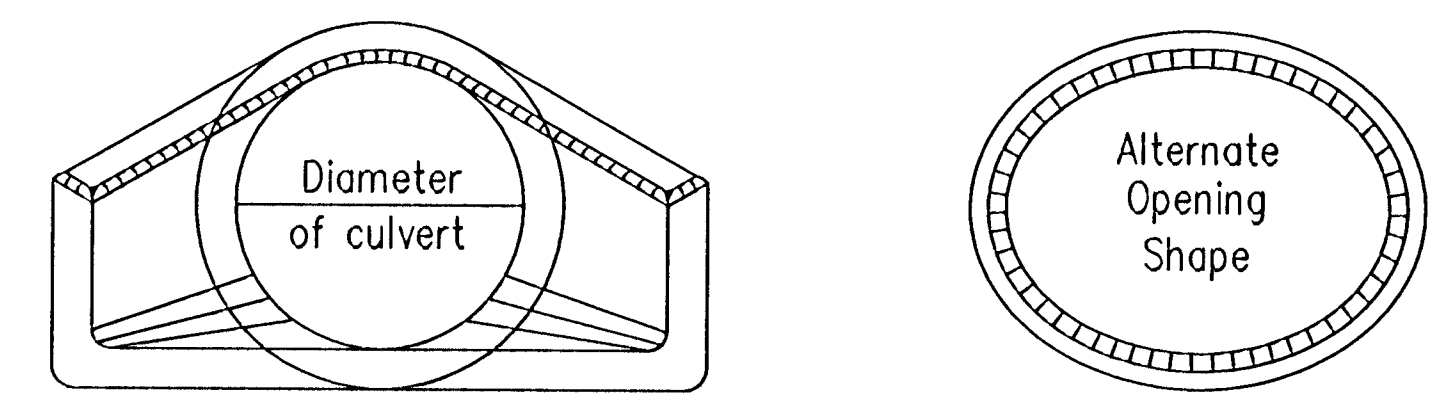
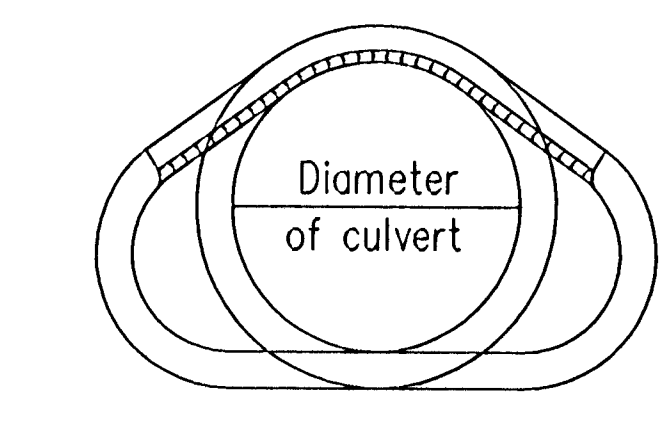


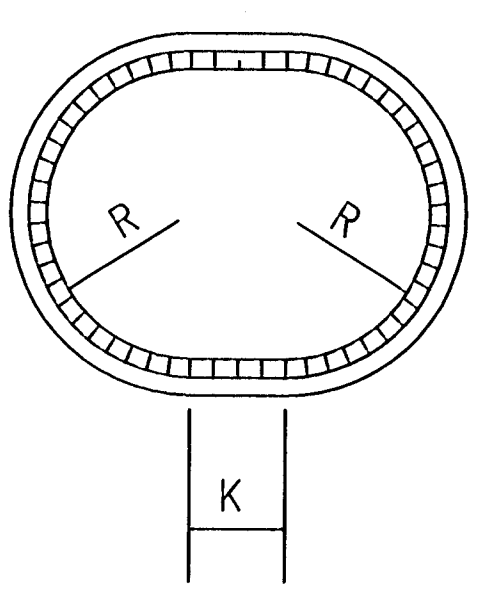
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS	472 83673 (792310)	04	7	15



