

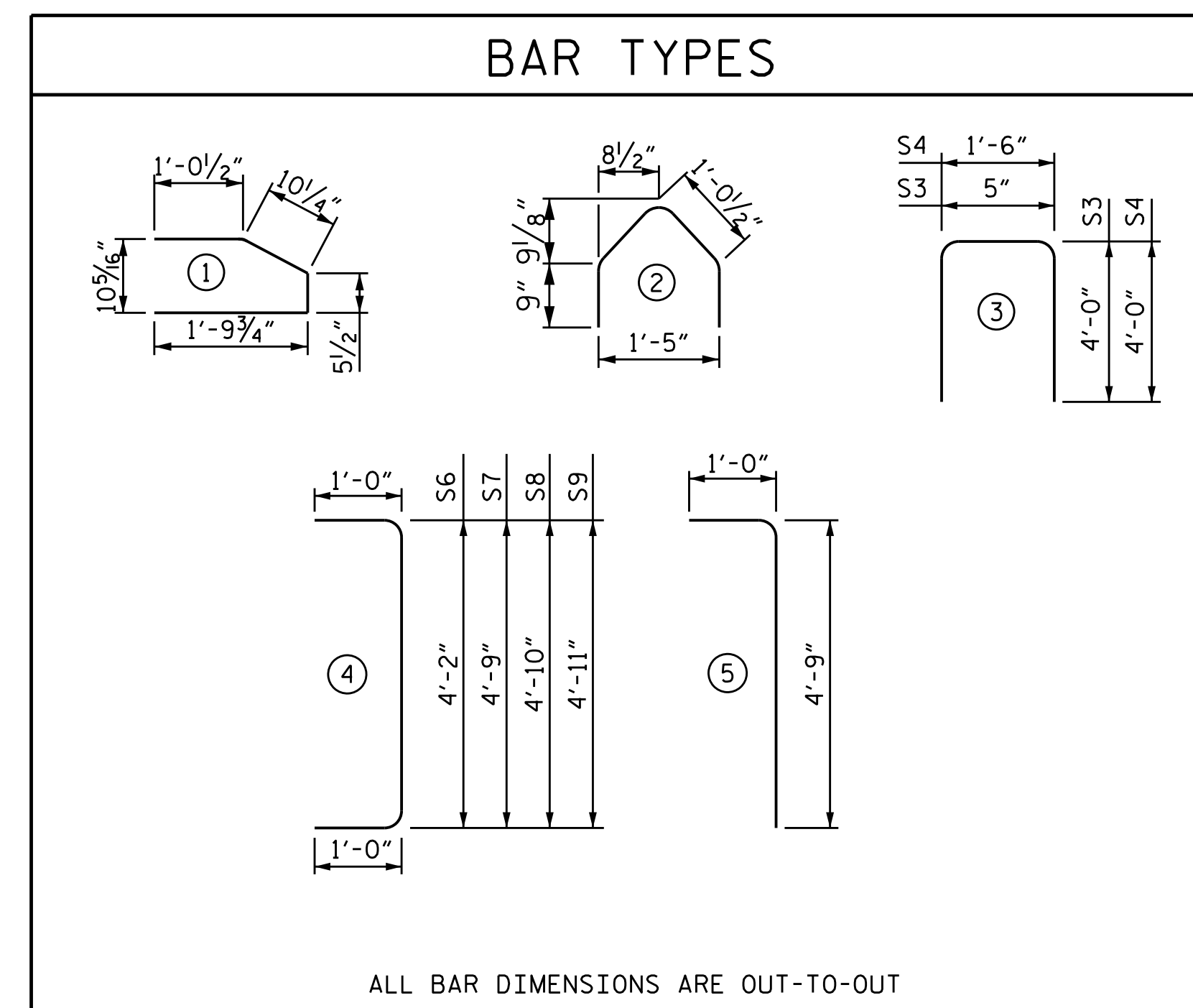
0.6" Ø CFRP STRANDS						
AREA	ULTIMATE STRENGTH	APPLIED PRESTRESS				
(SQUARE INCHES)	(LBS. PER STRAND)	(LBS. PER STRAND)				
0.179	60,749	42,524				
GFRP BARS FOR ONE GDR						
SPANS A & C						
BAR	NUMBER	SIZE	TYPE	LENGTH	LIN. FT.	
S1	88	#4	1	4'-2"	366'-8"	
S2	44	#4	2	3'-7"	157'-8"	
S3	10	#3	3	8'-5"	84'-2"	
S4	2	#3	3	9'-6"	19'-0"	
S5	135	#4	STR	3'-8"	495'-0"	
S6	238	#5	4	6'-2"	1467'-8"	
S8	48	#5	4	6'-10"	328'-0"	
S9	62	#5	4	6'-11"	428'-10"	
S10	134	#5	5	5'-9"	770'-6"	
QUANTITIES FOR ONE GIRDER						
TOTAL GFRP BARS LENGTH				0.6" Ø CFRP STRANDS		
LIN. FT.				No.		
4117.50'				44		
GIRDERS REQUIRED						
SPAN	NUMBER	LENGTH	TOTAL LENGTH			
A	4	VARIES	397.43'			
C	4	VARIES	399.36'			

