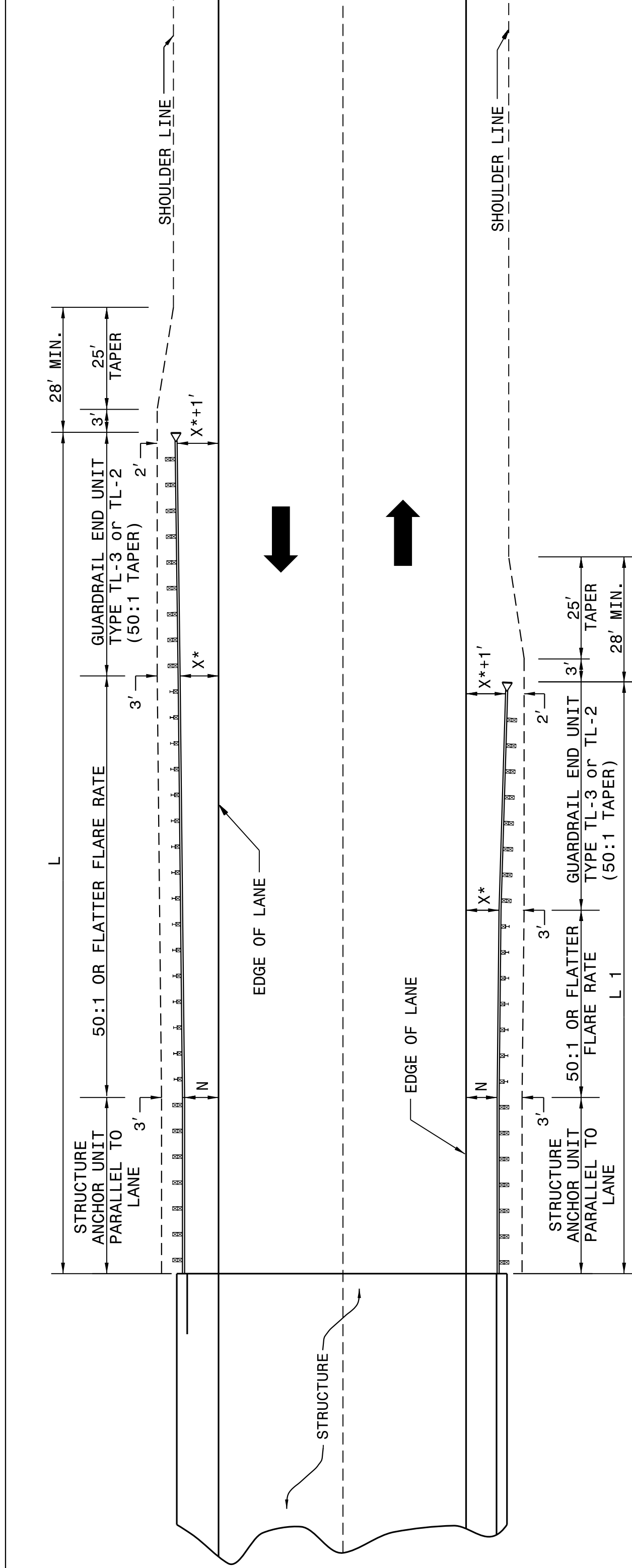


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ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

SHEET 4 OF 11
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ROADWAY DETAIL DRAWING FOR
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**GUARDRAIL INSTALLATION AT BRIDGE APPROACHES
FOR TWO-LANE, TWO-WAY TRAFFIC**

DESIGN SPEED (MPH)	"L" APPROACH LENGTH (FT.)			"L1" TRAILING LENGTH (FT.)		
	OVER 2000	1001-2000	400-1000	DESIGN YEAR ADT OVER 2000	CURRENT YEAR ADT 1001-2000	TRAILING LENGTH (FT.) UNDER 400
70	362.5'	362.5'	350.0'	187.5'	175.0'	75.0'
60	300.0'	287.5'	275.0'	137.5'	100.0'	75.0'
50	212.5'	212.5'	200.0'	87.5'	75.0'	75.0'
40	175.0'	150.0'	137.5'	75.0'	75.0'	75.0'
X*	8'	6'	4'	8'	6'	4'

* USE FLARE RATE AS THE CONTROL IF THE "X" DISTANCE IS NOT OBTAINED. ("X" IS BASED ON SHOULDER WIDTHS IN THE HIGHWAY DESIGN BRANCH MANUAL, PART 1, 1-4B, F1).

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE.

