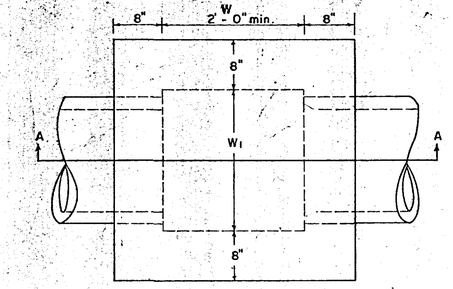
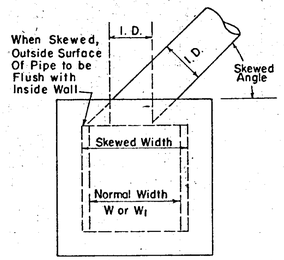
TS AP 193(9) 70 135

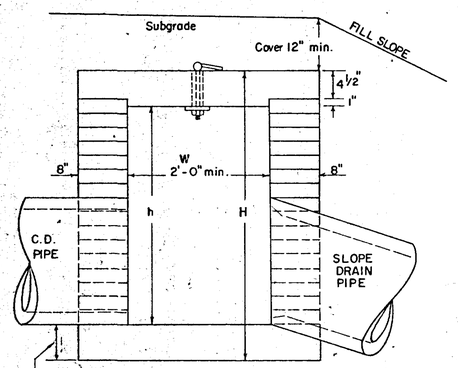
DETAILS OF BRICK JUNCTION BOX



PLAN



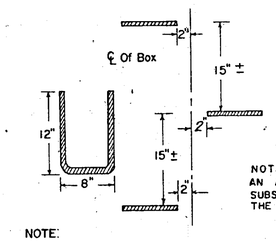
METHOD OF LAYOUT FOR SKEWED PIPE



SECTION A - A

USE 6" THICK PLAIN NON-REINFORCED CONC. BOTTOM SLAB FOR W & W1 = 2'0" THRU 4'6"

USE 10" THICK PLAIN NON-REINF. CONC. BOTTOM SLAB FOR W & W1 = 4'7" THRU 7'-9".

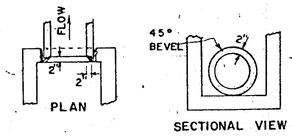


NOTE:
AN ALTERNATE STEP MAY BE SUBSTITUED IF APPROVED BY THE LABORATORY.

NOTE:
MINIMUM OF THREE - 3/4" Φ STEEL LADDER BARS ARE REQUIRED IN ALL JUNCTION BOXES WHERE h IS GREATER THAN 4'-0".

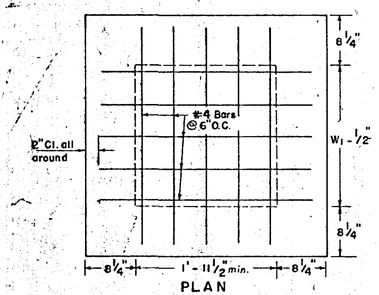
NUMBER & LOCATION OF LADDER BARS IN JUNCTION BOX TO BE AS DIRECTED BY THE ENGINEER.

DETAIL AND ARRANGEMENT OF LADDER BARS

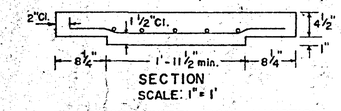


BEVEL REQUIRED AT OUTLET PIPE WHERE BELL OR GROOVE SECTION IS NOT PROVIDED.