0.6" Ø CFRP STRANDS						
AREA	ULTIMATE STRENGTH	APPLIED PRESTRESS				
(SQUARE INCHES)	(LBS. PER STRAND)	(LBS. PER STRAND)				
0.179	60,749	42,524				
GFRP BARS FOR ONE GDR						
SPAN B						
BAR	NUMBER	SIZE	TYPE	LENGTH	LIN. FT.	
S1	88	#4	1	4'-2"	366'-8"	
S2	44	#4	2	3'-7"	157'-8"	
S3	10	#3	3	8'-5"	84'-2"	
S4	2	#3	3	9'-6"	19'-0"	
S5	135	#4	STR	3'-8"	495'-0"	
S6	264	#5	4	6'-2"	1628'-0"	
S8	48	#5	4	6'-10"	328'-0"	
S9	36	#5	4	6'-11"	249'-0"	
S10	134	#5	5	5'-9"	770'-6"	
QUANTITIES FOR ONE GIRDER						
TOTAL GFRP BARS LENGTH				0.6" Ø CFRP STRANDS		
LIN. FT.				No.		
4098.00'				44		
GIRDERS REQUIRED						
NUMBER	LENGTH	TOTAL LENGTH				
4	VARIES	400.38'				

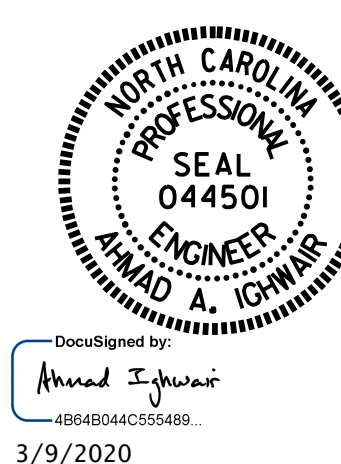
0.6" Ø CFRP STRANDS						
AREA	ULTIMATE STRENGTH	APPLIED PRESTRESS				
(SQUARE INCHES)	(LBS. PER STRAND)	(LBS. PER STRAND)				
0.179	60,749	42,524				
GFRP BARS FOR ONE GDR						
SPANS R, T, U, W, X, Z & AA						
BAR	NUMBER	SIZE	TYPE	LENGTH	LIN. FT.	
S1	88	#4	1	4'-2"	366'-8"	
S2	44	#4	2	3'-7"	157'-8"	
S3	10	#3	3	8'-5"	84'-2"	
S4	2	#3	3	9'-6"	19'-0"	
S5	135	#4	STR	3'-8"	495'-0"	
S6	238	#5	4	6'-2"	1467'-8"	
S7	48	#5	4	6'-9"	324'-0"	
S8	62	#5	4	6'-10"	423'-8"	
S10	134	#5	5	5'-9"	770'-6"	
QUANTITIES FOR ONE GIRDER						
TOTAL GFRP BARS LENGTH				0.6" Ø CFRP STRANDS		
LIN. FT.				No.		
4108.33'				44		
GIRDERS REQUIRED						
SPAN	NUMBER	LENGTH	TOTAL LENGTH			
R	4	VARIES	398.66'			
T	4	VARIES	398.66'			
U	4	VARIES	397.66'			
W	4	VARIES	398.66'			
X	4	VARIES	397.66'			
Z	4	VARIES	398.67'			
AA	4	VARIES	398.68'			

