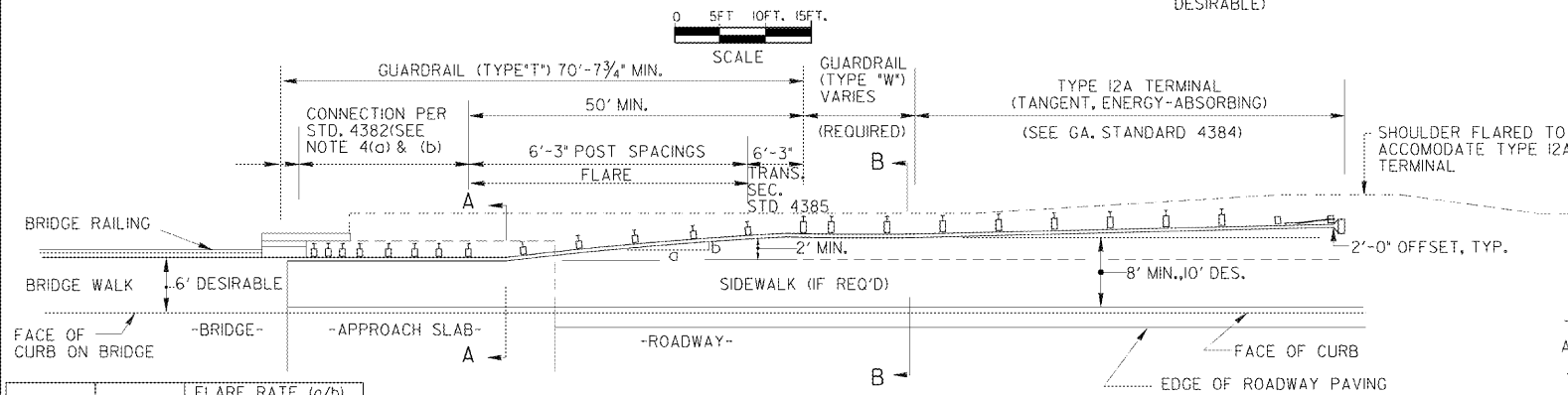


GUARDRAIL LOCATION AT BRIDGE WITH SIDEWALK

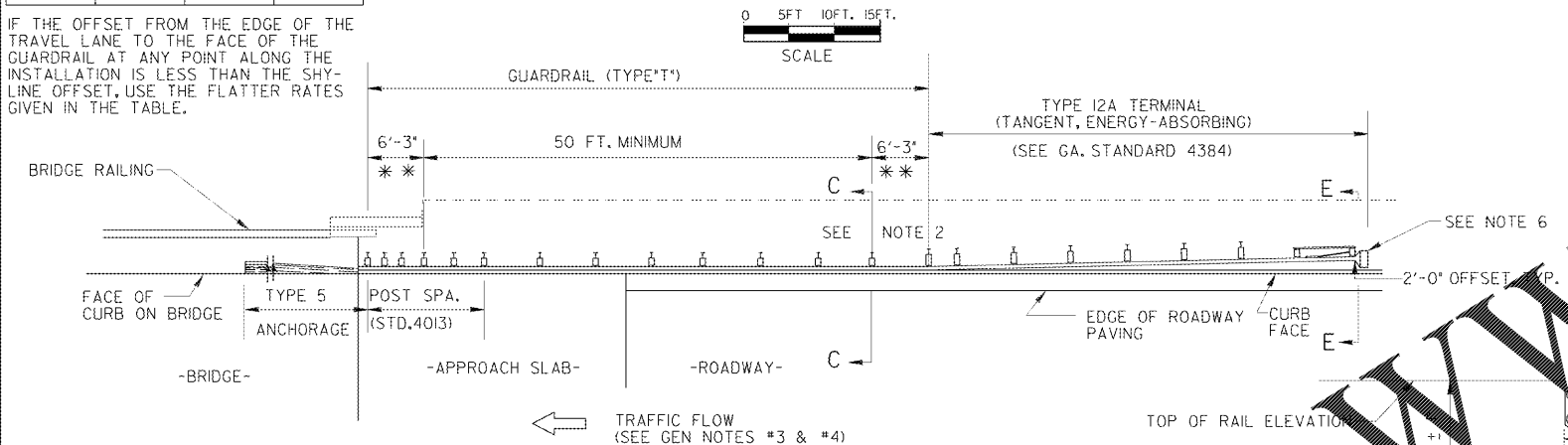
(6 FT. SIDEWALK ACROSS BRIDGE DESIRABLE)



