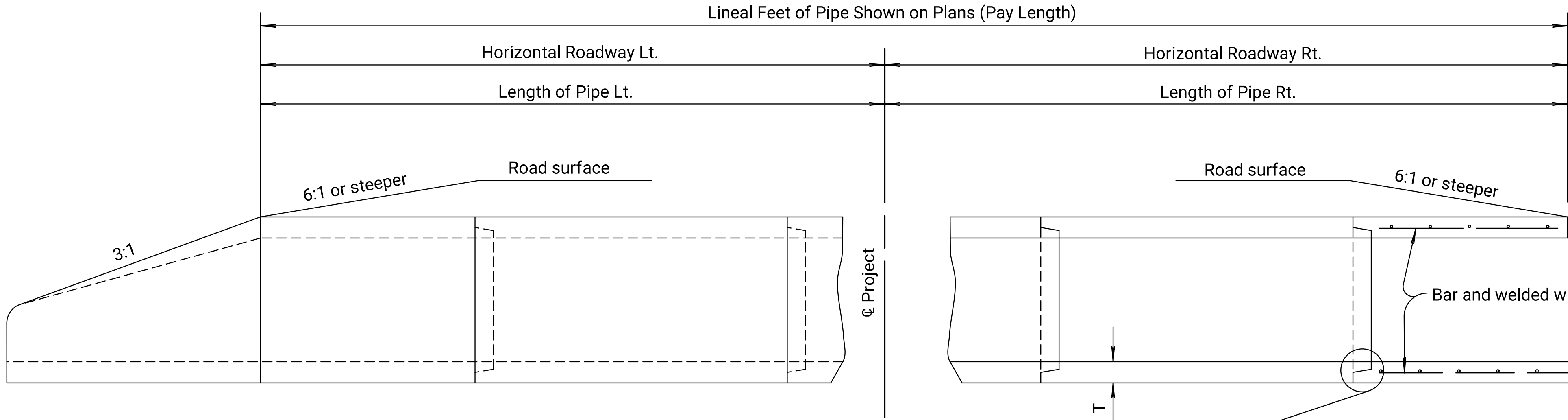
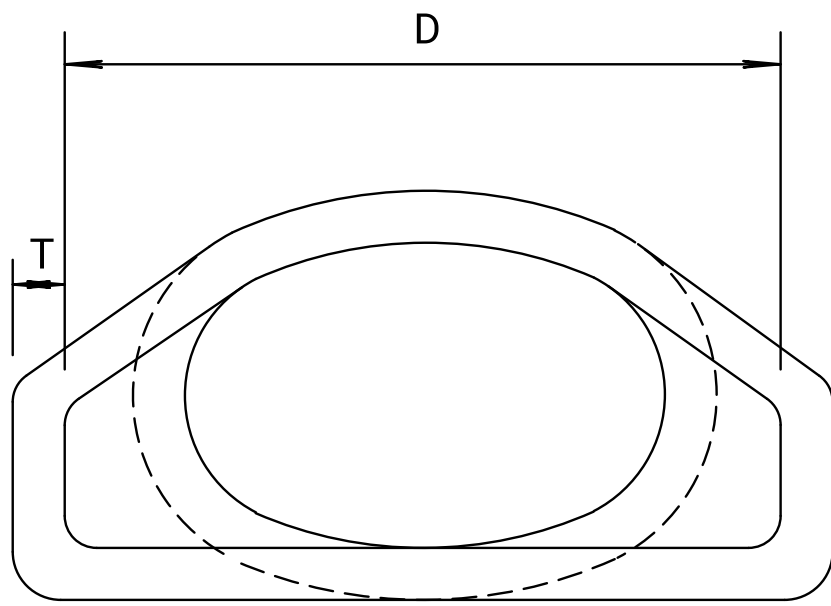


Note to Designer: KDOT Pipe Policy provides guidance in identifying the prohibited and/or restricted uses of CSP, ACSP, PEP, PVCP, CAP & RCP. Provide end sections of the same type and coating as the pipe. Exceptions to this are noted in the Standard Specifications. Refer to the KDOT Design Manual, Volume I (Part C), Road Section, "Elements of Drainage & Culvert Design" for structural pipe design information which includes: corrugations, sizes, gauges, maximum/minimum fill heights and classes of pipe.

