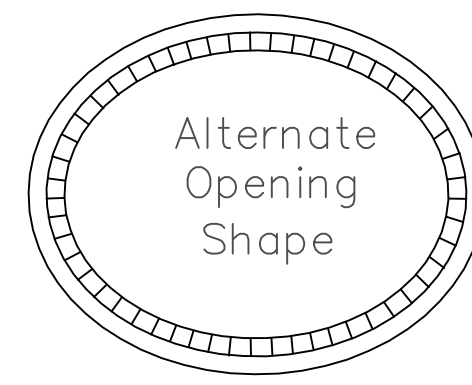
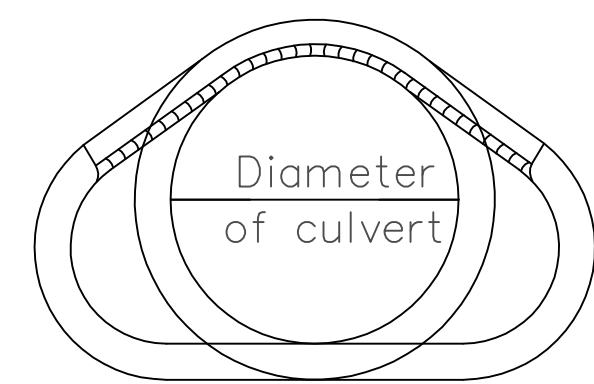


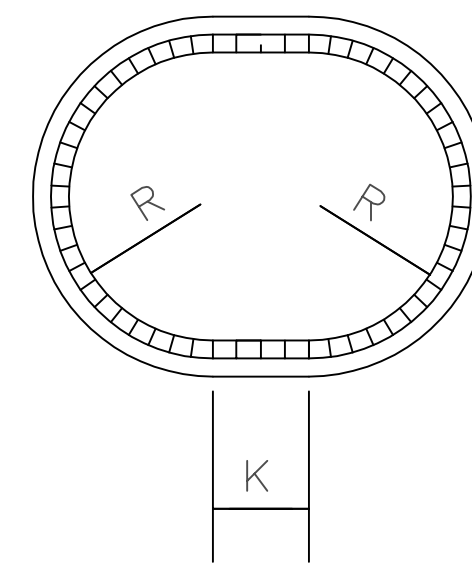
END ELEVATION (TYPE I)



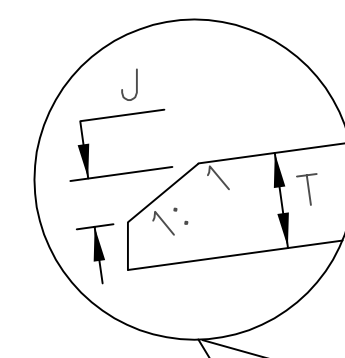
END ELEVATION (TYPE III)



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



END ELEVATION (TYPE III)



∅ 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. Drainage Structure No. Included in pay length of pipe.
Minimum waterway area is calculated at the inside of the bevel.