DESIGN SPEED (mph)	SHY-LINE OFFSET (ft)	FLARE RATE (a/b)	BARRIER INSIDE SHY-LINE	BARRIER AT OR BEYOND SHY-LINE
70	9	30	15	
60	8	26	14	
55	7	24	12	
50	6.5	21	11	
45	6	18	10	
40	5	16	8	
30	4	13	7	

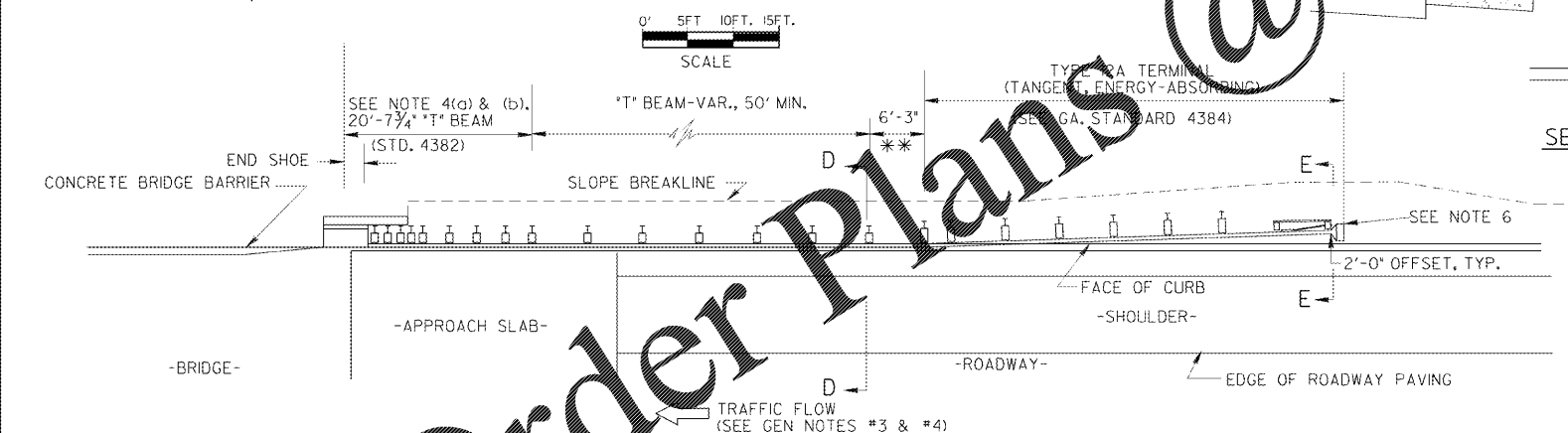
IF THE OFFSET FROM THE EDGE OF THE TRAVEL LANE TO THE FACE OF THE GUARDRAIL AT ANY POINT ALONG THE INSTALLATION IS LESS THAN THE SHY-LINE OFFSET, USE THE FLATTER RATES GIVEN IN THE TABLE.

