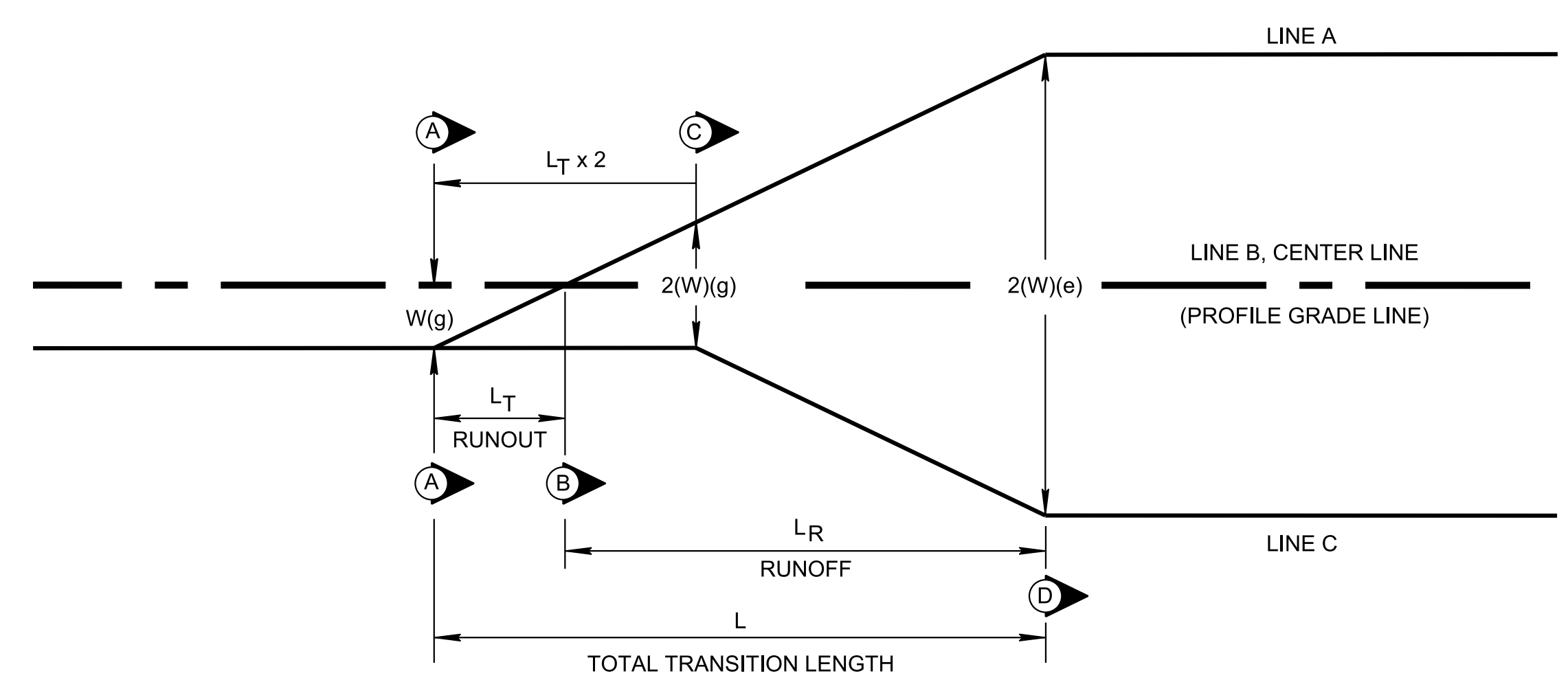
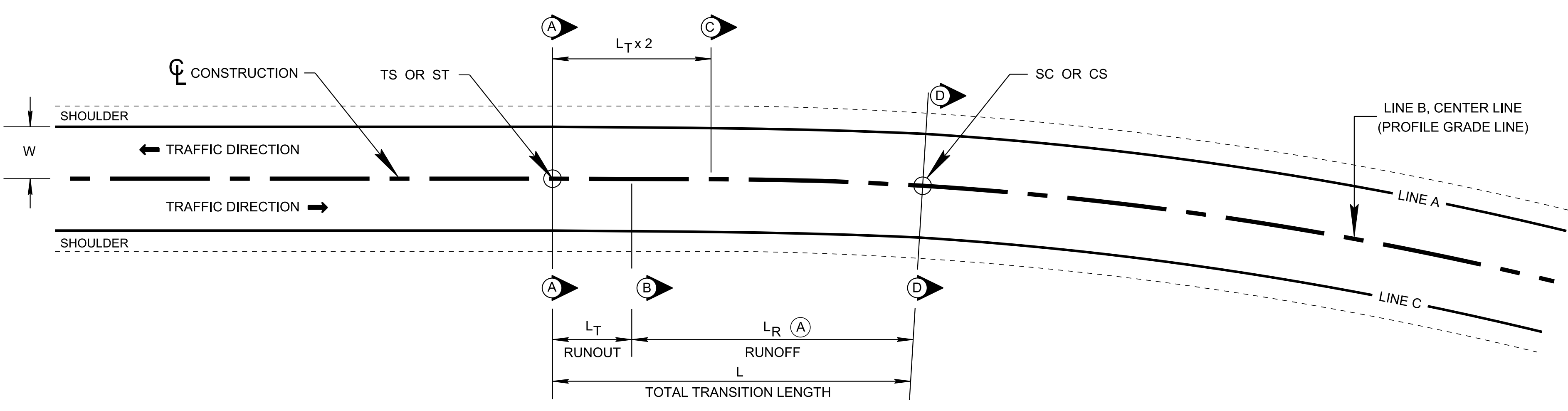