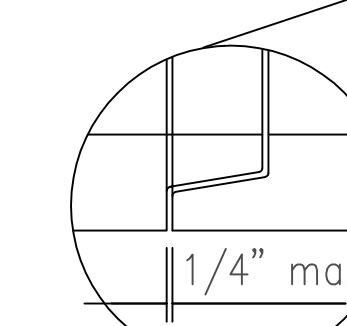
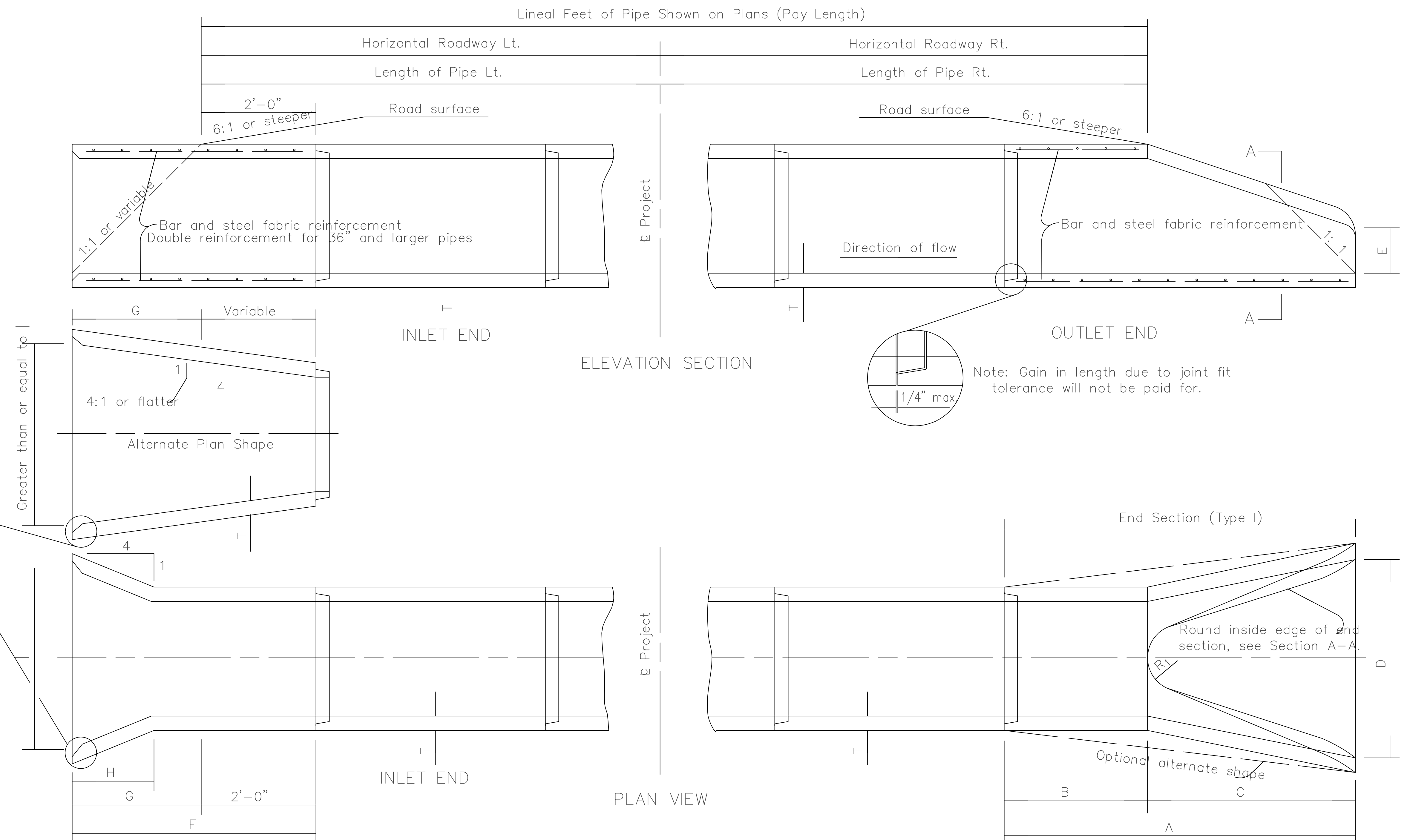
END SECTION (TYPE I) NOMINAL DIMENSIONS

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 1/2"	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 3/4"	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"

