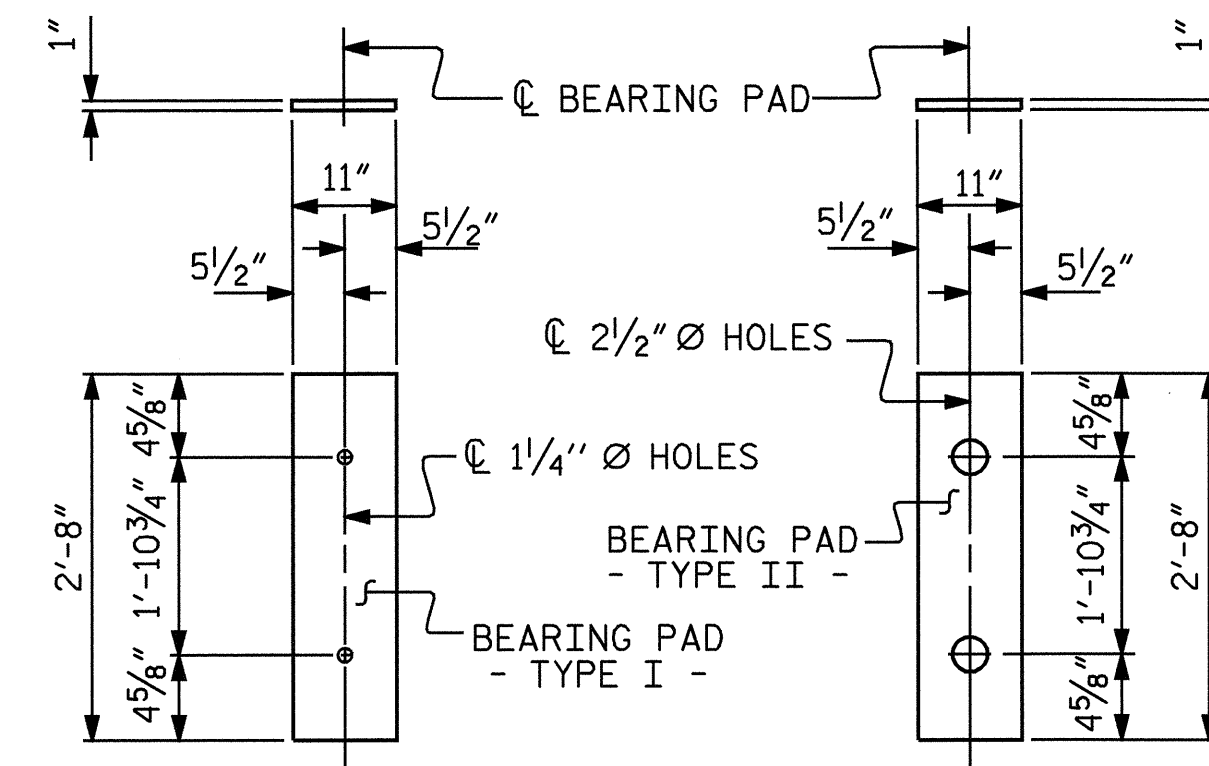


CONCRETE WEARING SURFACE PLAN



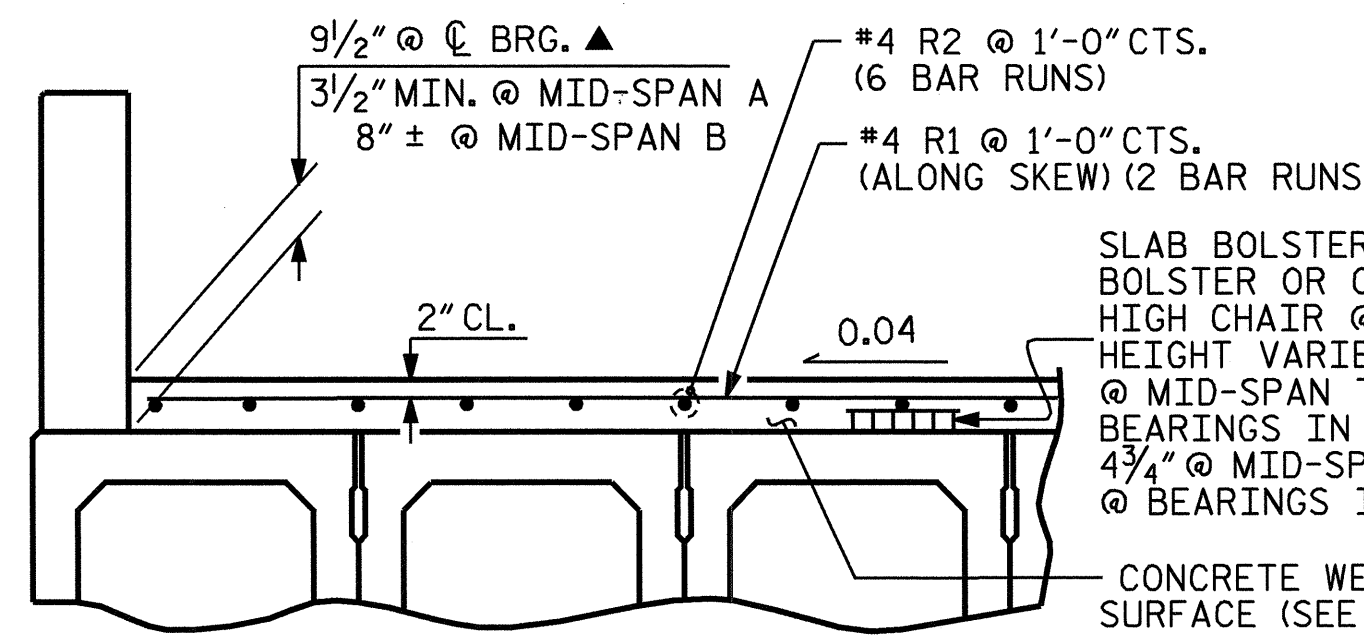
ELASTOMERIC BEARING DETAILS

ELASTOMER IN ALL BEARINGS SHALL BE 60 DUROMETER HARDNESS.

SPLICE LENGTH CHART	
BAR SIZE	EPOXY COATED
#4	2'-0"
#5	3'-5"

GROOVING BRIDGE FLOORS	
APPROACH SLABS	1580 SQ.FT.
BRIDGE DECK	4856 SQ.FT.
TOTAL	6436 SQ.FT.

BILL OF MATERIAL FOR CONCRETE WEARING SURFACE					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*R1	296	# 4	STR	19'-9"	3905
*R2	222	# 4	STR	26'-0"	3856
*R3	36	# 4	STR	28'-0"	673
*EPOXY COATED REINFORCING STEEL LBS.					8434
CONCRETE WEARING SURFACE				SQ.FT.	5390.0



REINFORCING FOR CONCRETE WEARING SURFACE

▲BASED ON PREDICTED CAMBER

BOX BEAM UNITS REQUIRED							
3'-0" x 3'-3" BOX BEAMS	NUMBER	LENGTH	TOTAL LENGTH	3'-0" x 2'-3" BOX BEAMS	NUMBER	LENGTH	TOTAL LENGTH
SPAN A INT.	11	103'-9 1/4"	1141'-5 3/4"	SPAN B INT.	11	43'-9 1/4"	481'-5 3/4"
EXT.	2	103'-9 1/4"	207'-6 1/2"	EXT.	2	43'-9 1/4"	87'-6 1/2"
TOTAL	13		1349.02 FT.	TOTAL	13		569.02 FT.