**TRANSITION DETAILS - TANGENT TO CURVE**



**DIAGRAMMATIC PROFILES OF THE PAVEMENT EDGE LINES**  
SEE STANDARD DRAWING RD11-SE-2A FOR ADDITIONAL DETAILS



**TRANSITION DETAILS - SPIRAL CURVE**

LEGEND	
PC	= POINT OF CURVATURE
PT	= POINT OF TANGENCY
TS	= TANGENT TO SPIRAL
ST	= SPIRAL TO TANGENT
SC	= SPIRAL TO CURVE
CS	= CURVE TO SPIRAL
⊙	= SECTION VIEW (SEE RD11-SE-2A)
L	= TOTAL TRANSITION LENGTH = DISTANCE REQUIRED TO TRANSITION FROM NORMAL CROWN (2%) TO FULL SUPERELEVATION (e). INCLUDES SUPERELEVATION RUNOFF ( $L_R$ ) AND TANGENT RUNOUT ( $L_T$ ) LENGTH.
$\frac{1}{2}L$	= 50% OF TOTAL TRANSITION LENGTH (L)
W	= LANE WIDTH (1 LANE) (TABLES ASSUME 12FT LANES)
g	= NORMAL CROSS SLOPE (0.02 FT/FT)
$L_R$	= DISTANCE TO CHANGE CROSS SLOPE FROM 0% TO e
e	= SUPERELEVATION RATE (FT/FT)
$L_T$	= DISTANCE TO CHANGE CROSS SLOPE FROM -2% TO 0%
S	= NORMAL SHOULDER SLOPE

DESIGN NOTES	
(A)	SPIRAL CURVE LENGTH COINCIDES WITH TOTAL TRANSITION LENGTH.
(B)	$\frac{1}{2}$ OF TOTAL TRANSITION LENGTH UNLESS SHOWN OTHERWISE ON PLANS.

GENERAL NOTES	
①	REFER TO SPECIFIC CURVE DATA CONTAINED IN PROJECT PLANS FOR TOTAL TRANSITION LENGTH (L) AND FULL SUPERELEVATION (e).
②	WHEN SPIRAL CURVES ARE REQUIRED, THE TOTAL TRANSITION LENGTH (L) WILL BE PLACED WITHIN THE SPIRAL. WHEN SPIRAL CURVE TRANSITIONS ARE NOT REQUIRED, 50% OF THE TOTAL TRANSITION LENGTH TO BE PLACED EQUALLY ON EITHER SIDE OF THE PC AND PT UNLESS OTHERWISE SHOWN ON THE PLANS.
③	UNLESS OTHERWISE SPECIFIED, ALL LENGTHS ARE MEASURED ALONG THE CENTERLINE OF CONSTRUCTION.
④	SUPERELEVATION ON THIS STANDARD ARE SHOWN FOR CURVES TO THE RIGHT. CURVES TO THE LEFT ARE MIRROR IMAGE OF WHAT IS SHOWN.
⑤	AXIS OF ROTATION COINCIDES WITH PROFILE GRADE LOCATION.
⑥	THIS DRAWING IS TO BE USED IN CONJUNCTION WITH STANDARD DRAWING RD11-SE-2A AND RD11-LR SERIES.
⑦	USE FORMULAS ON STANDARD DRAWING RD11-SE-1 TO DETERMINE TOTAL TRANSITION LENGTH (L).

STATE OF TENNESSEE  
STANDARD DRAWING  
DEPARTMENT OF TRANSPORTATION

**SUPERELEVATION  
TRANSITION  
DETAILS FOR  
UNDIVIDED  
ROADWAYS**

1/31/2019 3:04:53 PM C:\Users\jj00547\Desktop\3 RD11 Typical Sections and Design Criteria\RD11SE2-20190101.dgn