GUARDRAIL LOCATION AT BRIDGE WITH NARROW WALK

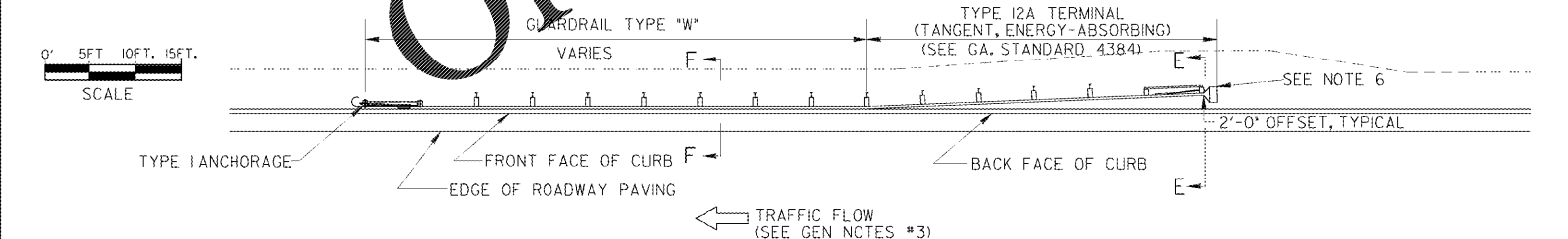


*SEE STD. 4385 FOR TRANSITION PIECE BETWEEN 'T'-BEAM AND ANCHORAGES, WHERE REQUIRED.

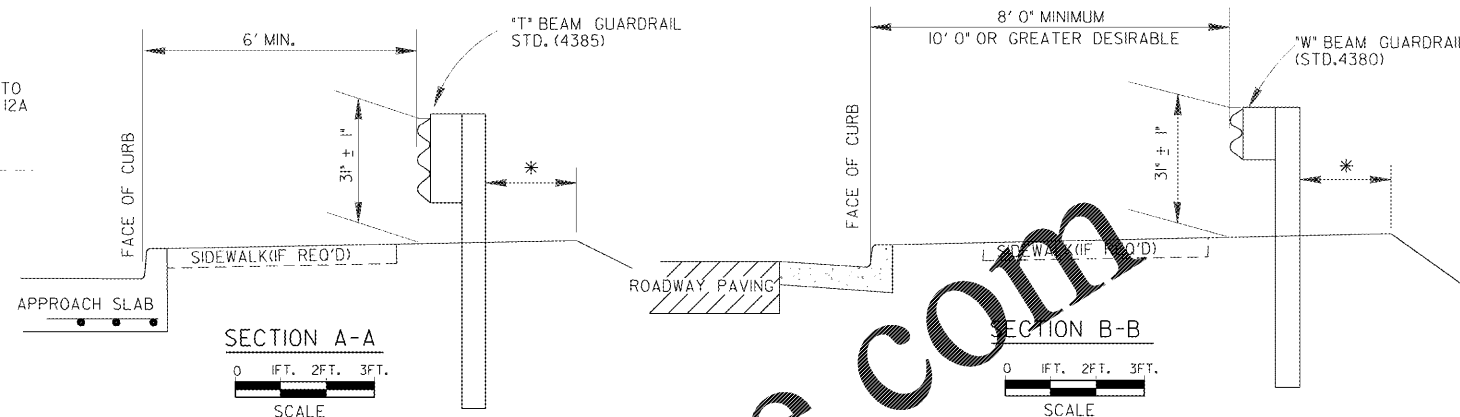
GUARDRAIL LOCATION SHOULDER ACROSS BRIDGE



