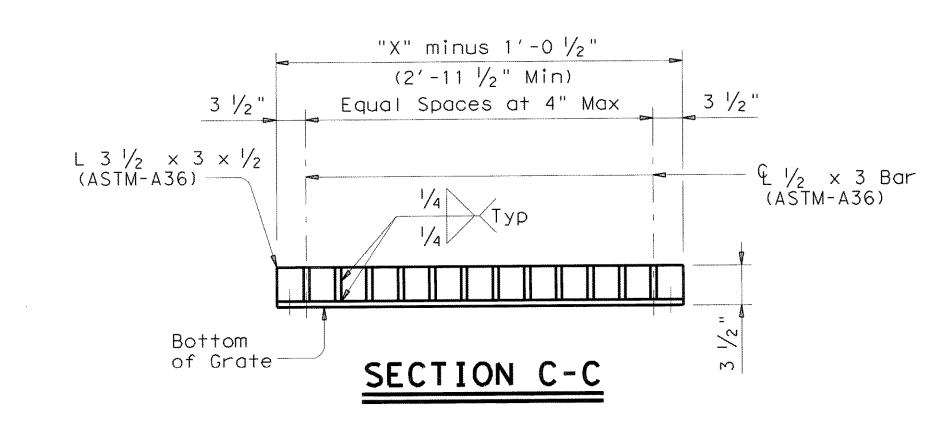
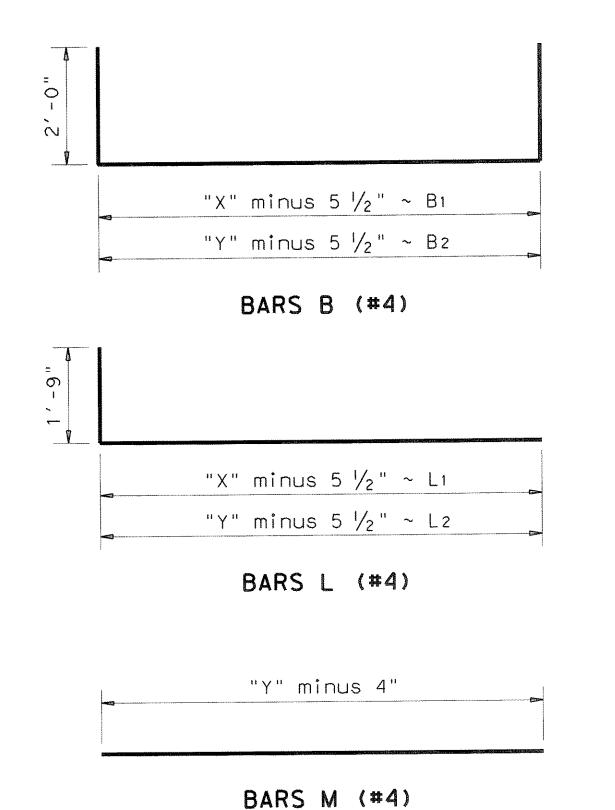
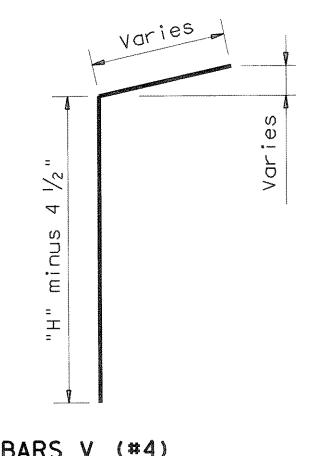


"X" minus 1'-0 $\frac{1}{2}$ "

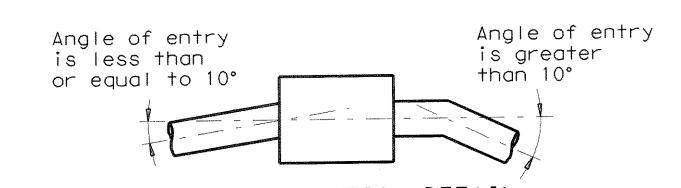
TYPICAL GRATE PLAN





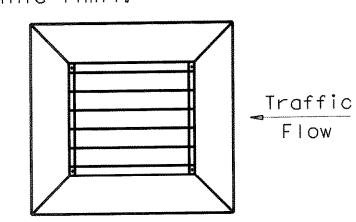


BARS V (#4)



PIPE CONNECTION DETAIL Connecting pipes should enter within 10° of normal to inlet wall. If necessary, pipe elbow

or curved approach alignment should be used to stay within this limit.



GRATE ORIENTATION DETAIL

If possible, horizontal grate inlet should be oriented such that both traffic and ditch water approach parallel to bars on grate. If this is not possible, orientation must favor traffic flow. Grate is not to be used under direct traffic, rather it is to be used in ditches and medians away from the roadway.

GENERAL NOTES:

When approved, precast inlets with equivalent structural capacity may be furnished. Sealed engineering calculations and drawings shall be submitted for approval prior to construction.

Shop drawings will not be required. Apron shall be cast-in-place.

In areas of conflict between reinforcing steel, blockouts, pipes, anchor bolts or other reinforcing steel, the reinforcement shall be bent or adjusted to clear as directed by the Engineer.

Anchor Bolts are $\frac{1}{2}$ " Dia ASTM A307 Grade A bolts (or A36 threaded rods with one tack welded hex head nut each) with one hex head nut and one

plain steel washer. Structural Steel for grates shall conform to the requirements of ASTM Designation A-36 or

AISI Designation M1010-M1020. All reinforcing steel shall be Grade 60

unless otherwise noted. All steel components except reinforcing,

shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.

All concrete shall be Class "A" (f'c = 3,000 psi).

SHEET 2 OF 2