BEVEL DETAIL



PLAN



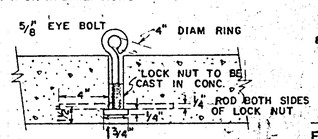
SECTION
SCALE: 1" = 1'

REINFORCED STEEL FOR JUNCTION BOX COVER

DIMENSIONS FOR JUNCTION BOX						
PIPE SIZE	MIN. W OR W1	MIN. h	MIN. H	W OR W1 FOR SKEWED PIPE		
				75°	60°	45°
15"	2'-0"	1'-9 1/2"	2'-9"	2'-0"	2'-4"	3'-0"
18"	2'-3"	2'-1"	3'-1/2"	2'-3"	2'-7"	3'-5"
24"	2'-10"	2'-8"	3'-7 1/2"	3'-0"	3'-6"	4'-6"
30"	3'-5"	3'-3"	4'-2 1/2"	3'-7"	4'-2"	5'-3"
36"	4'-0"	3'-10"	4'-9 1/2"	4'-2"	4'-10"	6'-1"
42"	4'-7"	4'-5"	5'-4 1/2"	4'-9"	5'-6"	6'-11"
48"	5'-2"	5'-0"	5'-11 1/2"	5'-4"	6'-2"	7'-9"

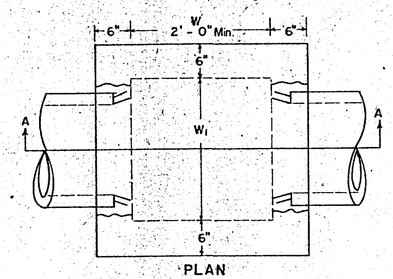
MINIMUM HEIGHT IS CONTROLLED BY THE SIZE OF CONNECTING CROSS DRAIN OR LONGITUDINAL PIPE WHICHEVER IS THE LARGER AND MAY BE VARIED FOR OTHER CONDITIONS AS DIRECTED BY THE ENGINEER.

IT IS NOT NECESSARY THAT BOX ENCLOSURE FOR CROSS DRAIN OR LONGITUDINAL PIPE BE CONSTRUCTED SQUARE. W OR W1 DIMENSIONS CAN VARY ACCORDING TO SIZE OF PIPE.

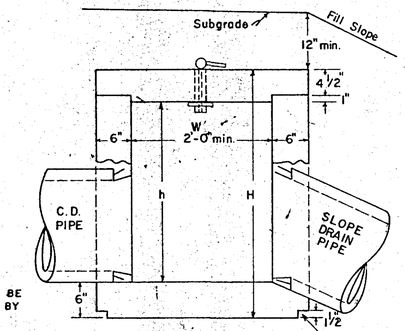


ALTERNATE METHOD OF CONNECTING BOLT & RING

DETAILS OF PRECAST CONCRETE JUNCTION BOX

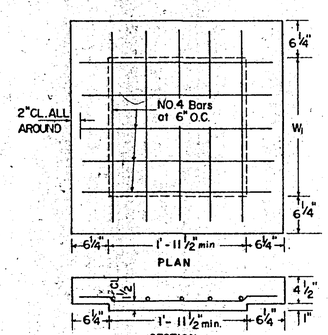


PLAN



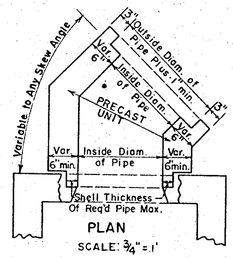
SECTION A-A

HANDLING GROOVE (Optional)

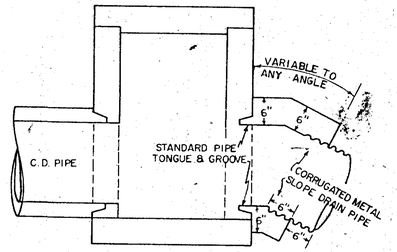


REINF. STEEL FOR JUNCTION BOX COVER

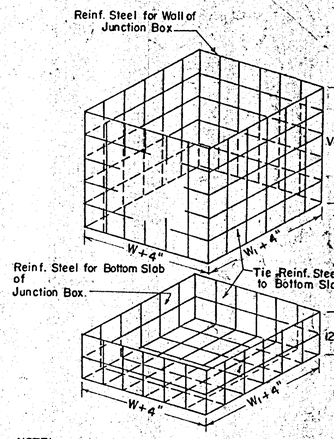
OPTIONAL METHOD OF CONNECTION SKEWED PIPE OR SLOPE DRAIN PIPE



THIS UNIT, WHERE REQUIRED FOR SKEWED PIPE IS INCLUDED IN PRICE BID FOR JUNCTION BOX.



