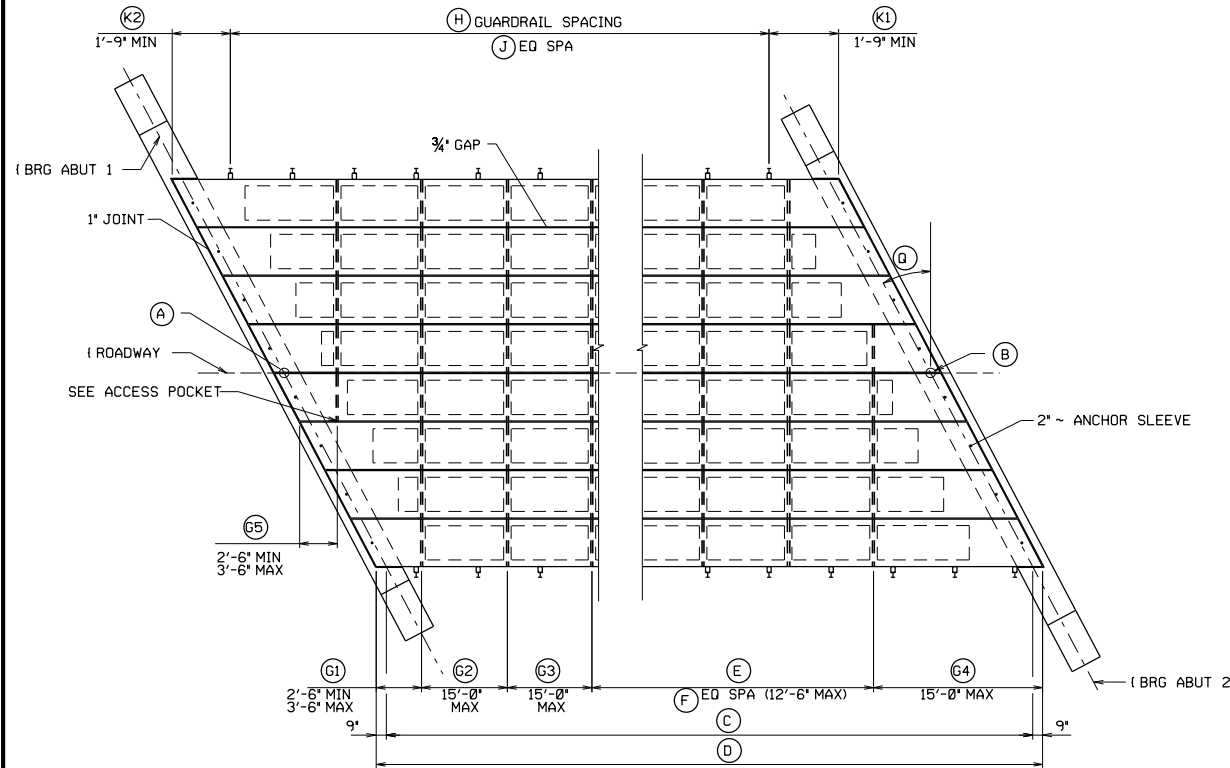
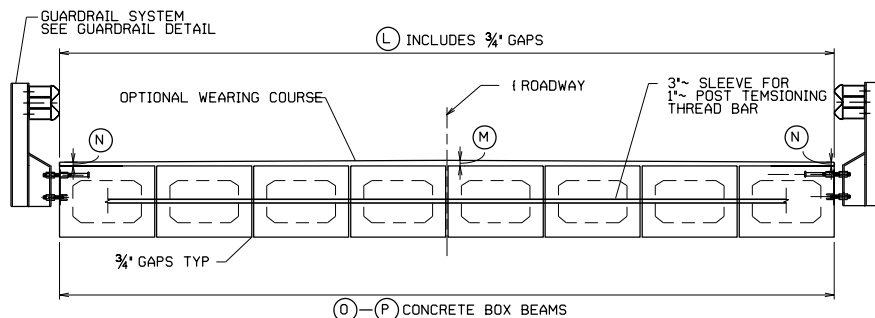