DEAD LOAD DEFLECTION AND CAMBER												
0.6" Ø LOW RELAXATION STRAND												
SPAN A EXTERIOR AND INTERIOR BOX BEAM												
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (BOX BEAM ALONE IN PLACE)	↑	0.0	0.106	0.201	0.275	0.323	0.339	0.323	0.275	0.201	0.106	0.0
DEFLECTION DUE TO CONC. WEARING SURFACE	↓	0.0	0.032	0.060	0.082	0.096	0.101	0.096	0.082	0.060	0.032	0.0
FINAL CAMBER	↑	0.0	1/8"	1 1/16"	2 5/16"	2 3/4"	2 1/8"	2 3/4"	2 5/16"	1 1/16"	1/8"	0.0

ALL VALUE ARE SHOWN IN FEET, EXCEPT "FINAL CAMBER" WHICH IS SHOWN IN INCHES.

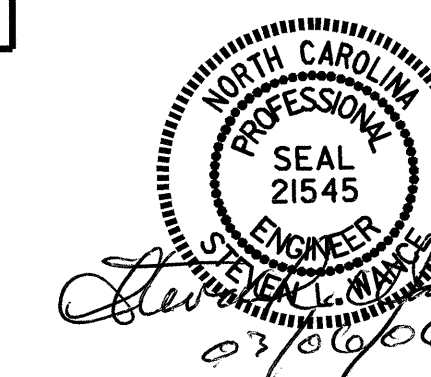
DEAD LOAD DEFLECTION AND CAMBER												
0.6" Ø LOW RELAXATION STRAND												
SPAN B EXTERIOR AND INTERIOR BOX BEAM												
TENTH POINTS	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	0	
CAMBER (BOX BEAM ALONE IN PLACE)	↑	0.0	0.025	0.047	0.064	0.075	0.079	0.075	0.064	0.047	0.025	0.0
DEFLECTION DUE TO CONC. WEARING SURFACE	↓	0.0	0.003	0.006	0.009	0.010	0.011	0.010	0.009	0.006	0.003	0.0
FINAL CAMBER	↑	0.0	1/4"	1/2"	11/16"	13/16"	13/16"	13/16"	11/16"	1/2"	1/4"	0.0

ALL VALUE ARE SHOWN IN FEET, EXCEPT "FINAL CAMBER" WHICH IS SHOWN IN INCHES.

BILL OF MATERIAL FOR PARAPET & END POSTS							
BAR	SPAN A	SPAN B	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
*B3	40		40	# 5	STR	53'-6"	2232
*B4		20	20	# 5	STR	43'-6"	907
*E1	4	4	8	# 7	STR	3'-3"	53
*E2	4	4	8	# 7	STR	3'-9"	61
*E3	4	4	8	# 7	STR	4'-3"	69
*E4	4	4	8	# 7	STR	4'-9"	78
*E5	4	4	8	# 7	STR	5'-1"	83
*F1	4	4	8	# 6	STR	1'-10"	22
*F2	2	2	4	# 6	STR	3'-5"	21
*F3	2	2	4	# 6	STR	3'-10"	23
*F4	2	2	4	# 6	STR	3'-3"	20
*F5	2	2	4	# 6	STR	3'-8"	22
*EPOXY COATED REINFORCING STEEL						LBS.	3591
CLASS AA CONCRETE						CU.YDS.	42.9
TOTAL LIN. FT. OF CONCRETE PARAPET							295.33

PROJECT NO. B-4110
DURHAM COUNTY
 STATION: 17+41.66 -L-

SHEET 13 OF 13



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 DETAILS
 PRESTRESSED CONCRETE
 BOX BEAM UNIT

REVISIONS						TOTAL SHEETS
NO.	BY:	DATE:	NO.	BY:	DATE:	27
1			3			27
2			4			27

ASSEMBLED BY : SWAN@PE	DATE : 08/05
CHECKED BY : M.A. ALLEN	DATE : 11/05
DRAWN BY : TLA 5/05	ADDED 7/11/05R
CHECKED BY : GM 6/05	