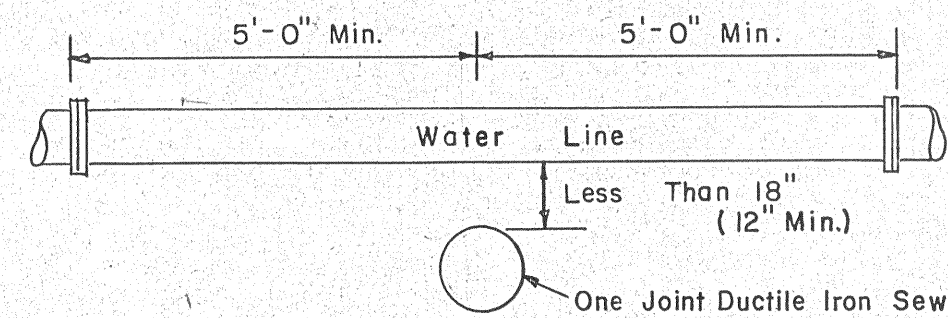




**DETAIL OF WATER LINE AND
SEWER LINE CROSSING
WHEN SEPARATION IS
LESS THAN 18 INCHES**
NOT TO SCALE

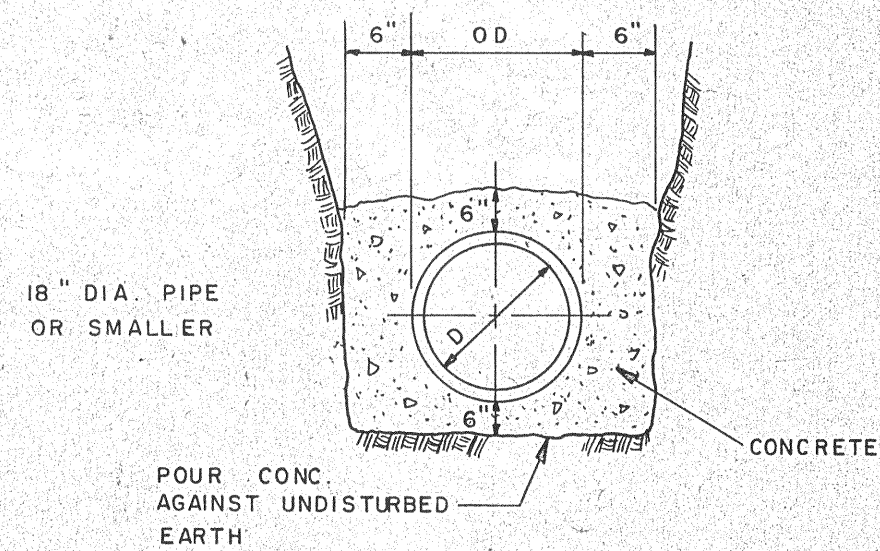
LOW CRADLE = 160% } OF EARTH TRENCH
HIGH CRADLE = 200% } BEARING VALUE

MAXIMUM TRENCH WIDTH
TAKEN AT TOP OF PIPE
6" TO 15" DIA. PIPE

APPROVED BACKFILL TAMPED
IN 6" LAYERS TO 1'-0" ABOVE
PIPE

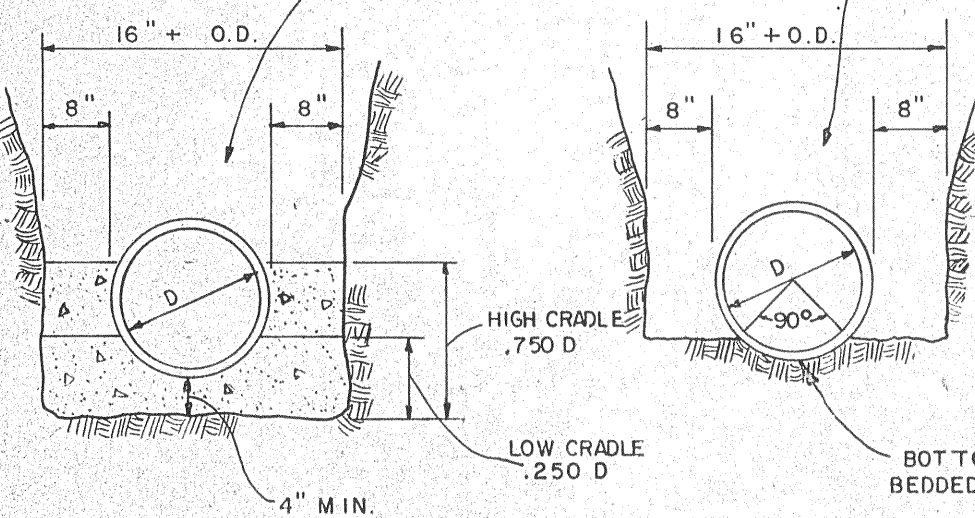
APPROVED BACKFILL TAMPED
IN 6" LAYERS TO 1'-0" ABOVE
PIPE

APPROVED BACKFILL TAMPED
IN 6" LAYERS TO 1'-0" ABOVE
PIPE



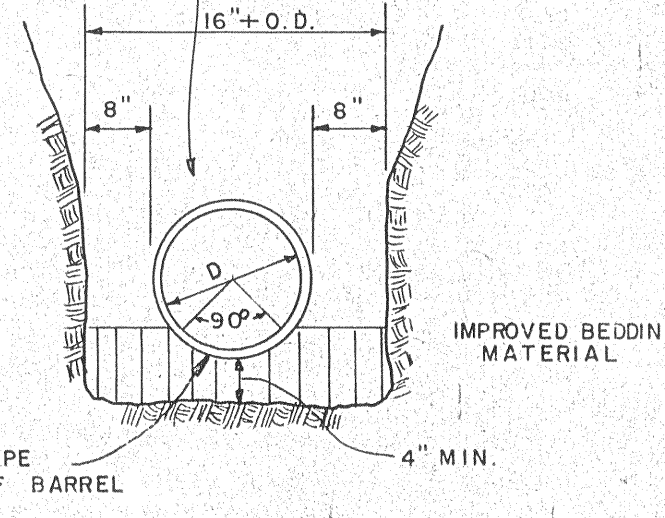
CONCRETE ENCASEMENT

NOT TO SCALE



POUR CONCRETE AGAINST
UNDISTURBED MATERIAL
CRADLE
(IN ROCK OR EARTH)