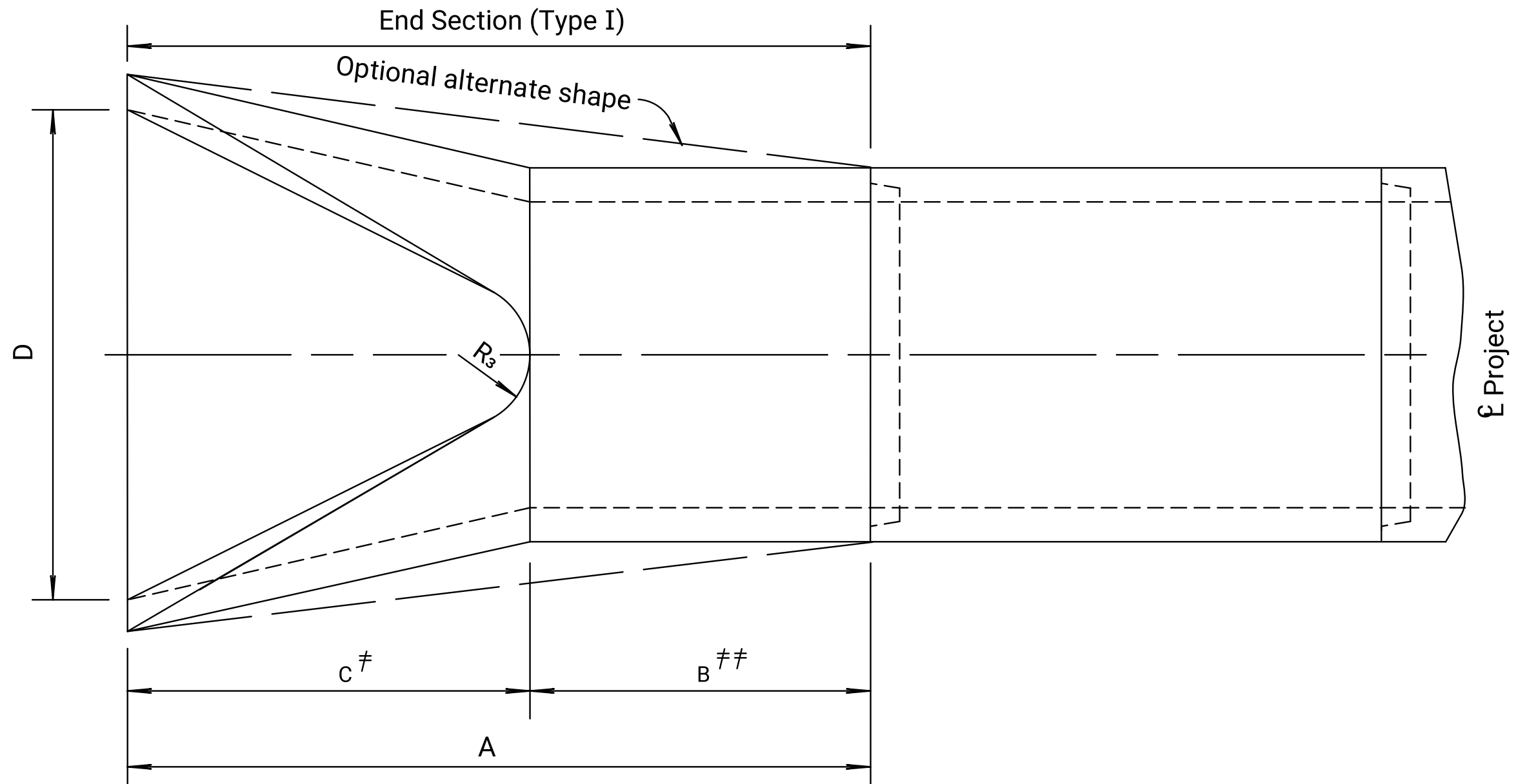
STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS		0	0	



