

NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2 1/2" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 2 1/2" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 1/2" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE B LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. THE 12" WIDE BOND BREAKING TAPE SHALL BE CENTERED OVER THE JOINT AND CONFORM TO THE REQUIREMENTS OF TYPE N BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED RELEASE STRENGTH. AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI.

ALL REINFORCING STEEL IN PARAPETS SHALL BE EPOXY COATED.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

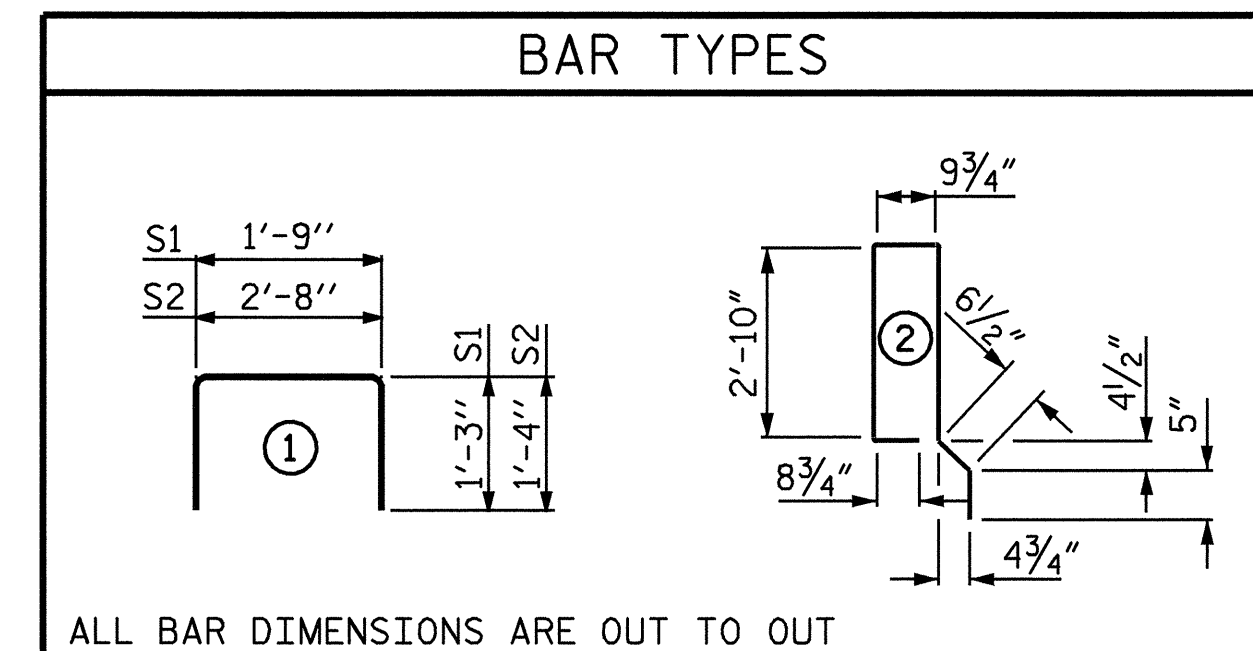
APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

FOR ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE CORED SLAB UNITS SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR. SEE SPECIAL PROVISION FOR CALCIUM NITRITE CORROSION INHIBITOR.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

BILL OF MATERIAL FOR ONE CORED SLAB SECTION SPAN "A", "B", "C", OR "D"															
				STAGE 1								STAGE 2			
				TYPE I UNIT		TYPE II UNIT		TYPE III UNIT		TYPE IV UNIT		TYPE V UNIT		TYPE VI UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	4	#4	STR	26'-0"	69	26'-0"	69	26'-0"	69	26'-0"	69	26'-0"	69	26'-0"	69
S1	8	#5	1	4'-3"	35	4'-3"	35	4'-3"	35	4'-3"	35	4'-3"	35	4'-3"	35
S2	98	#4	1	5'-4"	349	5'-4"	349	5'-4"	349	5'-4"	349	5'-4"	349	5'-4"	349
*S3	51	#5	2	8'-2"	434	8'-2"	434	8'-2"	434	8'-2"	434	8'-2"	434	8'-2"	434
REINFORCING STEEL			LBS.		453		382		382		382		382		453
*EPOXY COATED REINFORCING STEEL			LBS.		434										434
5,000 P.S.I. CONCRETE			CU. YDS.		7.0		7.0		8.4		7.0		6.9		7.0
1/2" Ø L.R. STRANDS			No.		22		22		25		22		22		22

