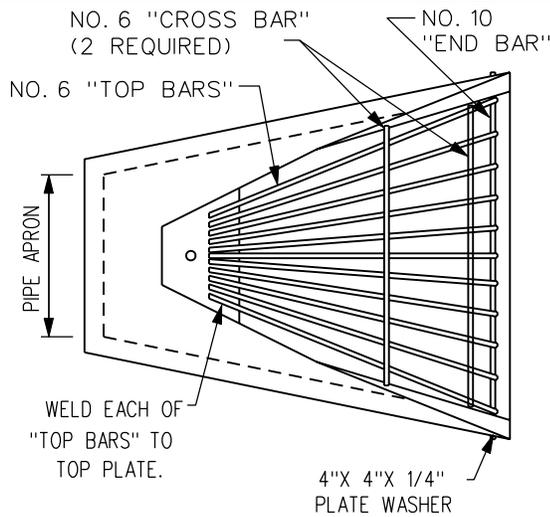


URBAN STANDARD SPECIFICATIONS for PUBLIC IMPROVEMENT MANUAL



TYPICAL PLAN

GENERAL NOTES

IT IS INTENDED THAT THE DESIGN FOR THE PIPE APRON GUARD DETAILED HEREON PROVIDE A TREATMENT FOR THE EXPOSED END OF A PIPE CULVERT, SUCH THAT AN OUT-OF-CONTROL VEHICLE COULD PASS OVER THE END OF THE CULVERT WITHOUT UNDUE LOSS OF CONTROL OR DAMAGE TO THE VEHICLE.

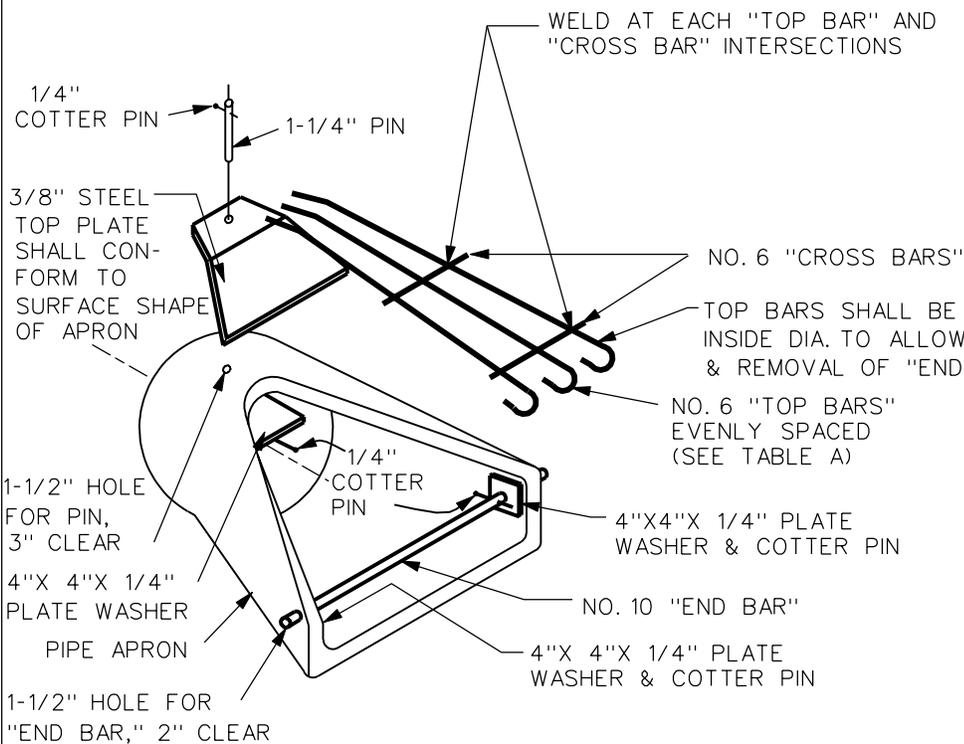
STEEL BARS USED IN CONSTRUCTION OF THE GUARD SHALL BE SMOOTH OR DEFORMED STEEL, ASTM A615, GRADE 40 OR MERCHANT QUALITY.

WELDING OF STEEL PARTS SHALL BE AS SHOWN AND SUBJECT TO THE APPROVAL OF THE ENGINEER. THE GUARD SHALL BE GIVEN TWO COATS OF PAINT, THE FIRST COAT BEING AN APPROVED PRIMER AND THE SECOND FOLIAGE GREEN. IN LIEU OF PAINTING AS SPECIFIED, THE COMPLETED APRON GUARD SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123.

ALTERNATE DETAILS FOR DESIGN OF APRON GUARD MAY BE SUBMITTED TO THE JURISDICTIONAL ENGINEER FOR APPROVAL.

SPECIAL NOTE

WHEN DETAIL PROJECT PLANS REQUIRE PIPE APRON GUARDS OF SIZES OTHER THAN THOSE SHOWN HEREON, THE DESIGN FOR SUCH APRON GUARDS SHALL BE SIMILAR TO THOSE INDICATED, CONFORMING TO MINIMUM BAR SPACING AND GENERAL REQUIREMENTS SHOWN.

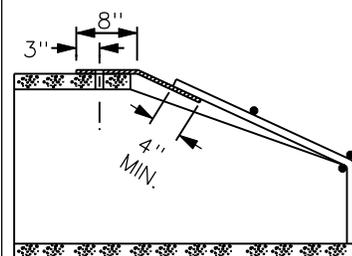


INSTALLATION VIEW

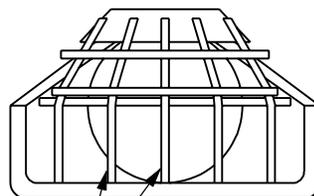
TABLE A

NO. 6 TOP BARS

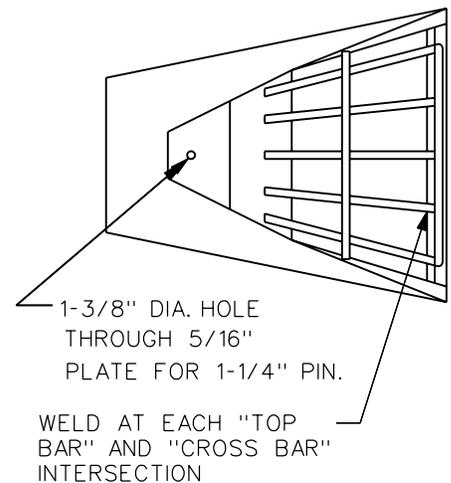
15" PIPE APRON	6 EA.
18" PIPE APRON	7 EA.
24" PIPE APRON	8 EA.
30" PIPE APRON	10 EA.
36" PIPE APRON	12 EA.



SECTION



END VIEW



PLAN

1	10/19/04	
REV.	DATE	BY
DATE: 01-01-98		

FLARED END SECTION APRON GUARD

FIGURE: 4020.3

SHEET 1 OF 1