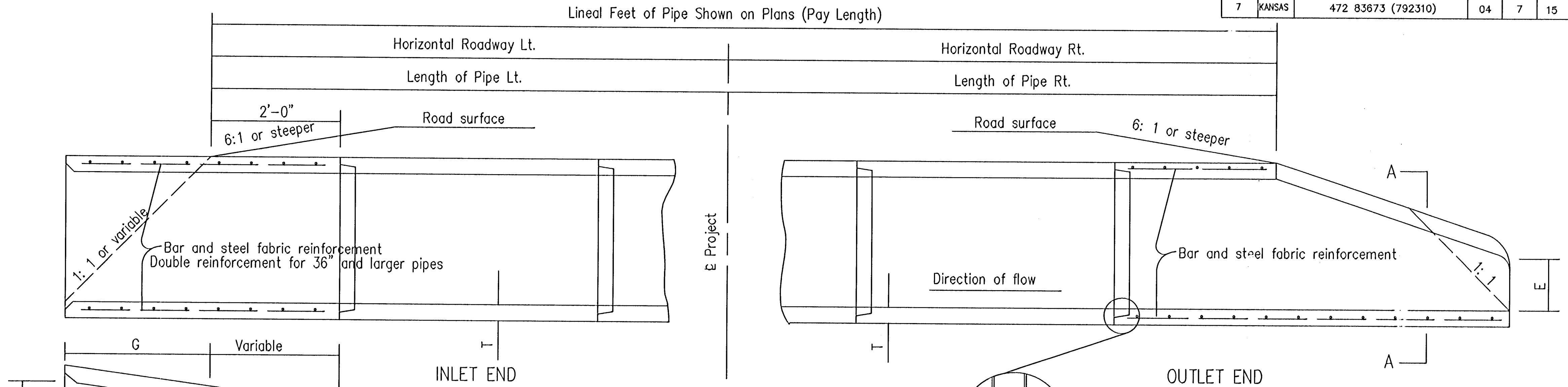
END ELEVATION (TYPE I)



