

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 SL LOW MODULUS SILICONE SEALANT. THE 2" Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

AT THE CONTRACTOR'S OPTION, HOT POURED RUBBER ASPHALT JOINT SEALER MAY BE USED IN LIEU OF SILICONE SEALANT. THE HOT POURED RUBBER ASPHALT MATERIAL SHALL CONFORM TO THE REQUIREMENTS FOR JOINT SEALER, SEE STANDARD SPECIFICATIONS.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE 1/2" THICK EXPANSION JOINT MATERIAL IN THE JOINTS AT EACH END OF THE BRIDGE AND IN THE JOINTS BETWEEN THE ENDS OF THE CORED SLAB SPANS IS 1/2" NOMINAL AND CAN BE EXPECTED TO VARY. THE CONTRACTOR MAY USE MORE THAN ONE LAYER OF EXPANSION JOINT MATERIAL, WITH A MINIMUM LAYER THICKNESS OF 3/8" TO PROVIDE THE THICKNESS REQUIRED.

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.

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.

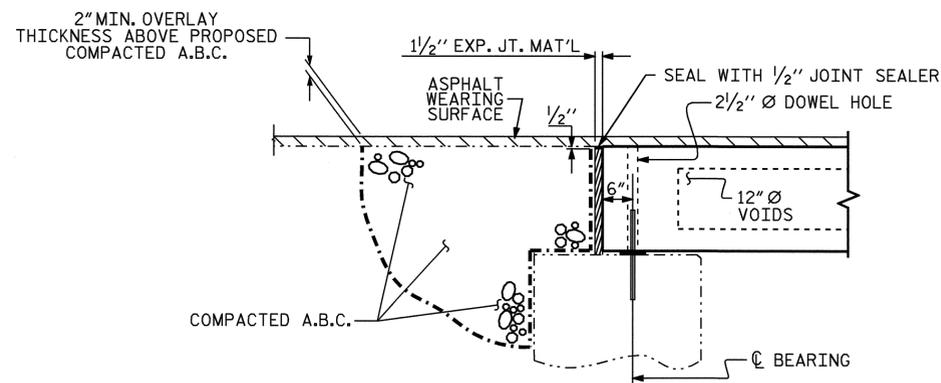
CORED SLAB UNITS SHALL CONTAIN CALCIUM NITRITE CORROSION INHIBITOR. SEE SPECIAL PROVISIONS.

THE COST OF THE 3/4" Ø ANCHOR BOLTS SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR 3'-0" X 1'-9" PRESTRESSED CONCRETE CORED SLAB, AND SHALL BE GALVANIZED.

FOR ELASTOMERIC BEARINGS, SEE SPECIAL PROVISIONS.

FOR PRESTRESSED CONCRETE MEMBERS, SEE SPECIAL PROVISIONS.

GRADE 270 STRANDS	
AREA (SQUARE INCHES)	1/2" Ø L.R. 0.153
ULTIMATE STRENGTH (LBS. PER STRAND)	41,300
APPLIED PRESTRESS (LBS. PER STRAND)	30,980



SECTION AT END BENT
SHOWING BACKFILL DETAILS

NOTES: THE ROADWAY APPROACHES LEADING UP TO THE CORED SLAB UNITS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

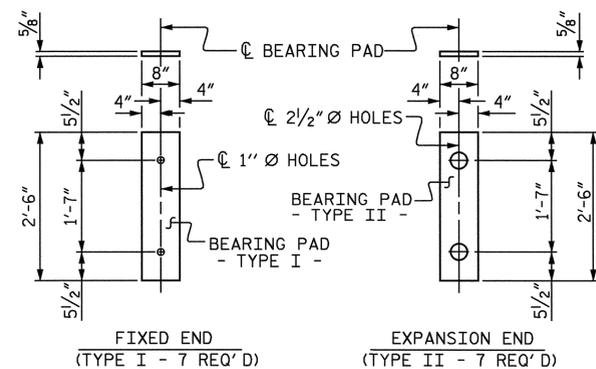
COMPACTED A.B.C. SHALL BE COMPACTED ACCORDING TO THE STANDARD SPECIFICATIONS.

BAR TYPES							
ALL BAR DIMENSIONS ARE OUT TO OUT							
BILL OF MATERIAL FOR ONE CORED SLAB SECTION							
BAR NUMBER	SIZE	TYPE	EXTERIOR UNIT LENGTH	EXTERIOR UNIT WEIGHT	INTERIOR UNIT LENGTH	INTERIOR UNIT WEIGHT	
B1	# 4	STR	26'- 1"	70	26'- 7"	70	
S1	# 4	1	4'- 3"	23	4'- 3"	23	
S2	# 4	1	5'- 4"	356	5'- 4"	356	
REINFORCING STEEL				449 LBS.			
5,000 P.S.I. CONCRETE				6.9 CU. YDS.			
1/2" Ø L.R. STRANDS				No. 22			

DEAD LOAD DEFLECTION AND CAMBER	
	3'-0" x 1'-9" 1/2" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	2" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	7/16" ↓
FINAL CAMBER	1 3/16" ↑

** INCLUDES FUTURE WEARING SURFACE

CORED SLABS REQUIRED (FOR RAMP 2)			
	NUMBER	LENGTH	TOTAL LENGTH
EXTERIOR C.S.	2	50'-7 3/4"	101'-3 1/2"
INTERIOR C.S.	5	50'-7 3/4"	253'-2 3/4"
TOTAL	7		354'-6 1/4"



ELASTOMERIC BEARING DETAILS

PROJECT NO. F-4700
CURRITUCK COUNTY
 STATION: 10+00.00 -RP2-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 STANDARD
 3'-0" X 1'-9"
 PRESTRESSED CONCRETE
 CORED SLAB UNIT
 KNOTTS ISLAND
 FERRY BASIN
 OCTOBER 1981

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-35
1			3			TOTAL SHEETS 56
2			4			

ASSEMBLED BY : K. McCAULEY	DATE : 8/30/04
CHECKED BY : O. PUJICSERVER	DATE : 10/5/04
DRAWN BY : WJH 4/89	REV. 10/17/00 RWW/LES
CHECKED BY : FCJ 5/89	REV. 7/10/01 RWW/LES
	REV. 5/7/03R RWW/JTE