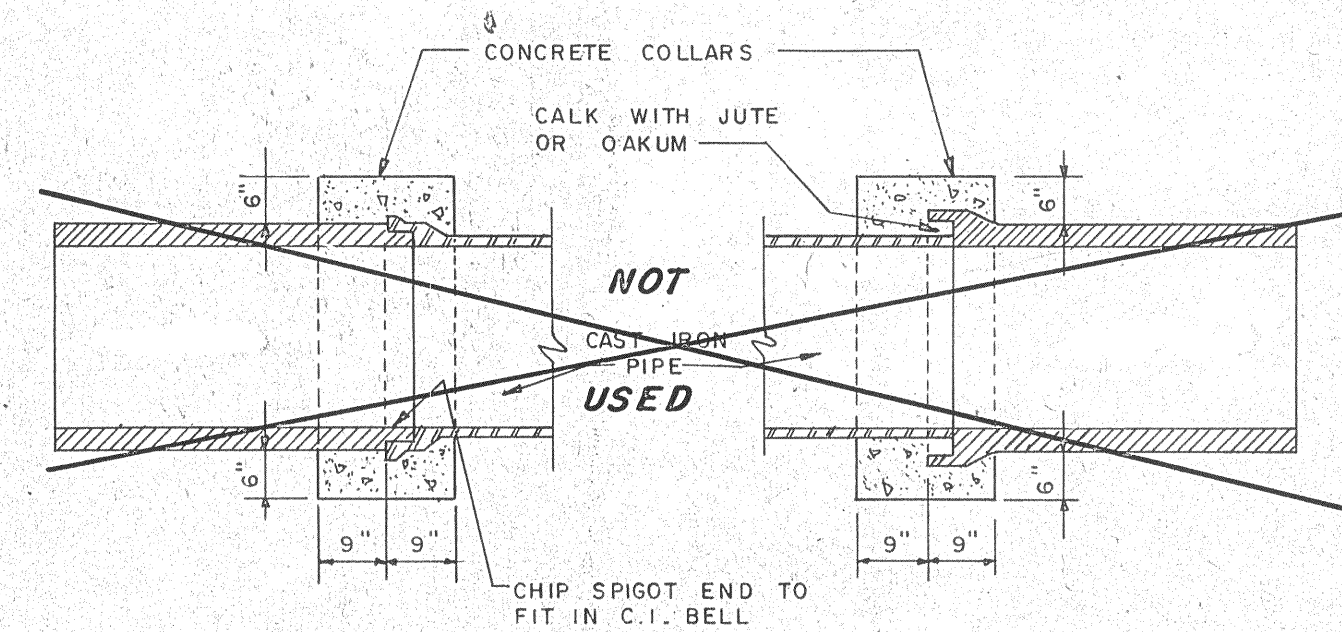
LOAD FACTOR = 1.5
TRENCH IN EARTH



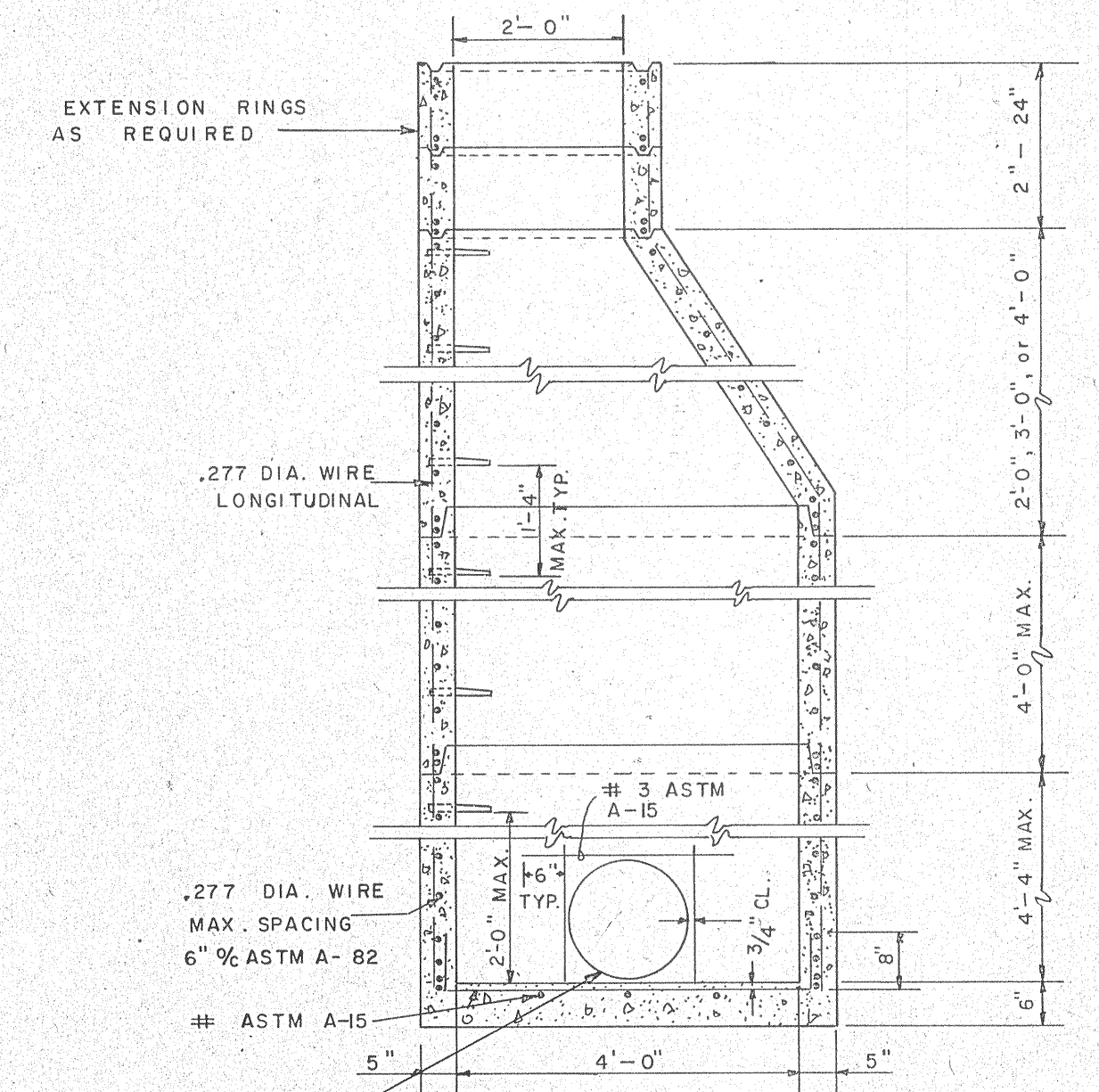
LOAD FACTOR = 1.9
TRENCH IN ROCK
& IMPROVED BEDDING

PIPE TRENCH BEDDING