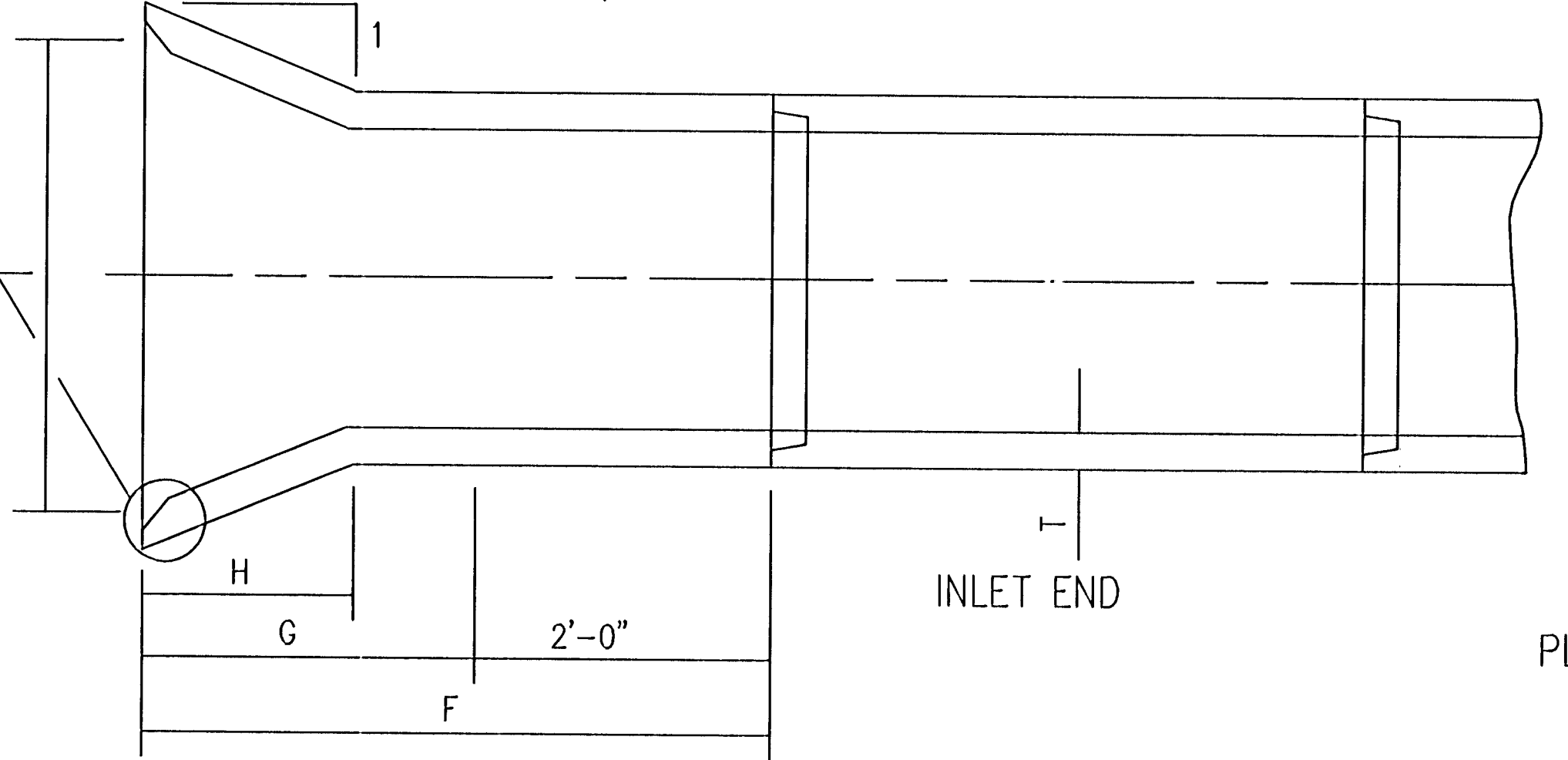
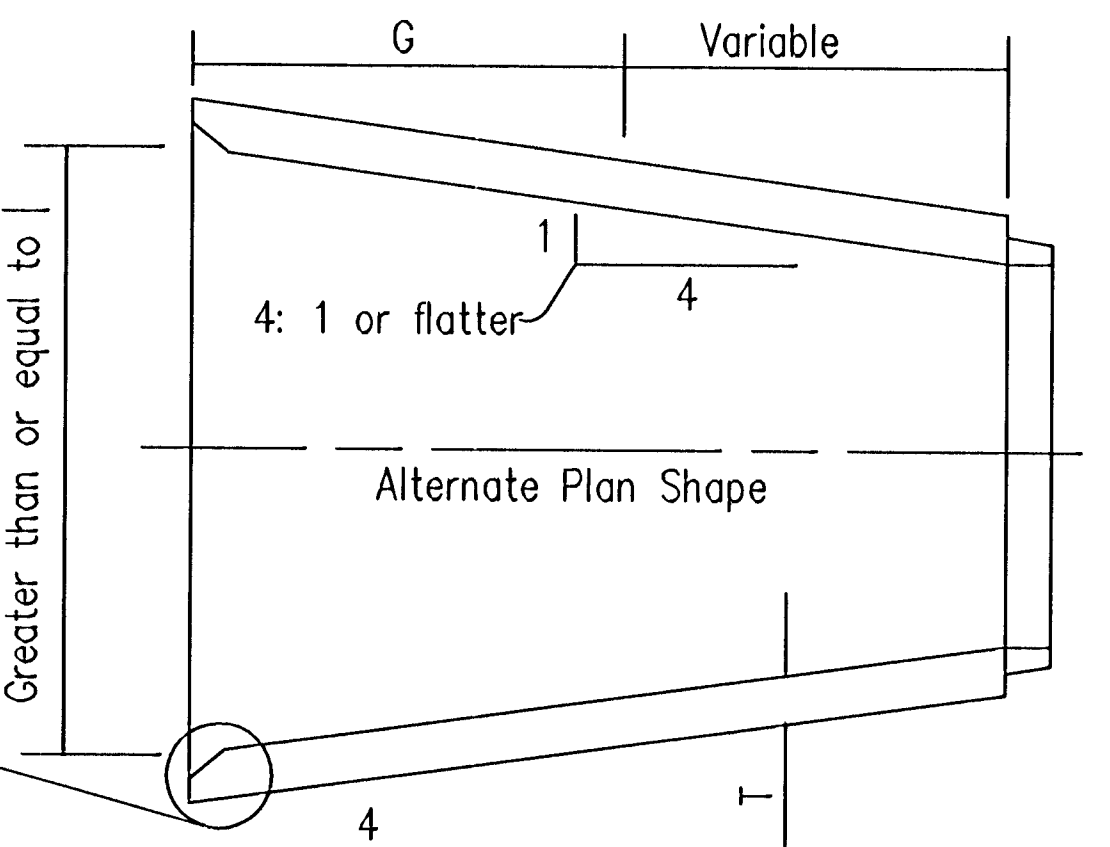
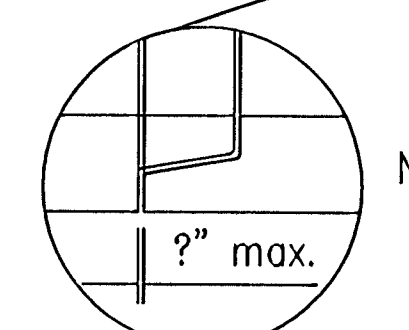
SECTION A-A
Showing rounding of inside edge of end section.