PLAN



TYPICAL CROSS-SECTION WITH GUARDRAIL

CONCRETE ADJACENT BOX BEAM CONTROL POINTS		
CODE	DESCRIPTION	DIMENSION
A	WP STA	
B	WP STA	
C	BEARING TO BEARING LENGTH	
D	OVERALL BEAM LENGTH	
E	LENGTH POST TENSION SLEEVE SPACING (12'-6")	
F	NUMBER OF EQUAL SPACING P.T. SLEEVE (12'-6")	
G1	LENGTH FROM END OF BEAM TO FIRST SLEEVE	
G2	LENGTH BETWEEN FIRST SLEEVE AND SECOND	
G3	LENGTH BETWEEN SECOND AND THIRD SLEEVE	
G4	LENGTH FROM LAST SLEEVE TO END OF BEAM	
G5	LENGTH FROM ACCESS POCKET TO END OF BEAM	
H	OVERALL LENGTH OF GUARDRAIL AT 6'-3" SPACING	
J	NUMBER OF EQUAL SPACING GUARDRAIL INSERTS	
K1	DISTANCE FROM END OF BEAM TO FIRST INSERT	
K2	DISTANCE FROM LAST INSERT TO END OF BEAM	
L	OVERALL WIDTH (INCLUDES 3/4" GAP)	
M	THICKNESS OF WEARING AT CENTERLINE	
N	THICKNESS OF WEARING AT EDGE OF DECK	
O	NUMBER OF BEAMS	
P	BEAM SIZE (WIDTH x DEPTH)	
Q	SKEW ANGLE	

GROUT STRENGTH TABLE		
	3 DAY (PSI)	7 DAY (PSI)
PRE-TEST STRENGTH		
JOB CONTROL STRENGTH		
GROUT TYPE & MANUFACTURER		

POST-TENSIONING BAR LENGTH		
BAR	FORMULA	LENGTH
VIEVENI	$\frac{1}{2} \cdot 3'$	
Z	$\frac{1}{4} \cdot 3'$	
V(ODD)	$\frac{1}{2} \cdot 4'-6"$	

ELONGATION (INCHES)												
BAR	CODE	CALC.	MEASURED									
			NO. 1	NO. 2	NO. 3	NO. 4	NO. 5	NO. 6	NO. 7	NO. 8	NO.	NO.
Z	ⓐ											
V	ⓑ											

CALCULATED ⓐ = WFTJ / 24.8
 CALCULATED ⓑ = WFTJ / 99.2
 ODD NO. BEAMS
 CALCULATED ⓐ = (WFTJ + 3) / 99.2

FINAL POST-TENSIONING FORCE
 TYPE Z BARS = 80 KIPS
 TYPE V BARS = 40 KIPS

NOTE:

FABRICATOR TO MAINTAIN
 MINIMUM 1'-0" CLEARANCE
 BETWEEN 1 POST TENSION
 BAR AND 1 GUARDRAIL INSERT
 GUARDRAIL INSERT SPACING
 3'-1 1/2" CENTER TO CENTER

CHECK GUARDRAIL INSERT AND POST TENSION SLEEVE OVERLAP																	
LOCATION FROM END OF BEAM	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
GUARDRAIL INSERT LOCATION																	
POST TENSIONING SLEEVE LOCATION																	

NO SLEEVE ORDINATE SHOULD BE WITHIN 1'-0" OF GUARDRAIL INSERT

IT SHOULD BE VERIFIED BY THE DESIGNER THAT THERE IS NO CONFLICT BETWEEN
 THE GUARDRAIL INSERT, POST TENSIONING SLEEVE AND ANY SUBSTRUCTURE UNIT

NOT TO SCALE

NO.	REVISION	DATE	BY										

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

DESIGNED CON	DATE	CHECKED	DATE
DRAWN	DATE	REVIEWED	DATE

STANDARD BRIDGE PLANS
**CONCRETE ADJACENT
 BOX BEAM RF SKEW**
 SHEET NUMBER 3000ER2