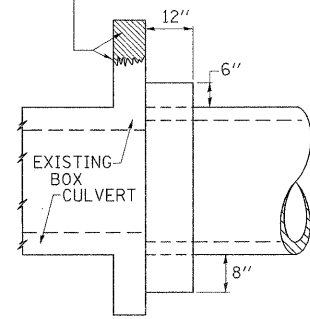
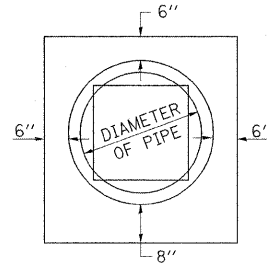


DETAILS OF CONCRETE COLLAR

REMOVE PORTION OF EXIST HEADWALL DOWN TO 12" BELOW FINISHED GRADE.



SIDE VIEW



END VIEW

TABULATION

DIAMETER OF PIPE	CL SI CONC CU YDS EST
12"	0.16
15"	0.19
18"	0.21
24"	0.29
30"	0.37
36"	0.44
42"	0.53
48"	0.62
54"	0.71
60"	0.81
72"	1.03

THE CONCRETE COLLAR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE COLLAR, AS SHOWN ON THE PLANS, WHICH PRICE SHALL INCLUDE THE REMOVAL OF SUCH PORTIONS OF THE EXISTING HEADWALLS AS MAY BE REQUIRED.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT.

REVISIONS	
REDESIGNED	2-15-89
REVISED	8-19-94
REVISED	3-25-08

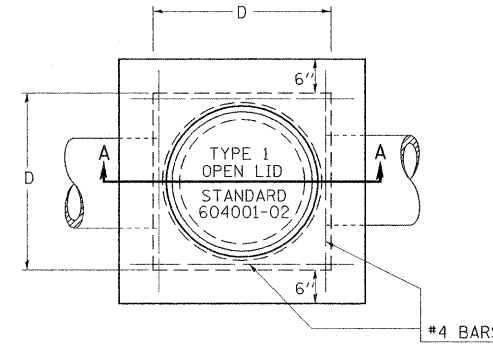
STD. 9-19

DETAILS OF MANHOLES, SPECIAL, TYPE 1

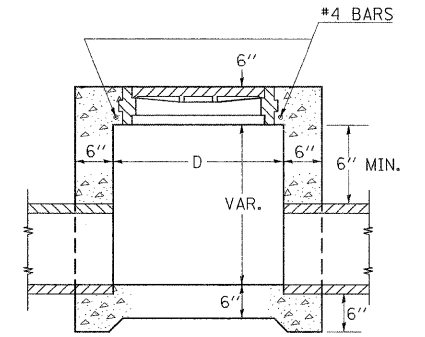
DESIGNS A THRU G

TABLE OF DIMENSIONS

DESIGN	PIPE DIAM.	D
A	18" & LESS	2' 6"
B	21" & 24"	3' 0"
C	27" & 30"	3' 7"
D	33" & 36"	4' 2"
E	42"	4' 9"
F	48"	5' 4"
G	54"	5' 11"



PLAN



SECTION A-A

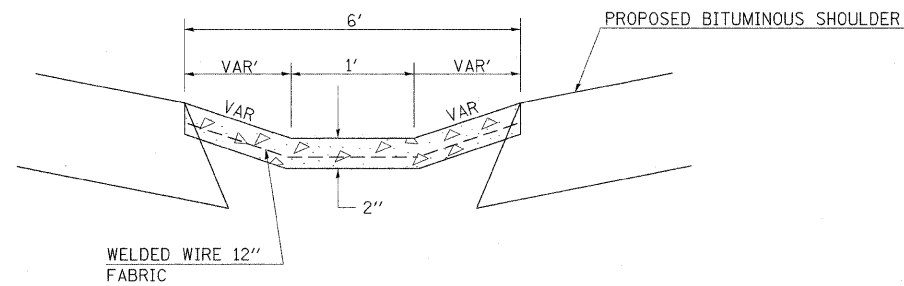
NOTE:

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. MANHOLES SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR MANHOLE, SPECIAL, TYPE 1 WHICH PRICE SHALL INCLUDE CAST IRON FRAME, SPECIAL, TYPE 1, WITH TYPE 1 OPEN LID, AND REINFORCEMENT BARS.

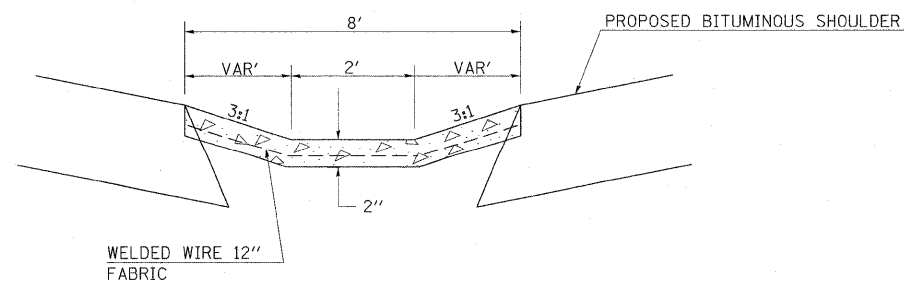
REVISIONS	
REDESIGNED	2-15-89
REVISED	8-19-94
REVISED	3-26-08

STD. 9-4

PAVED DITCH SPECIAL

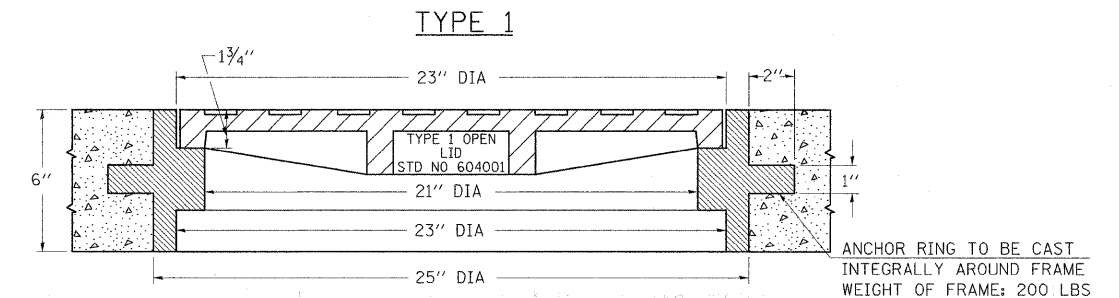


TO BE USED
STA 772+26 TO 774+67 (IL 13WB)



TO BE USED
STA 780+38 TO 781+22 (IL 13WB)

DETAILS OF CAST IRON FRAME SPECIAL TYPE 1 WITH TYPE 1 OPEN LID



THE FRAMES MAY BE MADE OF EITHER GRAY IRON CONFORMING TO THE STANDARD SPECIFICATIONS OR DUCTILE IRON CONFORMING TO THE SPECIFICATIONS FOR DUCTILE IRON CASTING, A.S.T.M. DESIGNATION: A536, GRADE 60-45-10.

WEIGHT OF FRAME: 90 LBS

REVISIONS	
REDESIGNED	2-15-89
REVISED	12-14-01
REVISED	3-26-08

STD. 9-18