PRECAST ADAPTOR MAY BE USED WITH CORRUGATED METAL SLOPE DRAIN PIPE.
SCALE: 3/4" = 1'



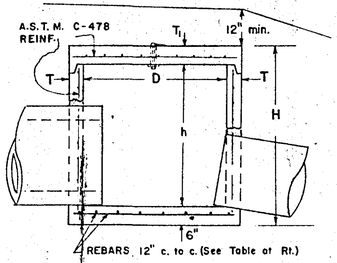
NOTE: REINFORCING STEEL FOR JUNCTION BOX SHALL BE 2/2, 6x6 WELDED WIRE FABRIC, ROLLED TO THE DIMENSIONS AS SHOWN ABOVE OR TO ALLOW A MINIMUM OF 2" CLEARANCE.

REINFORCING RODS OF 1/2" DIAMETER PLACED ON 12" CENTERS BOTH VERTICAL AND HORIZONTAL MAY BE USED AS AN ALTERNATE TO THE ABOVE.

CIRCULAR PRECAST JUNCTION BOX

BASIN AND TOP WILL HAVE DESIGN AND REINFORCEMENT ACCORDING TO A.S.T.M. C-478 EXCEPT WHERE INDICATED OTHERWISE. MATERIALS WILL COMPLY WITH GA. STD. SPECIFICATIONS FOR PRECAST MANHOLE SECTIONS.

D	T (min)	T_1 (min.)	MAX. PIPE SIZE	REBAR SIZE (in bottom)
4'-0"	5"	6"	30"	#5
5'-0"	5"	8"	42"	#5
6'-0"	6"	8"	48"	#6

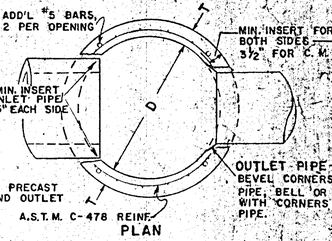


REBARS 12" c. to c. (See Table at Rt.)

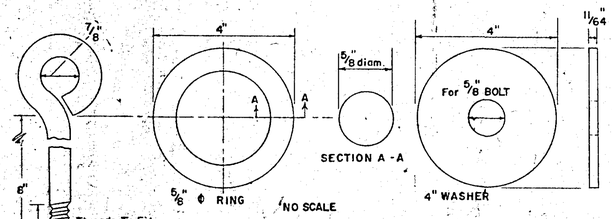
SECTIONAL VIEW

PIPE SIZE	MIN. h	MIN. H
15"	1'-10"	2'-10"
18"	2'-2"	3'-2"
24"	2'-9"	3'-9"
30"	3'-4"	4'-4"
36"	4'-0"	5'-2"
42"	4'-7"	5'-9"
48"	5'-2"	6'-4"

NOTE:
OPENINGS SHALL BE PRECAST FOR BOTH INLET AND OUTLET PIPES.



SCALE: 1/2" = 1'



Washer, Bolt & Ring To Be Galvanized Steel Or Wrought Iron.
Ring To Be Bend In Eye Of Bolt Before Leaving Shop.

DETAILS OF BOLT, RING & WASHER FOR JUNCTION BOX COVER

REVISIONS		DATE
Add. Circular Junction Box	R.M.U.	12-30-75
Add. Bevel Detail	R.M.U.	1-14-76

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
JUNCTION BOXES

JUNCTION BOX (BRICK)
JUNCTION BOX (PRECAST)
JUNCTION BOX (CIRCULAR PRECAST)

SCALE AS SHOWN

JAN., 1969

DESIGNED
DRAWN RWH
TRACED AVS
CHECKED RBS

SUBMITTED
STATE ROAD DESIGN ENGINEER
APPROVED
STATE HIGHWAY ENGINEER

NUMBER 9031 U