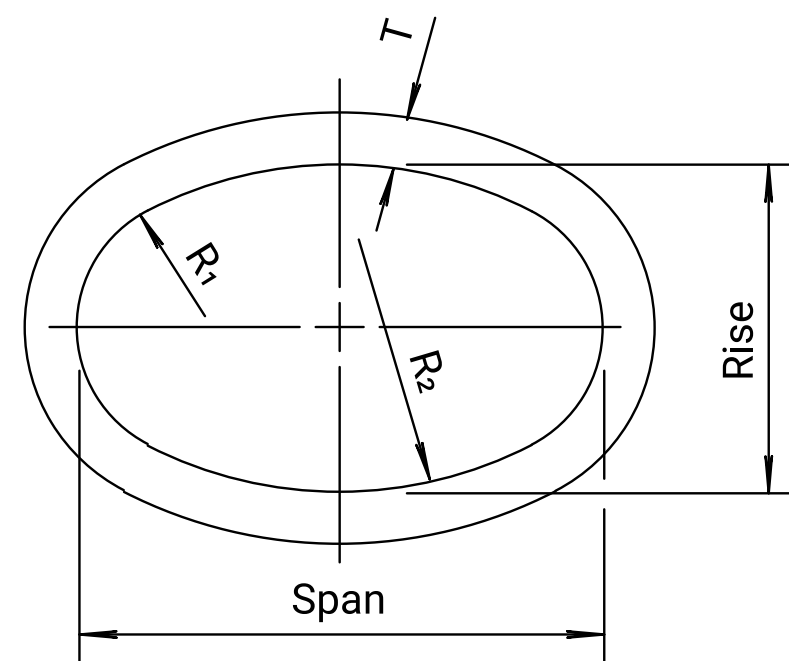
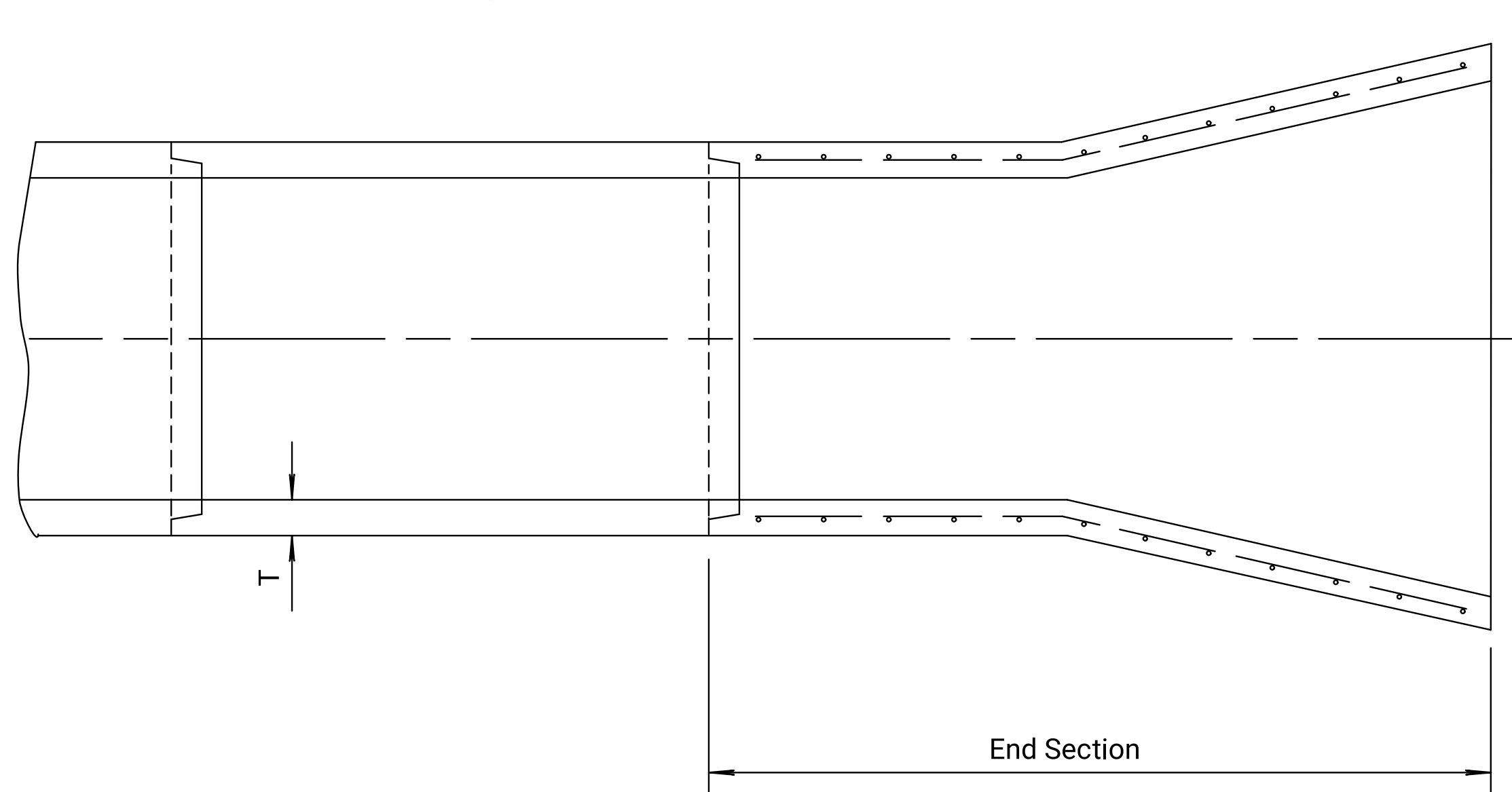
ELEVATION AND SECTION



