONCRETE FROM ENTERING THE PIPE.

THE CORRUGATED STEEL PIPE USED IN THE SLOTTED DRAIN SHALL MEET THE REQUIREMENTS OF AASHTO M-36/ASTM A 760. THE CMP SHALL BE CALVANIZED OR ALUMINIZED STEEL TYPE 2. STEEL GRATING SHALL MEET THE GALVANIZING REQUIREMENTS OF AASHTO M-111. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR SLOTTED DRAIN PIPE, AND SHALL INCLUBE ELBOWS, DRILLING HOLES IN GRATING, SUPPLYING AND PLACING AL BARS AND CONCRETE.

USE APPROVED END CAP TO PREVENT CONCRETE ENTRY INTO THE PIPE DURING GUTTER CONSTRUCTION ON THE UPSTREAM END OF PIPE.

ANY BENDS, ELBOWS, TEES, OR FITTINGS NEEDED TO CONNECT SLOTTED DRAIN PIPE TO DRAINAGE STRUCTURE/SYSTEM SHALL BE INCLUDED IN THE COST OF SLOTTED DRAIN PAY ITEMS.

LASS SI CONCRETE OR POUR WITH GUTTER.
COST INCLUDED IN COST
OF SLOTTED DRAIN.

150(6")

150(6")

75(3")

75(3")

RBIT. SHLOR.
200 (8")

SLOTTED DRAIN

-900 (36"

50 (2") MIN

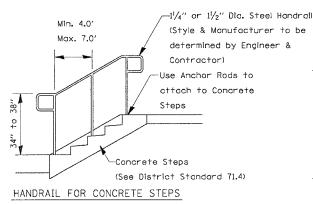
CORRUGATED STEEL PIPE 375 (15")-

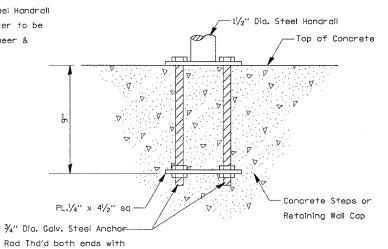
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

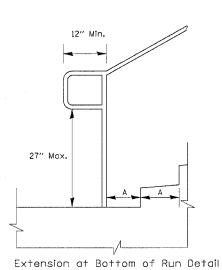
PIPE HANDRAILS FOR STEPS

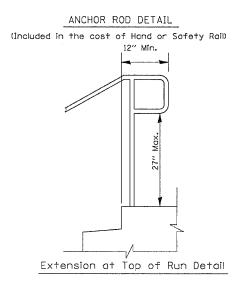
Heavy Hex Nut Washer &

two Hex Nuts









Notes:

Stairways shall have continuous handrails both sides of all stairs.

The inside handrail on switchback or dogleg stairs shall always be continuous.

Gripping surfaces shall be uninterrupted by newel posts, other construction elements, or obstructions.

Ends of handrall shall be either rounded or returned smoothly to floor, wall, or post.

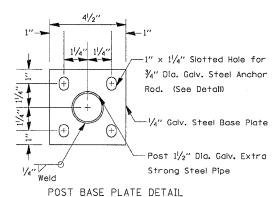
Hand & safety rails shall not rotate within their fittings.

The clear space between hanralls and any wall shall be 11/2"

Handrail shall conform to Section 509 with the exception that all pipe and connections shall be welded galvanized or aluminum according to Article 1006.30, or 1006,34.

The diameter of the gripping surface of the handrail shall be 1-1/4" to 1-1/2" $\,$

This work shall be paid for at the contract unit price per meter (foot) for PIPE HANDRAIL.



(Included in the cost of Hand or Safety Rail)

SLOTTED DRAIN PIPE

PIPE HANDRAILS FOR STEPS