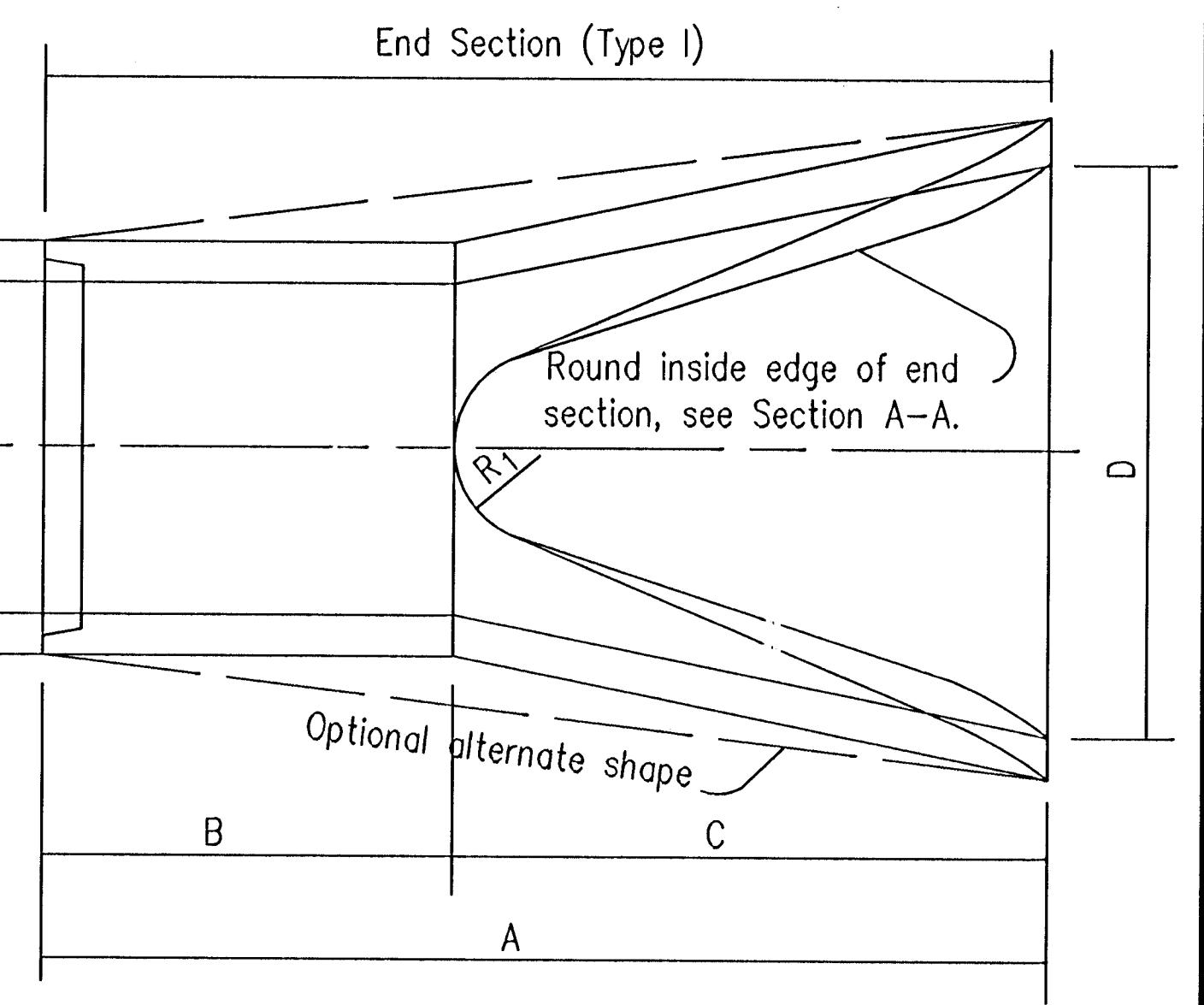
END ELEVATION (TYPE III)



ELEVATION SECTION



PLAN VIEW



OUTLET END

∅ Transition to round pipe.
Paid for as separate item of End Section, except when structures shall bid as alternates. In that case End Sections shall be subsidiary to bid item.

