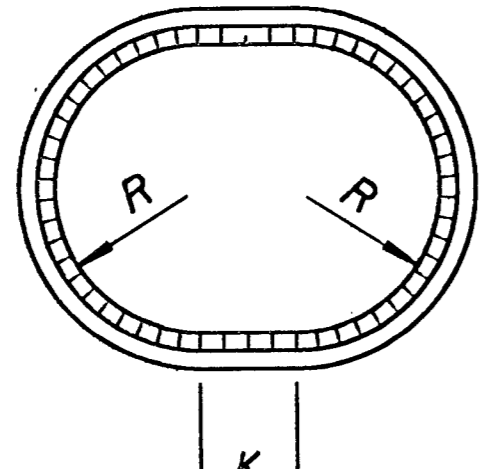
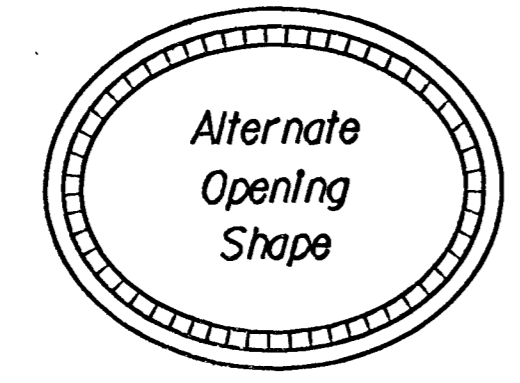
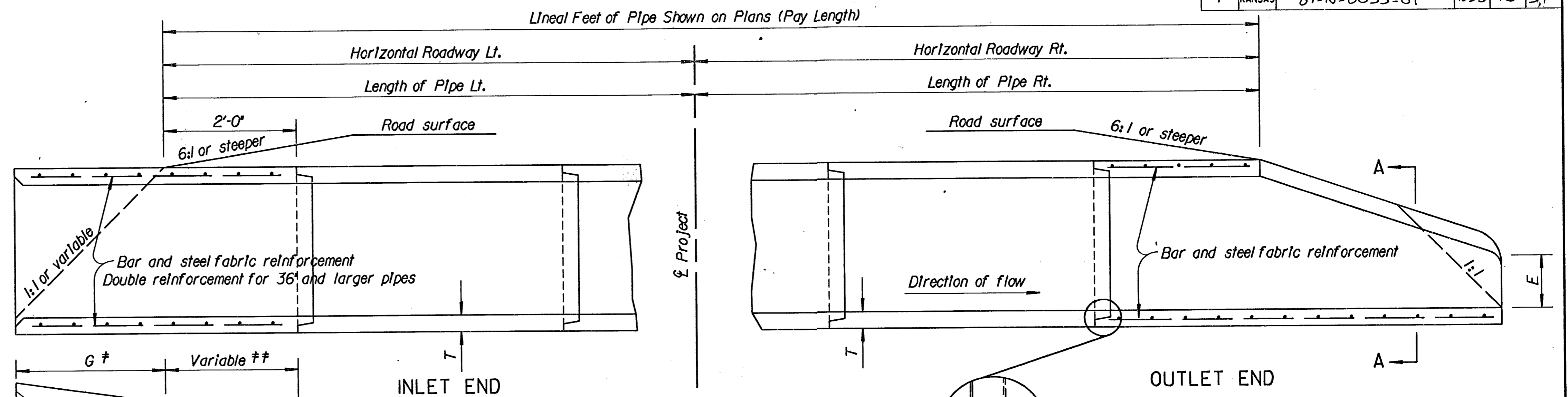
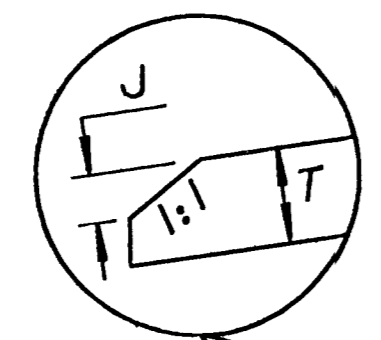


END ELEVATION (TYPE I)

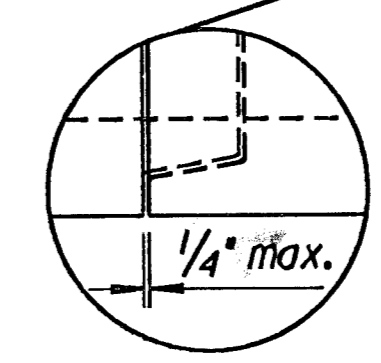


SECTION A-A
Showing rounding of inside edge of end section.