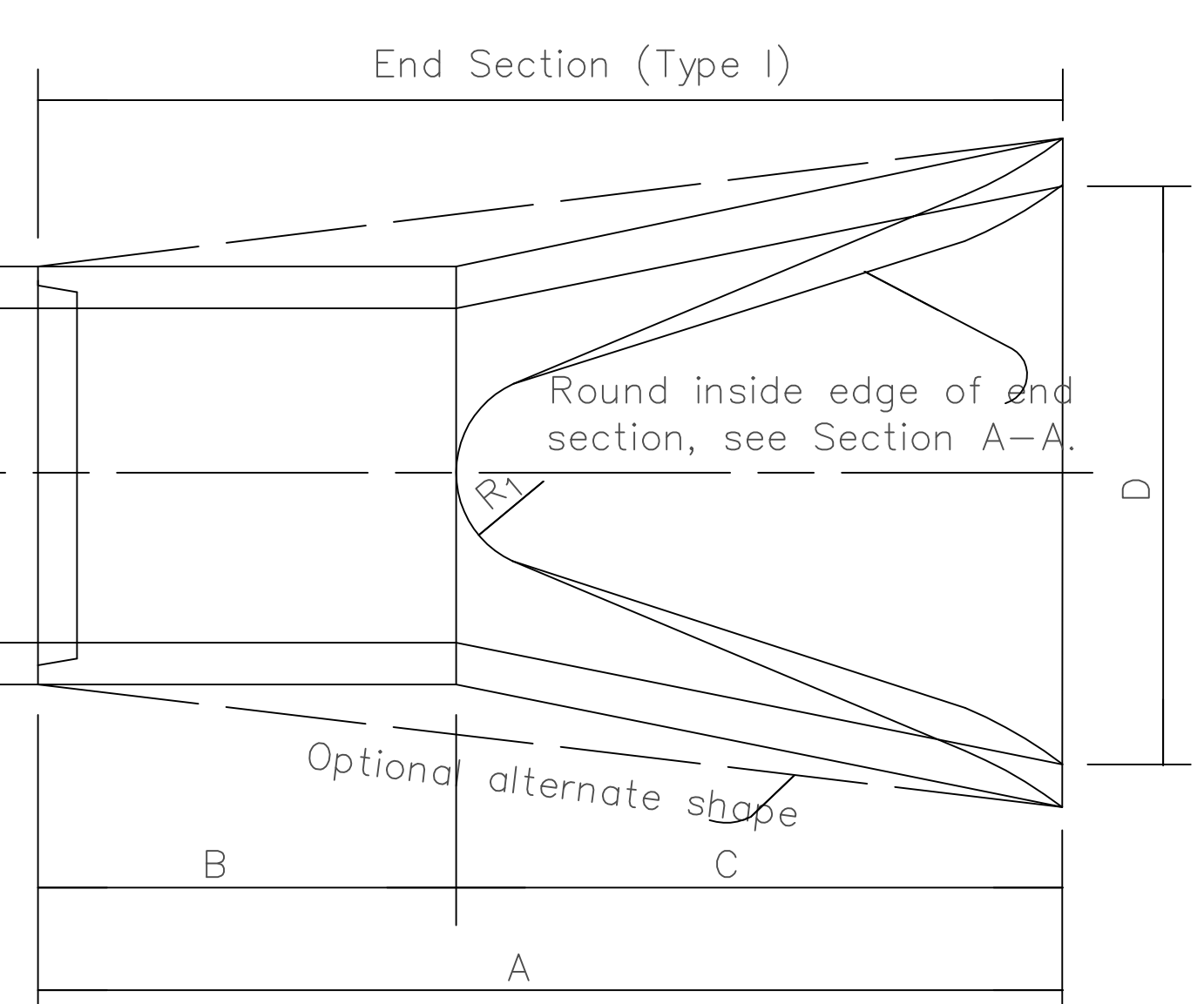
SIDE TAPERED INLET SECTION (TYPE III)-NOMINAL DIMENSIONS

Diam.	Min. W.W. Area Sq.Ft.	F	G	H	I	J	K	R	T
24"	4.5	4'-3"	2'-3"	1'-5 1/8"	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 7/8"	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.



Note: Gain in length due to joint fit tolerance will not be paid for.



PIPE CULVERT SUMMARY

Station	Location	Type	Size	Crown Grade Elev.	Flow line		Horizontal Roadway		Degree of Rotation	Length of Pipe		Lin.Ft. of Pipe	End Sections			
					LT.	RT.	LT.	RT.		LT.	RT.		Type I	Type III		
York+0+35.00	CL	2-RCP's	12"	1308.53	1306.04	1306.28	15.5'	15.5'	-	25'	25'	100'	2	2		
37th+10+32.00	CL	RCP	15"	1306.32	1303.99	1303.78	15'	15'	-	22.1'	20.9'	43	1	1		

OUTLET END
Note: The culverts listed on this sheet may or may not indicate that the culvert installed will be rein-forced concrete, steel, or aluminum.

NO.	DATE	REVISIONS	BY	APP'D

KANSAS DEPARTMENT OF TRANSPORTATION
CONCRETE END SECTIONS FOR CONCRETE PIPES TYPE I & SIDE TAPERED INLET SECTION (TYPE III)
RD662

DESIGNED	1-6-92	APP'D	James O. Brewer
DETAIL CK.		QUANTITIES	TRACED BOWSER
DESIGN CK.		QUAN.CK.	TRACE CK. SEITZ