0.6" Ø CFRP STRANDS						
AREA	ULTIMATE STRENGTH	APPLIED PRESTRESS				
(SQUARE INCHES)	(LBS. PER STRAND)	(LBS. PER STRAND)				
0.179	60,749	42,524				
GFRP BARS FOR ONE GDR						
SPANS S, V, & Y						
BAR	NUMBER	SIZE	TYPE	LENGTH	LIN. FT.	
S1	88	#4	1	4'-2"	366'-8"	
S2	44	#4	2	3'-7"	157'-8"	
S3	10	#3	3	8'-5"	84'-2"	
S4	2	#3	3	9'-6"	19'-0"	
S5	135	#4	STR	3'-8"	495'-0"	
S6	264	#5	4	6'-2"	1628'-0"	
S7	48	#5	4	6'-9"	324'-0"	
S8	36	#5	4	6'-10"	246'-0"	
S10	134	#5	5	5'-9"	770'-6"	
QUANTITIES FOR ONE GIRDER						
TOTAL GFRP BARS LENGTH				0.6" Ø CFRP STRANDS		
LIN. FT.				No.		
4091.00'				44		
GIRDERS REQUIRED						
SPAN	NUMBER	LENGTH	TOTAL LENGTH			
S	4	VARIES	399.66'			
V	4	VARIES	398.66'			
Y	4	VARIES	398.67'			

0.6" Ø CFRP STRANDS						
AREA	ULTIMATE STRENGTH	APPLIED PRESTRESS				
(SQUARE INCHES)	(LBS. PER STRAND)	(LBS. PER STRAND)				
0.179	60,749	42,524				
GFRP BARS FOR ONE GDR						
SPAN BB						
BAR	NUMBER	SIZE	TYPE	LENGTH	LIN. FT.	
S1	88	#4	1	4'-2"	366'-8"	
S2	44	#4	2	3'-7"	157'-8"	
S3	10	#3	3	8'-5"	84'-2"	
S4	2	#3	3	9'-6"	19'-0"	
S5	134	#4	STR	3'-8"	491'-4"	
S6	238	#5	4	6'-2"	1467'-8"	
S7	48	#5	4	6'-9"	324'-0"	
S8	62	#5	4	6'-10"	423'-8"	
S10	132	#5	5	5'-9"	759'-0"	
QUANTITIES FOR ONE GIRDER						
TOTAL GFRP BARS LENGTH				0.6" Ø CFRP STRANDS		
LIN. FT.				No.		
4093.17'				44		
GIRDERS REQUIRED						
NUMBER	LENGTH	TOTAL LENGTH				
4	VARIES	396.83'				



PROJECT NO. B-4863  
CARTERET COUNTY  
 STATION: 34+75.00 -L-  
 SHEET 7 OF 17



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SUPERSTRUCTURE  
 54" CFRP F.I.B.  
 PRESTRESSED CONCRETE GIRDER  
 (GFRP STIRRUP OPTION)

DRAWN BY : B.N.BARODAWALA DATE : 01-20  
 CHECKED BY : A. A. IGHWAIR DATE : 01-20  
 DESIGN ENGINEER OF RECORD: A. A. IGHWAIR DATE : 01-20

DOCUMENT NOT CONSIDERED  
 FINAL UNLESS ALL  
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-084
1			3			TOTAL SHEETS
2			4			194