GUARDRAIL LOCATION BACK OF CURB

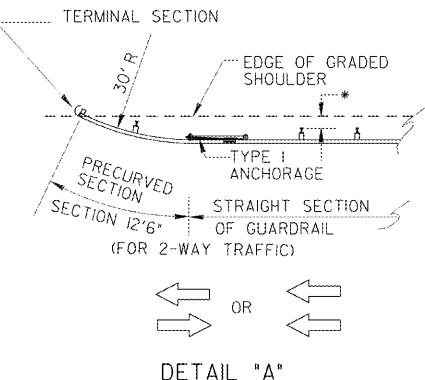
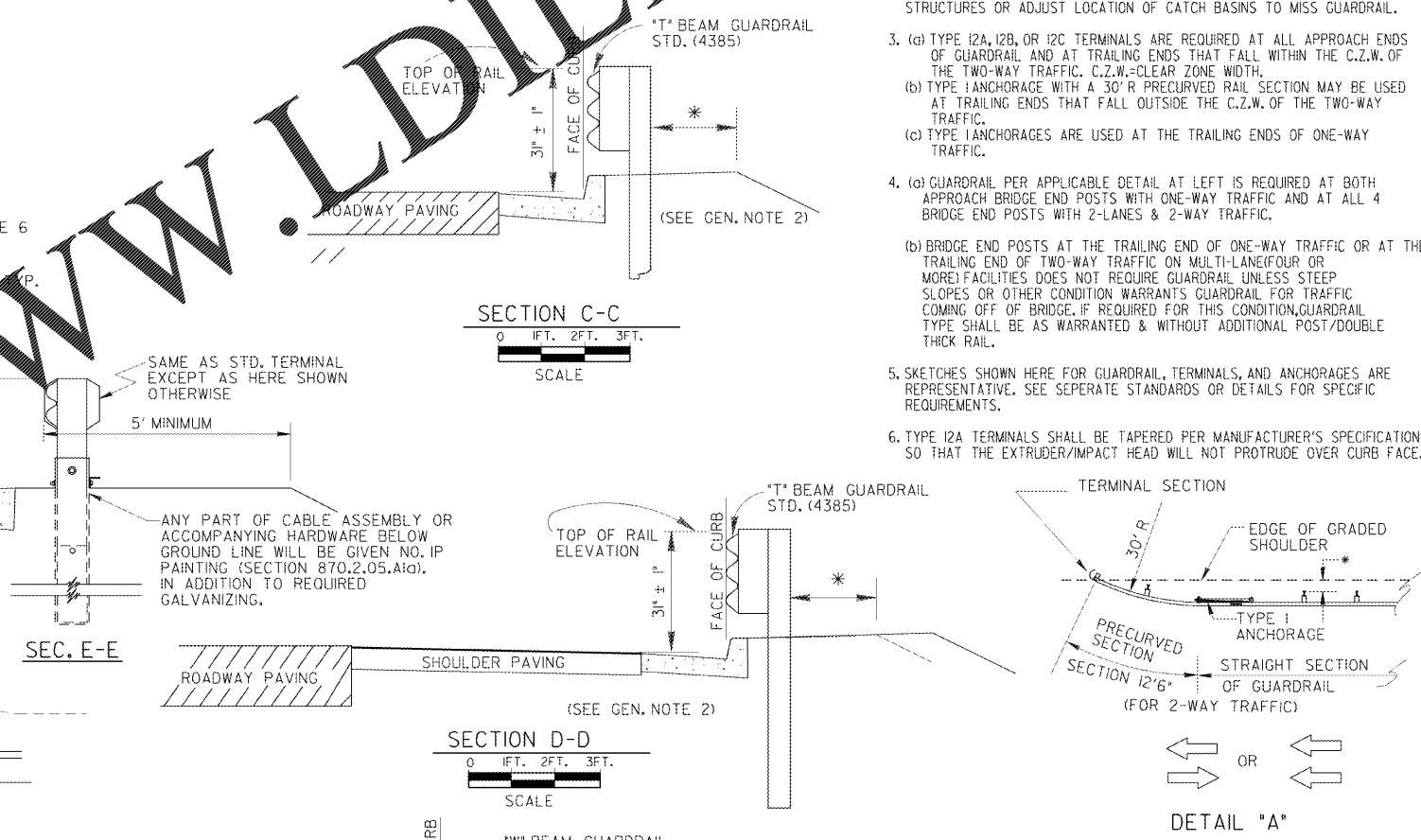


NOTE: APPLICATION OF ABOVE DETAILS IS TYPICAL FOR URBAN TYPE FACILITIES WITH CONTINUOUS CONCRETE CURB & GUTTER ADJACENT TO THE PAVEMENT. SEE SEPARATE DETAILS WHERE SECTIONS OF ASPHALT CURB ARE LOCATED UNDER GUARDRAIL ON SHOULDERS OF RURAL TYPE FACILITIES.