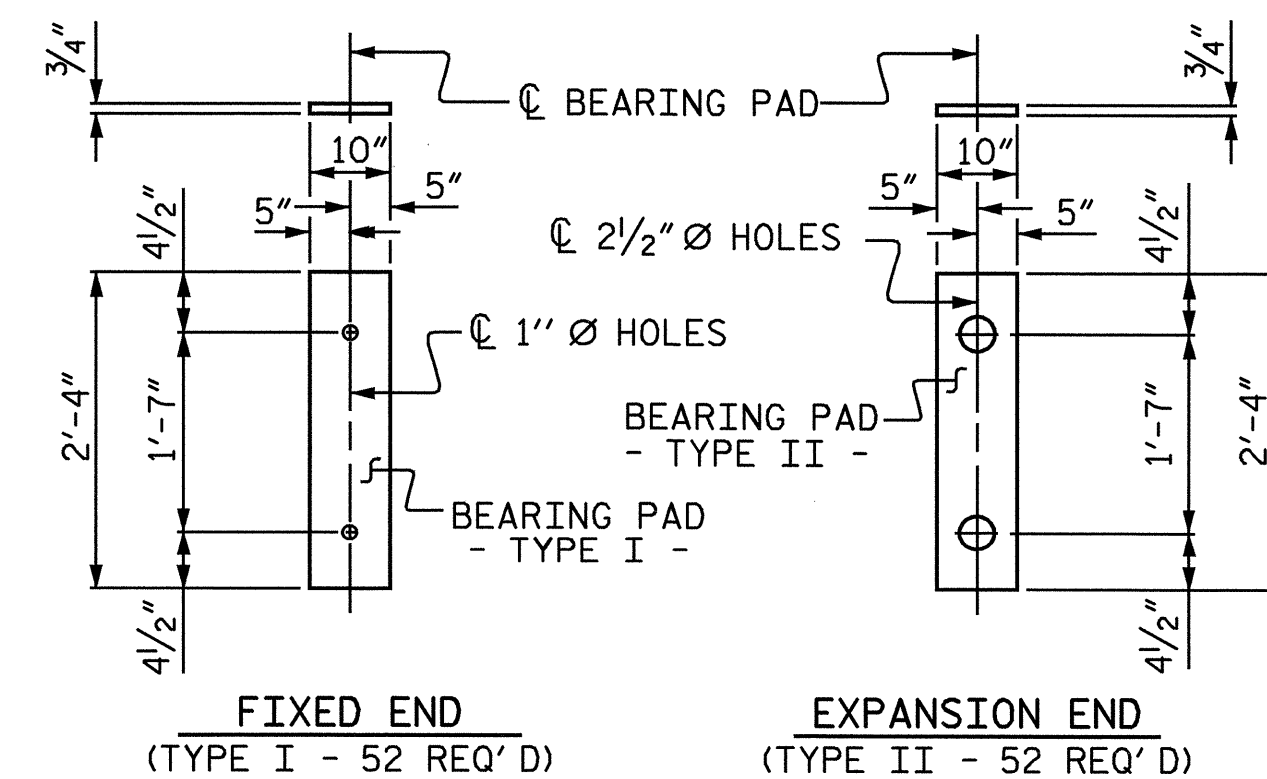


ALL BAR DIMENSIONS ARE OUT TO OUT

DEAD LOAD DEFLECTION AND CAMBER						
	STAGE 1				STAGE 2	
	TYPE I 1/2" Ø L.R. STRAND	TYPE II 1/2" Ø L.R. STRAND	TYPE III 1/2" Ø L.R. STRAND	TYPE IV 1/2" Ø L.R. STRAND	TYPE V 1/2" Ø L.R. STRAND	TYPE VI 1/2" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	2" ↑	2" ↑	2 1/16" ↑	2" ↑	2" ↑	2" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD **	5/16" ↓	5/16" ↓	1/4" ↓	5/16" ↓	5/16" ↓	5/16" ↓
FINAL CAMBER	1 1/16" ↑	1 1/16" ↑	1 13/16" ↑	1 1/16" ↑	1 1/16" ↑	1 1/16" ↑

\*\* INCLUDES FUTURE WEARING SURFACE

GRADE 270 STRANDS	
AREA ( SQUARE INCHES )	0.153
ULTIMATE STRENGTH ( LBS. PER STRAND )	41,300
APPLIED PRESTRESS ( LBS. PER STRAND )	30,980



ELASTOMERIC BEARING DETAILS

CORED SLABS REQUIRED			
SPAN "A", "B", "C", & "D"	NUMBER	LENGTH	TOTAL LENGTH
STAGE 1	TYPE I	4	49'-10 1/2"
	TYPE II	20	49'-10 1/2"
	TYPE III	4	49'-10 1/2"
	TYPE IV	4	49'-10 1/2"
	STAGE 1 TOTAL	32	1596'-0"
STAGE 2	TYPE V	16	49'-10 1/2"
	TYPE VI	4	49'-10 1/2"
	STAGE 2 TOTAL	20	997'-6"
TOTAL	52	2593.50 L.F.	

PROJECT NO. B-3348  
HYDE COUNTY  
 STATION: 22+85.00 -L-

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

3'-0" X 1'-9"  
 PRESTRESSED  
 CONCRETE CORED  
 SLAB UNIT

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-49
1			3			TOTAL SHEETS
2			4			76

5/27/04