NOT TO SCALE



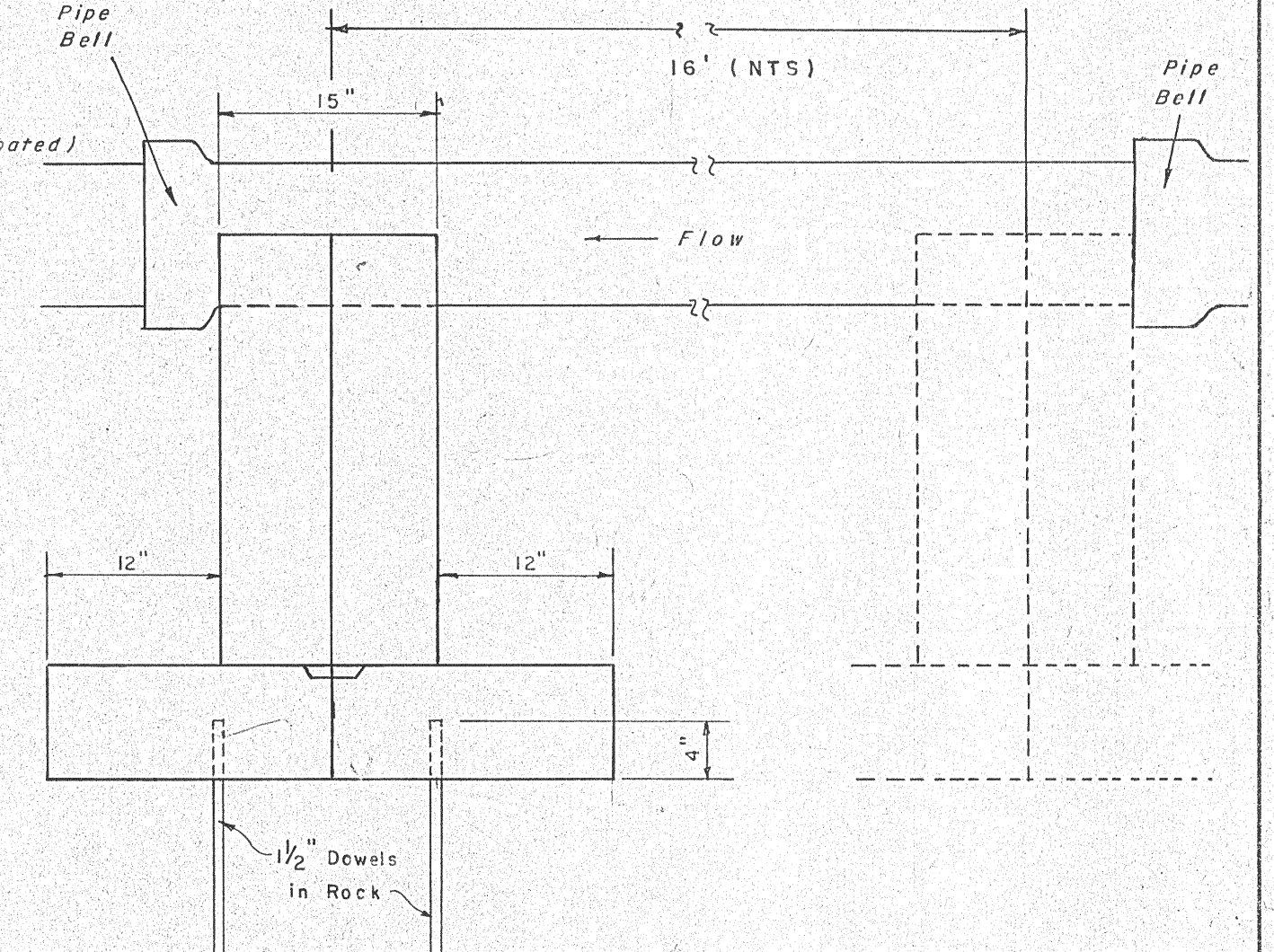
**SEWER PIPE TO CAST
IRON PIPE ADAPTER**
(USE FERRO FLEXIBLE
COUPLINGS OR APPROVED
EQUAL)



Manhole To Be
Furnished With
A Flexible Boot
Connection.