FLARED END SECTION ELEVATION



PLAN AND SECTION



END ELEVATION

END SECTION (TYPE I) NOMINAL DIMENSIONS													
Bid Designation Sq. Ft.	Equiv. Dia. (in.)	Min. W.W. Area Sq. Ft.	Span	Rise	Overall Length	Barrel Length	C [#]	D	E	R ₁	R ₂	R ₃	T
					A	B [#] / _#							
1.0 or 1.5	18"	1.8	23"	14"	6'-0"	3'-9"	2'-3"	3'-0"	8"	6"	20"	6"	2¾"
2.0, 2.5 or 3.0	24"	3.3	30"	19"	6'-0"	2'-9"	3'-3"	4'-0"	8½"	8¼"	26¼"	7"	3¼"
4.0	27"	4.1	34"	22"	6'-0"	2'-2"	3'-10"	4'-6"	9"	9¼"	29 ¹⁷ / ₃₂ "	8"	3½"
5.0	30"	5.1	38"	24"	6'-0"	1'-6"	4'-6"	5'-0"	9½"	10¼"	32¾"	9"	3¾"
6.0	33"	6.3	42"	27"	6'-0"	1'-3"	4'-9"	5'-6"	10⅜"	11 ⁷ / ₁₆ "	36 ³ / ₁₆ "	10½"	3¾"
7.0	36"	7.4	45"	29"	8'-0"	3'-0"	5'-0"	6'-0"	11¼"	12¼"	39¼"	12"	4½"
8.5	39"	8.8	49"	32"	8'-0"	3'-0"	5'-0"	6'-3"	12"	13 ⁹ / ₁₆ "	42 ²¹ / ₃₂ "	12½"	4¾"
10.0	42"	10.2	53"	34"	8'-0"	3'-0"	5'-0"	6'-6"	15¾"	14¾"	46"	13"	5"
11.0 or 12.5	48"	12.9	60"	38"	8'-0"	3'-0"	5'-0"	7'-0"	21"	16½"	51¾"	14"	5½"
14.0 or 16.5	54"	16.6	68"	43"	8'-0"	3'-0"	5'-0"	7'-6"	25½"	18 ² / ₃₂ "	58 ¹³ / ₃₂ "	16"	6"

[#] Paid for as separate item of "End Sections".

^{##} Included in pay length of pipe.

Design of end section shall conform to standard reinforced concrete horizontal elliptical pipe. Slight variations in the dimensions specified will be allowed.

Note: Reinforced concrete pipe extensions are based on the surveyed end of pipe. Replacement of any additional pipe length required due to the removal of the existing end section will not be paid for directly, but will be subsidiary to the bid item "Removal of Existing Structures".

04	05-17-13	Added Note, Pipe Extensions Subsidiary	S.W.K.	J.O.B.
03	04-18-08	Added ref. to KDOT Pipe Policy	S.W.K.	J.O.B.
02	04-06-05	Revised reinforcement callout	S.W.K.	J.O.B.
NO.	DATE	REVISIONS	BY	APPD
KANSAS DEPARTMENT OF TRANSPORTATION				
CONCRETE END SECTION FOR REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE TYPE I				
RD663				
FHWA APPROVAL 09-04-14 APPD. Jame O. Brewer				
DESIGNED	DETAILED	QUANTITIES	TRACED	
DESIGN CK.	DETAIL CK.	QUAN. CK.	TRACE CK.	