END ELEVATION (TYPE III)



ELEVATION SECTION



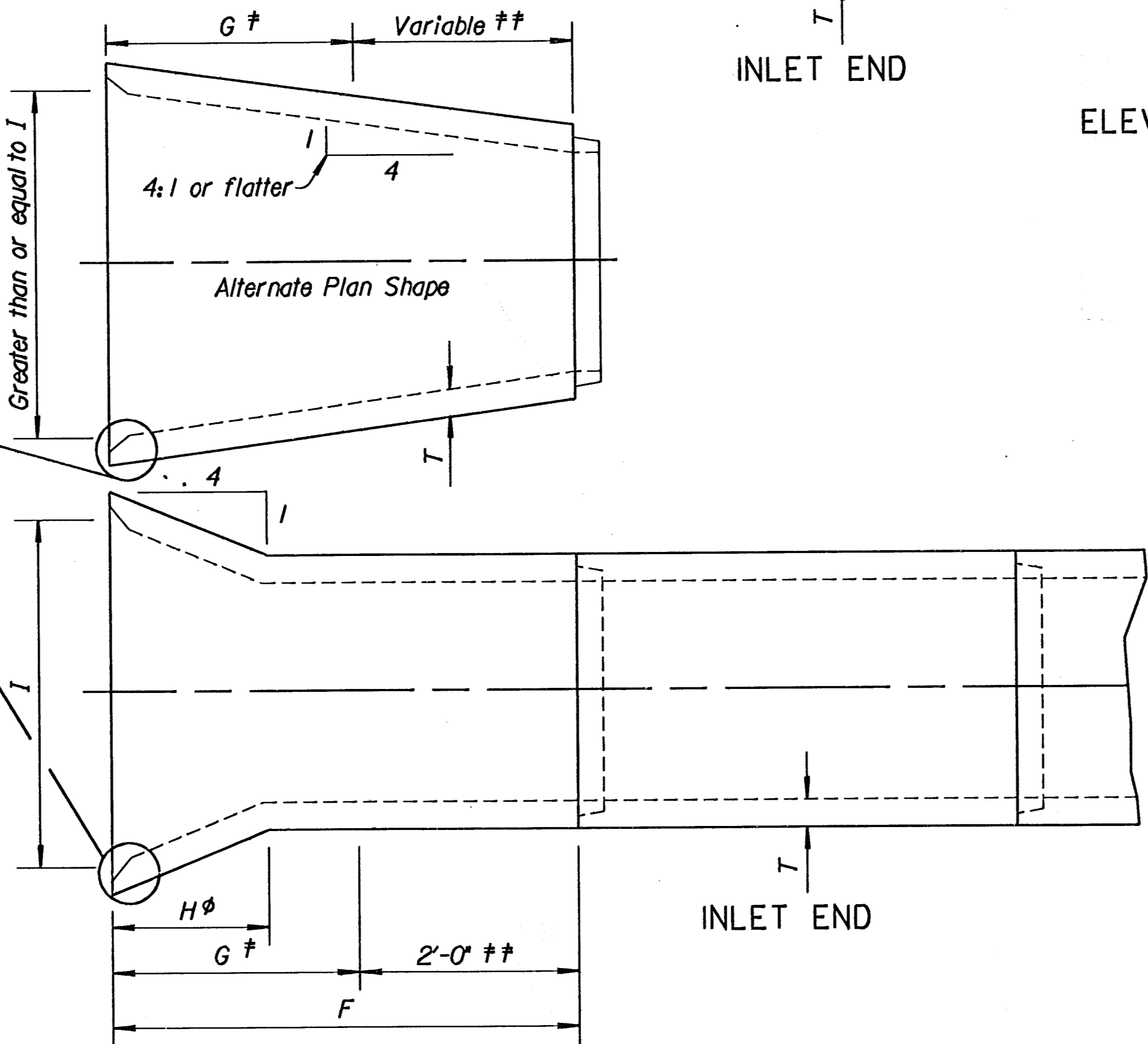
Note: Gain in length due to joint fit tolerance will not be paid for.

- φ 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 big item. *Drainage Structure No.
- †† Included in pay length of pipe.
- * Minimum waterway area is calculated at the inside of the bevel.