**USE FOR THIS PROJECT
ECCENTRIC MANHOLE
WITH MONOLITHIC BASE**

1/2" = 1' - 0"
Type "A"

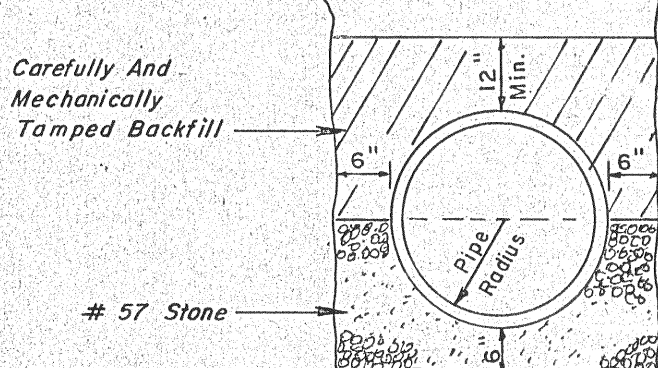
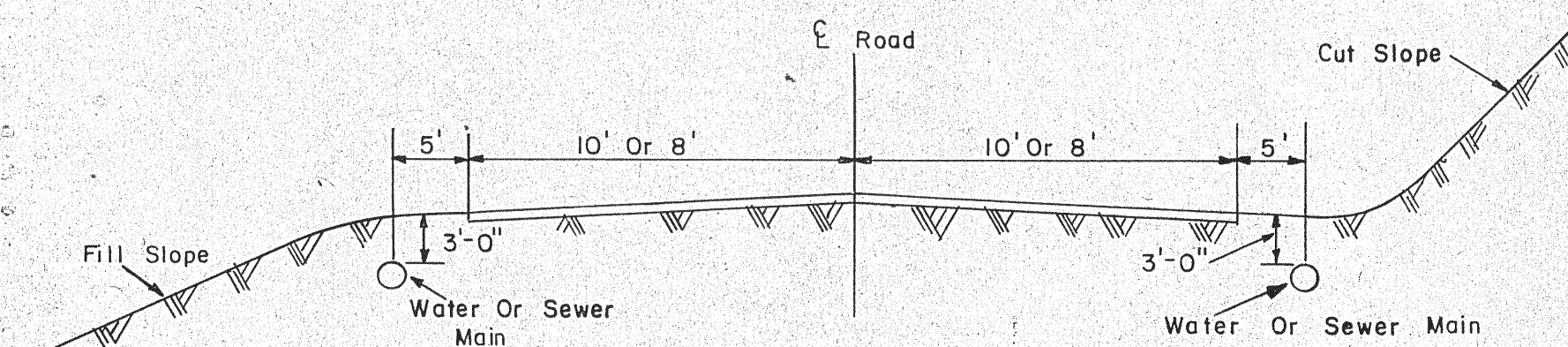


WATER CROSSING PIER (To Be Used On This Project
If Necessary)