* DISTANCE FROM BACK OF POST TO EDGE OF GRADED SHOULDER SHALL NOT BE LESS THAN 2 FEET WITH NORMAL LENGTH POST AND NOT LESS THAN 1 FOOT WITH ADDITIONAL LENGTH POST (STD. 4381)

- GENERAL NOTES:
- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
 - IF GUARDRAIL IS DIRECTLY ABOVE CURB, DO NOT USE STD. 1033D, 1033G, 1034D, 1034C CATCH BASINS AT SAME LOCATION, EITHER USE OTHER DRAINAGE STRUCTURES OR ADJUST LOCATION OF CATCH BASINS TO MISS GUARDRAIL.
 - (a) TYPE I2A, I2B, OR I2C TERMINALS ARE REQUIRED AT ALL APPROACH ENDS OF GUARDRAIL AND AT TRAILING ENDS THAT FALL WITHIN THE C.Z.W. OF THE TWO-WAY TRAFFIC. C.Z.W.=CLEAR ZONE WIDTH.
(b) TYPE I ANCHORAGE WITH A 30' R PRECURVED RAIL SECTION MAY BE USED AT TRAILING ENDS THAT FALL OUTSIDE THE C.Z.W. OF THE TWO-WAY TRAFFIC.
(c) TYPE I ANCHORAGES ARE USED AT THE TRAILING ENDS OF ONE-WAY TRAFFIC.
 - (a) GUARDRAIL PER APPLICABLE DETAIL AT LEFT IS REQUIRED AT BOTH APPROACH BRIDGE END POSTS WITH ONE-WAY TRAFFIC AND AT ALL 4 BRIDGE END POSTS WITH 2-LANES & 2-WAY TRAFFIC.
(b) BRIDGE END POSTS AT THE TRAILING END OF ONE-WAY TRAFFIC OR AT THE TRAILING END OF TWO-WAY TRAFFIC ON MULTI-LANE (FOUR OR MORE) FACILITIES DOES NOT REQUIRE GUARDRAIL UNLESS STEEP SLOPES OR OTHER CONDITION WARRANTS GUARDRAIL FOR TRAFFIC COMING OFF OF BRIDGE. IF REQUIRED FOR THIS CONDITION, GUARDRAIL TYPE SHALL BE AS WARRANTED & WITHOUT ADDITIONAL POST/DOUBLE THICK RAIL.
 - SKETCHES SHOWN HERE FOR GUARDRAIL, TERMINALS, AND ANCHORAGES ARE REPRESENTATIVE. SEE SEPARATE STANDARDS OR DETAILS FOR SPECIFIC REQUIREMENTS.
 - TYPE I2A TERMINALS SHALL BE TAPERED PER MANUFACTURER'S SPECIFICATIONS SO THAT THE EXTRUDER/IMPACT HEAD WILL NOT PROTRUDE OVER CURB FACE.



SPECIAL NOTE: LOCATION AND QUANTITIES GIVEN IN THE PLANS FOR GUARDRAIL, TERMINALS, AND ANCHORAGES ARE ESTIMATES MADE FROM OFFICE COMPUTATIONS. A FINAL DETERMINATION AS TO LOCATIONS AND QUANTITIES OF GUARDRAIL, TERMINALS, AND ANCHORAGES WILL BE MADE BY THE ENGINEER OR A REPRESENTATIVE FROM THE OFFICE OF TRAFFIC OPERATIONS AFTER CONSTRUCTION OF ROADWAY AND CURB. THIS APPLIES TO ALL CONDITIONS SHOWN ON THIS STANDARD.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
GUARDRAIL LOCATION
(ON ROADS WITH CURB & GUTTER, HEADER CURB OR INTEGRAL CURB)
31 INCH GUARDRAIL HEIGHT

SCALE AS SHOWN
AUGUST 2011

DES. G.L.O. (SUBMITTED)	DATE	NUMBER
DRW. G.L.O.	1-29-16	4391
CHK. B.R.E. (APPROVED)		
REVIEW B.A.S.		

STATE DESIGN POLICY ENGINEER
MARGARET B. PUKLO
CHIEF ENGINEER