Minimum waterway area is calculated at the inside of the bevel.

Diam.	A	B	C	D	E	R ₁	Slope	T
12"	6'-0 1/8"	4'-0 1/8"	2'-0"	2'-0"	4"	9	3: 1	2"
15"	6'-1"	3'-10"	2'-3"	2'-6"	6"	11	3: 1	2 1/4"
18"	6'-1"	3'-10"	2'-3"	3'-0"	9"	12	3: 1	2 1/2"
24"	6'-1 1/2"	2'-6"	3'-7 1/2"	4'-0"	9 ?"	14	3: 1	3"
30"	6'-1 3/4"	1'-7 3/4"	4'-6"	5'-0"	1'-0"	15	3: 1	3 1/2"
36"	8'-1 1/4"	2'-10 3/4"	5'-3"	6'-0"	1'-3"	20	3: 1	4"
42"	8'-2"	2'-11"	5'-3"	6'-6"	1'-9"	22	3: 1	4 1/2"
48"	8'-2"	2'-2"	6'-0"	7'-0"	2'-0"	22	3: 1	5"
54"	8'-2 1/4"	2'-9 1/4"	5'-5"	7'-6"	2'-3"	24	2.4 : 1	5 1/2"
60"	8'-3"	3'-3"	5'-0"	8'-0"	2'-11"	24	2 : 1	6"
72"	8'-3"	1'-9"	6'-6"	9'-0"	3'-0"	24	1.86 : 1	7"
84"	9'-3 1/2"	1'-9"	7'-6 1/2"	10'-0"	3'-0"	24	1.6 : 1	8"

Diam.	Min. W.W. Area Sq.Ft.	F	G	H	I	J	K	R	T
24"	4.5	4'-3"	2'-3"	1'-5 1/2"	2'-8"	1 1/2"	8"	1'-0"	3"
30"	7.0	4'-9 1/2"	2'-9 1/2"	1'-9 1/2"	3'-4"	2"	10"	1'-3"	3 1/2"
36"	10.1	5'-4"	3'-4"	2'-1 1/2"	4'-0"	2"	1'-0"	1'-6"	4"
42"	13.7	5'-10 1/2"	3'-10 1/2"	2'-5 1/8"	4'-8"	2 1/2"	1'-2"	1'-9"	4 1/2"
48"	17.9	6'-5"	4'-5"	2'-10 1/8"	5'-4"	3"	1'-4"	2'-0"	5"
54"	22.7	6'-11 1/2"	4'-11 1/2"	3'-2 1/2"	6'-0"	3 1/2"	1'-6"	2'-3"	5 1/2"
60"	28.0	7'-6"	5'-6"	3'-6 1/8"	6'-8"	4"	1'-8"	2'-6"	6"
72"	40.3	8'-7"	6'-7"	4'-3 3/8"	8'-0"	5"	2'-0"	3'-0"	7"
84"	54.8	9'-8"	7'-8"	5'-0 3/8"	9'-4"	6"	2'-4"	3'-6"	8"

Dimensions for alternate shapes shall be equal to or greater than those shown in the table, unless otherwise shown.

Station	Location	Type	Size	Crown Grade Elev.	Flow line		Horizontal Roadway		Degree of Rotation	Length of Pipe		Lin.Ft. of Pipe	End Sects.			
					LT.(N)	RT.(S)	LT.	RT.		LT.	RT.		Type I	Type III		
0+00 - 1+04.25	CUL DE SAC INLET	RCP	15"	—	101.41	102.41	—	—	—	—	—	105'	1	—	—	—

Note: The culverts listed on this sheet may or may not indicate that the culvert installed will be reinforced concrete, steel, or aluminum.

KANSAS DEPARTMENT OF TRANSPORTATION
CONCRETE END SECTIONS FOR CONCRETE PIPES
 TYPE I & SIDE TAPERED INLET SECTION (TYPE III)

RD662

FHWA APPROVAL 1-8-92
 DESIGNED 1 DETAILED
 DESIGN CK. 1 DETAIL CK.

J. P.D. James O. Brewer
 J. JANTZEN
 QUANCK

BY APP'D
 TRACED BOWSER
 TRACE CK. SEITZ