NOT TO SCALE

**DETAIL SHOWING WATER OR SEWER
LINE RUNNING PARALLEL TO A
PRIMARY OR SECONDARY ROAD**

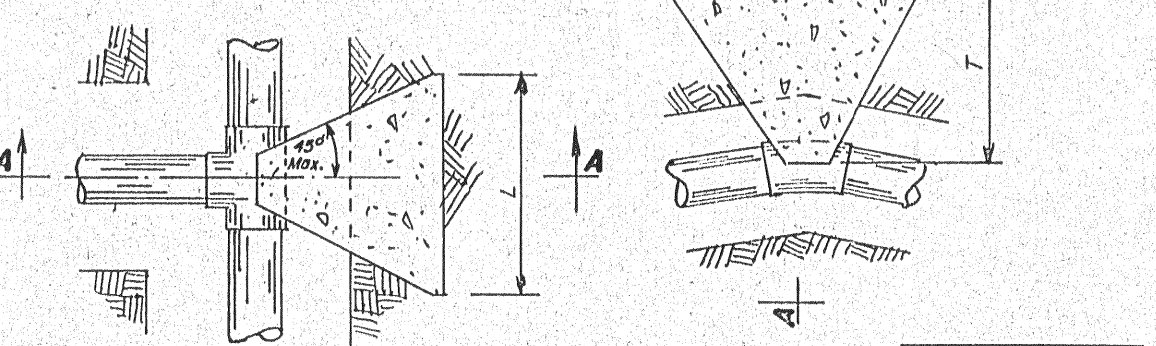
NOT TO SCALE



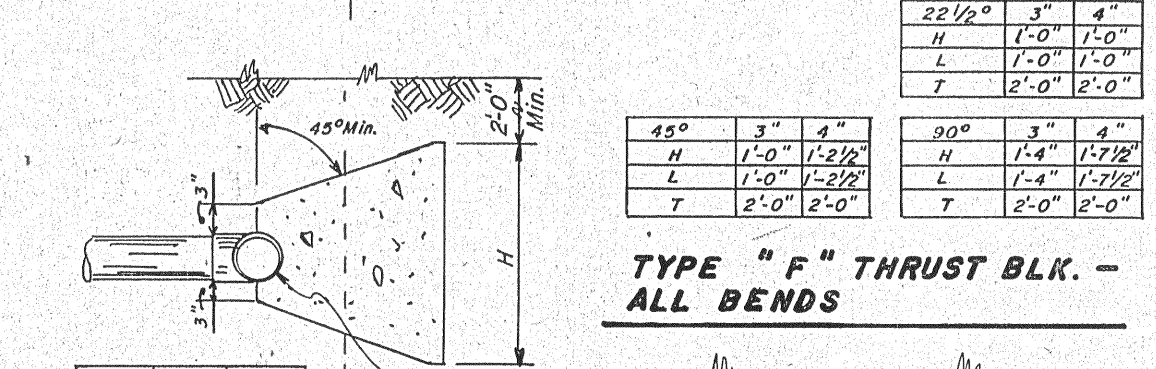
**STANDARD GRAVEL
BEDDING**

(To Be Used On This Project)