SEE STD. 862.03 FOR STRUCTURE ANCHOR UNITS

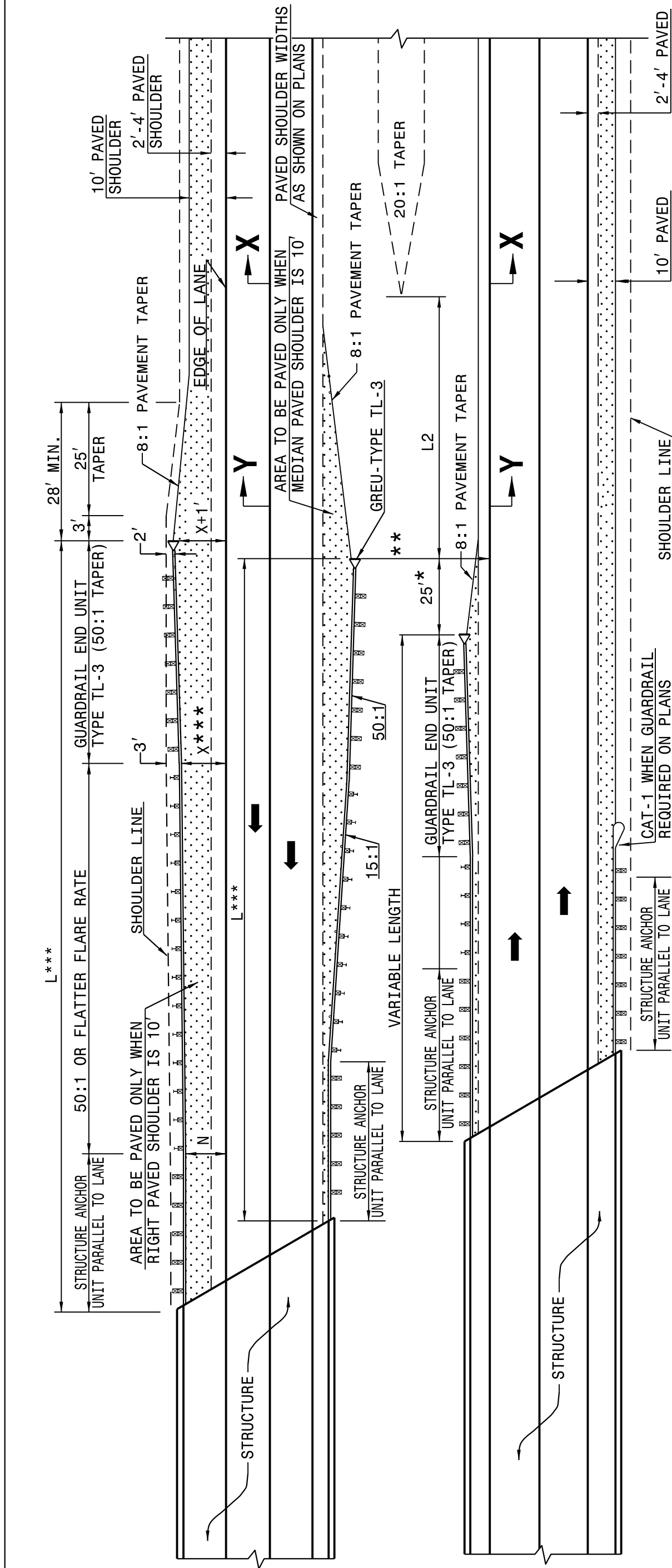
FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

LENGTHS AND OFFSETS FOR PROPOSED GUARDRAIL AT TWO LANE - TWO WAY LOCATIONS

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ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

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FOR POSTED SPEEDS ≥ 45mph USE GREU TYPE TL-3
FOR POSTED SPEEDS < 45mph USE GREU TYPE TL-2

DIMENSIONS FOR LENGTH OF GUARDRAIL APPROACHING DUAL LANE BRIDGES

MEDIAN WIDTH	-L-***		-L2- DIM.
	60 MPH	50 MPH	
30'	300.0'	250.0'	80.0'
36'	300.0'	250.0'	60.0'
40' & ABOVE	300.0'	250.0'	40.0'

NOTES: * MINOR VARIATION TO THE 25'-0" DIMENSION IS PERMISSIBLE TO ACCOMMODATE THE 12'-6" IN GUARDRAIL LENGTHS.

** NO GUARDRAIL IS REQUIRED ON THE TRAILING END WHEN THIS DISTANCE EXCEEDS CLEAR ROADSIDE RECOVERY AREA FOR THE APPROPRIATE DESIGN SPEED.

*** BASED ON "X" OF 12' USE FLARE RATE AS THE CONTROL IF THE "X" DISTANCE IS NOT OBTAINED. ("X" IS BASED ON SHOULDER WIDTHS IN THE HIGHWAY DESIGN BRANCH MANUAL, PART 1, 1-4B, F1A).

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL WHERE GUARDRAIL IS PARALLEL TO LANE. THE DESIGN LAYOUT FOR LENGTHS SHOWN ON THIS STANDARD ARE MINIMUM DESIGN LENGTHS.

SEE SHEET 1 OF 12 FOR SECTIONS XX, YY
SEE STD. 862.03 FOR STRUCTURE ANCHOR UNITS

DETAIL OF GUARDRAIL APPROACHING DUAL LANE BRIDGES

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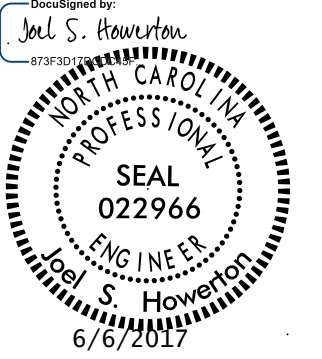
ROADWAY DETAIL DRAWING FOR
GUARDRAIL PLACEMENT

SHEET 3 OF 11
862D01

CONTRACT STANDARDS
AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

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