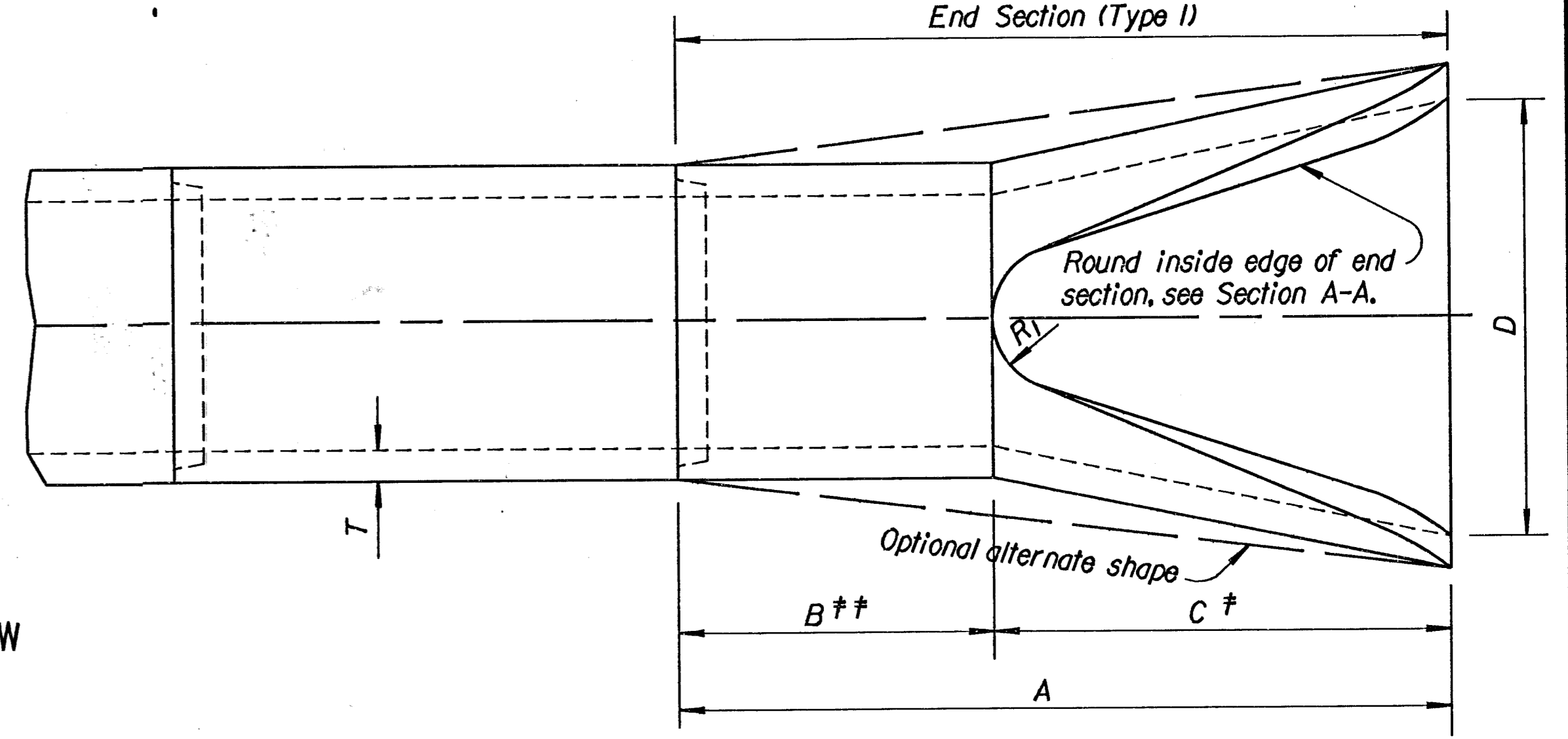
Diam.	A	B††	C†	D	E	R ₁	Slope	T
12"	6'-0 1/8"	4'-0 1/8"	2'-0"	2'-0"	4"	9	3:1	2"
15"	6'-1"	3'-10"	2'-3"	2'-6"	6"	11	3:1	2 1/4"
18"	6'-1"	3'-10"	2'-3"	3'-0"	9"	12	3:1	2 1/2"
24"	6'-1 1/2"	2'-6"	3'-7 1/2"	4'-0"	9 1/2"	14	3:1	3"
30"	6'-1 3/4"	1'-7 3/4"	4'-6"	5'-0"	1'-0"	15	3:1	3 1/2"
36"	8'-1 3/4"	2'-10 3/4"	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"

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 1/8"	6'-8"	4"	1'-8"	2'-6"	6"
72"	40.3	8'-7"	6'-7"	4'-3 5/8"	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.



PLAN VIEW



OUTLET END

Station	Location	Type	Size	Crown Grade Elev.	Flow line		Horizontal Roadway		Degree of Rotation	Length of Pipe		Lin. Ft. of Pipe		End Sects.	
					LT.	RT.	LT.	RT.		LT.	RT.	LT.	RT.	LT.	RT.
					SEE SCHEDULE ON SHEET 16										

Note: The culverts listed on this sheet may or may not indicate that the culvert installed will be reinforced 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)
STD. NO. 662

DESIGNED	QUANTITIES	TRACED
DESIGN CK.	DETAIL CK.	TRACE CK.

1-6-92 APP'D JAMES O. BREWER
 TRACED BOWSER
 TRACE CK. SEITZ