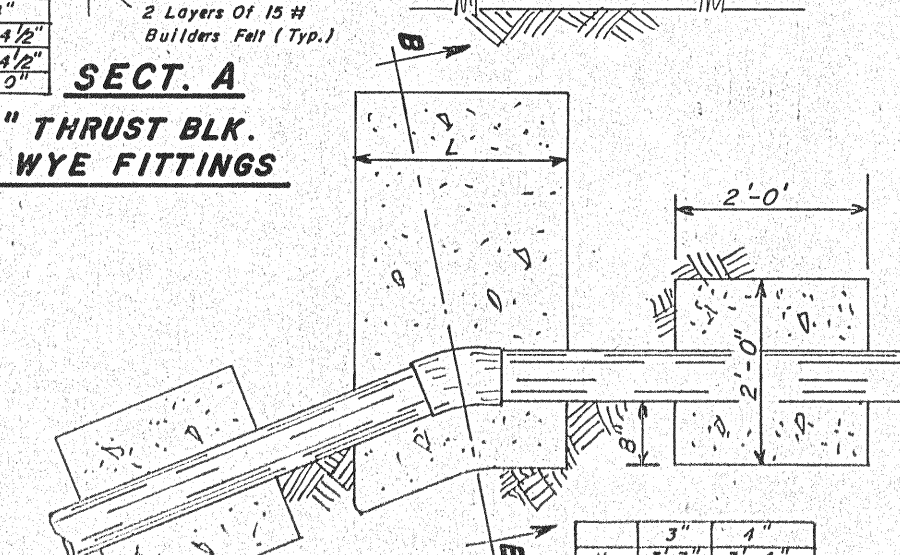
NOT TO SCALE



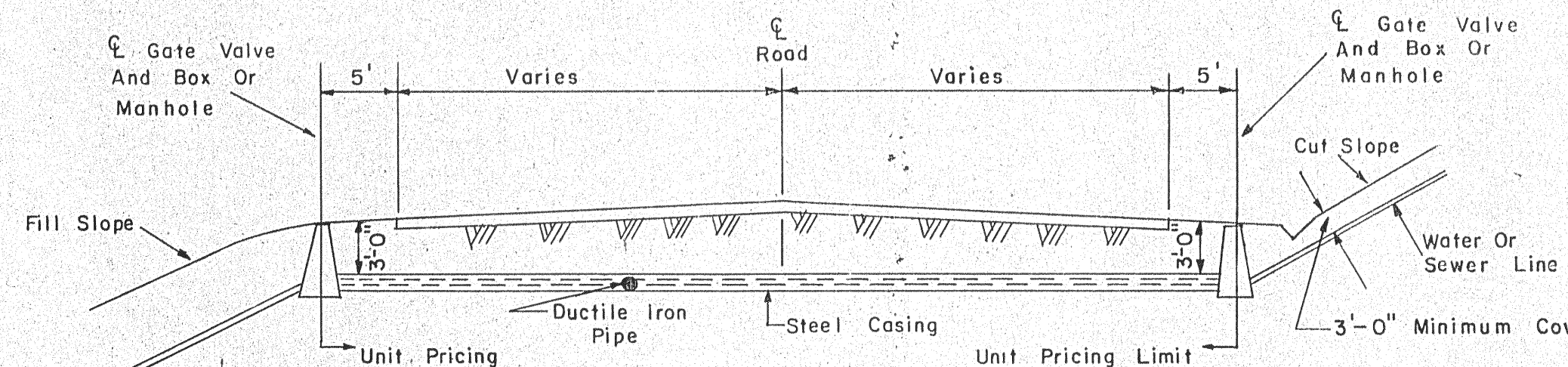
**TYPE "F" THRUST BLK. -
ALL BENDS**



**TYPE "F" THRUST BLK.
TEE OR WYE FITTINGS**



TYPE "L" THRUST BLK. - VERT. CREST



**DETAIL SHOWING WATER LINE OR SEWER
LINE CROSSING A PRIMARY OR
SECONDARY ROAD**

NOT TO SCALE

Railroad Crossing And Highway
Crossing Materials To Be Included

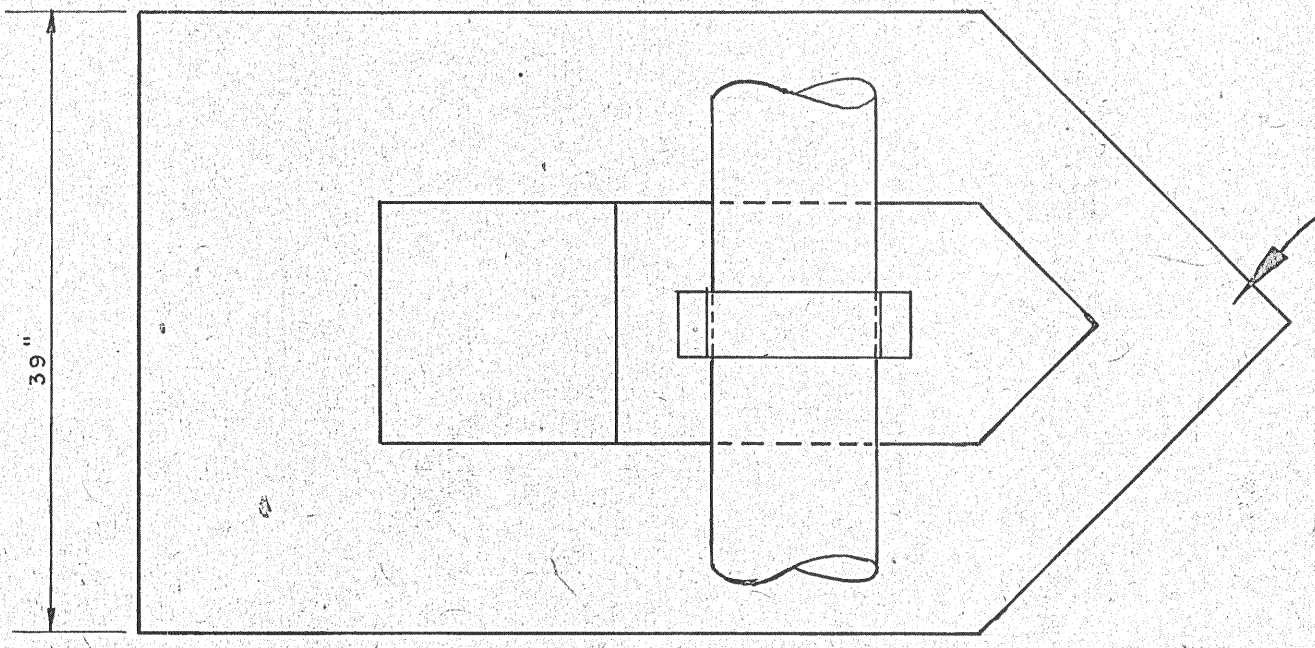
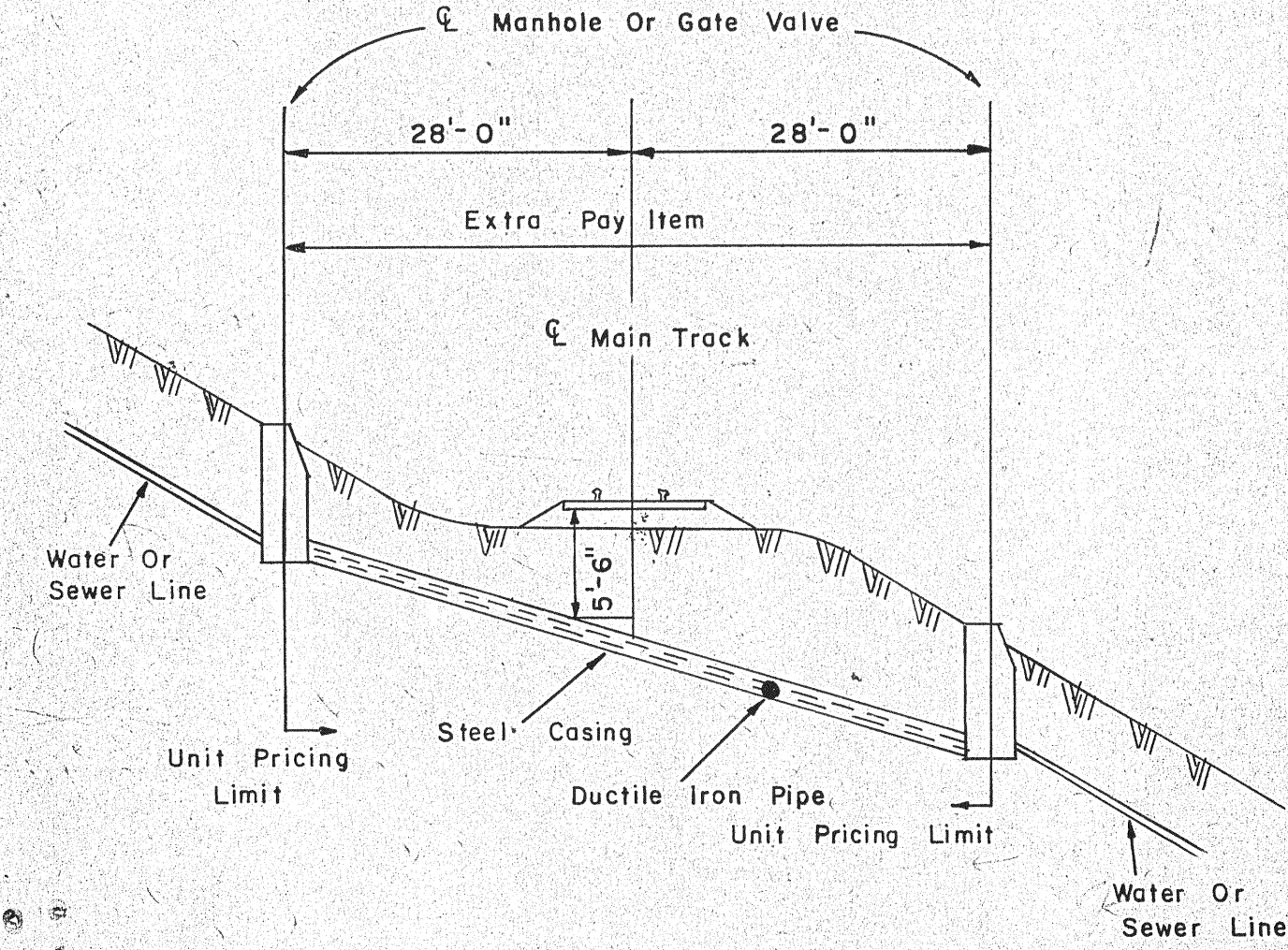
Casing Pipe
Grout
Pipe Fittings
Carrier Pipe

NOTE:

See Specifications For Size Of
Casing For Water And Sewer Lines.

**DETAIL SHOWING WATER LINE OR
SEWER LINE CROSSING A RAILROAD**

NOT TO SCALE



"AS BUILT PLANS"

2.5 Cu. Yds. of Dry Rip-Rap,
Class I, Shall Be Placed On The
Upstream End Of The Pier.

FLOW

REVISIONS
6-3-85
8-1-85

J. A. GUSTIN
CIVIL ENGINEER
CERTIFICATE NO.
2052

TOWN OF BOONES MILL			
CONSTRUCTION DETAILS			
J. A. GUSTIN & ASSOCIATES CONSULTING ENGINEERS MARTINSVILLE, VIRGINIA			
DESIGNED BY	JAG	SCALE	As Noted
DRAWN BY	TAW	DATE	11-23-81
CHECKED BY	NRC, JAG	SHEET NO.	TF-24