

CORED SLABS REQUIRED			
	NUMBER	LENGTH	TOTAL LENGTH
EXTERIOR C.S.	2	55'-0"	110'-0"
INTERIOR C.S.	10	55'-0"	550'-0"
TOTAL	12		660'-0"

DEAD LOAD DEFLECTION AND CAMBER	
	0.6" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	1 <sup>9</sup> / <sub>16</sub> " ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD**	1/2" ↓
FINAL CAMBER	1 <sup>1</sup> / <sub>16</sub> " ↓

\*\* INCLUDES FUTURE WEARING SURFACE

ASPHALT THICKNESS & PARAPET HEIGHT		
	PARAPET HEIGHT	ASPHALT OVERLAY THICKNESS
NEAR SPAN LEFT	2'-9 <sup>1</sup> / <sub>2</sub> "	3 <sup>1</sup> / <sub>2</sub> "
NEAR SPAN RIGHT	2'-11 <sup>3</sup> / <sub>4</sub> "	5 <sup>3</sup> / <sub>4</sub> "
FAR SPAN LEFT	2'-11 <sup>3</sup> / <sub>4</sub> "	5 <sup>3</sup> / <sub>4</sub> "
FAR SPAN RIGHT	2'-9 <sup>1</sup> / <sub>2</sub> "	3 <sup>1</sup> / <sub>2</sub> "
MID SPAN LEFT	2'-8 <sup>5</sup> / <sub>16</sub> "	2 <sup>5</sup> / <sub>16</sub> "
MID SPAN RIGHT	2'-8 <sup>3</sup> / <sub>8</sub> "	2 <sup>3</sup> / <sub>8</sub> "

BILL OF MATERIAL FOR TWO PARAPETS & FOUR END POSTS					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B12	64	#5	STR	15'-8"	1046
* E1	8	#7	STR	3'-1"	50
* E2	8	#7	STR	3'-7"	59
* E3	8	#7	STR	4'-1"	67
* E4	8	#7	STR	4'-7"	75
* E5	8	#7	STR	4'-9"	78
* F1	8	#6	STR	2'-0"	24
* F2	4	#6	STR	3'-2"	19
* F3	4	#6	STR	3'-6"	21
* F4	4	#6	STR	3'-5"	21
* F5	4	#6	STR	3'-10"	23
* S4	128	#5	2	5'-9"	768
* EPOXY COATED REINFORCING STEEL					2251 LBS.
CLASS AA CONCRETE					14.1 CU. YDS.
1'-2" X 2'-11 <sup>3</sup> / <sub>4</sub> " CONCRETE PARAPET					110.00 LIN. FT.

BAR TYPES							
ALL BAR DIMENSIONS ARE OUT TO OUT							
BILL OF MATERIAL FOR ONE CORED SLAB UNIT							
BAR	NUMBER	SIZE	TYPE	EXTERIOR UNIT LENGTH	EXTERIOR UNIT WEIGHT	INTERIOR UNIT LENGTH	INTERIOR UNIT WEIGHT
B7	4	#4	STR	28'-3"	75	28'-3"	75
S1	8	#5	3	4'-6"	38	4'-6"	38
S2	112	#4	3	5'-4"	399	5'-4"	399
* S3	64	#5	1	5'-10"	389		
S5	4	#4	3	5'-5"	14	5'-5"	14
S6	4	#4	3	5'-6"	15	5'-6"	15
S7	4	#4	3	5'-7"	15	5'-7"	15
S8	4	#4	3	5'-9"	15	5'-9"	15
REINFORCING STEEL					LBS. 571	571	
* EPOXY COATED REINFORCING STEEL					LBS. 389		
6500 P.S.I. CONCRETE					CU. YDS. 8.0	8.0	
0.6" Ø L.R. STRANDS					No. 19	19	

## 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<sup>1</sup>/<sub>2</sub>" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH NON-SHRINK GROUT.

THE BACKER RODS SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, AN INTERNAL HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. AT LEAST SIX 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.

ALL REINFORCING STEEL IN THE PARAPET 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.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE PARAPET AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN PARAPET EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF PARAPET SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

FLAME CUTTING OF THE TRANSVERSE POST-TENSIONING STRAND IS NOT ALLOWED.

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 4900 PSI.

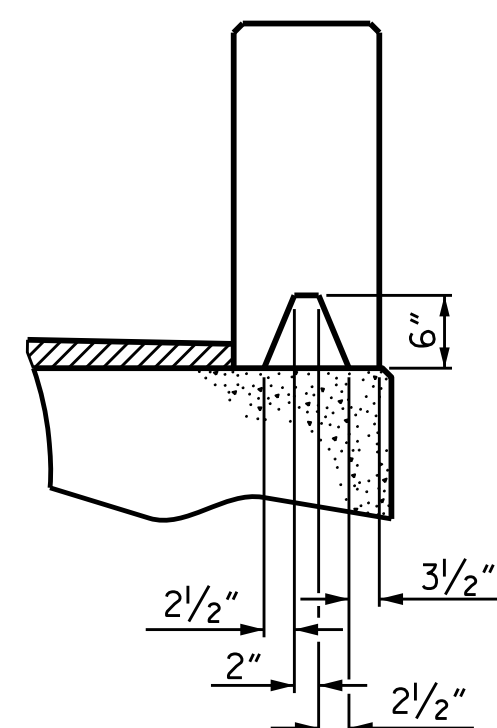
FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE PERMITTED THREADED INSERTS ARE DETAILED AS AN OPTION FOR THE CONTRACTOR TO ATTACH FALSEWORK AND FORMWORK DURING CONSTRUCTION.

THE PERMITTED THREADED INSERTS IN THE EXTERIOR UNITS SHALL BE SIZED BY THE CONTRACTOR, SPACED AT 4'-0" CENTERS AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. STAINLESS STEEL THREADED INSERTS MAY BE USED AS AN ALTERNATE.

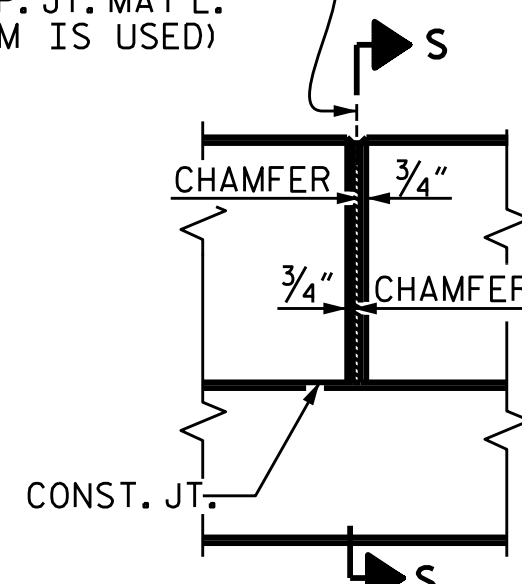
THE PERMITTED THREADED INSERTS SHALL BE GROUTED BY THE CONTRACTOR IMMEDIATELY FOLLOWING REMOVAL OF THE FALSEWORK.

THE COST OF THE PERMITTED THREADED INSERTS SHALL BE INCLUDED IN THE PRICE BID FOR THE PRECAST UNITS.



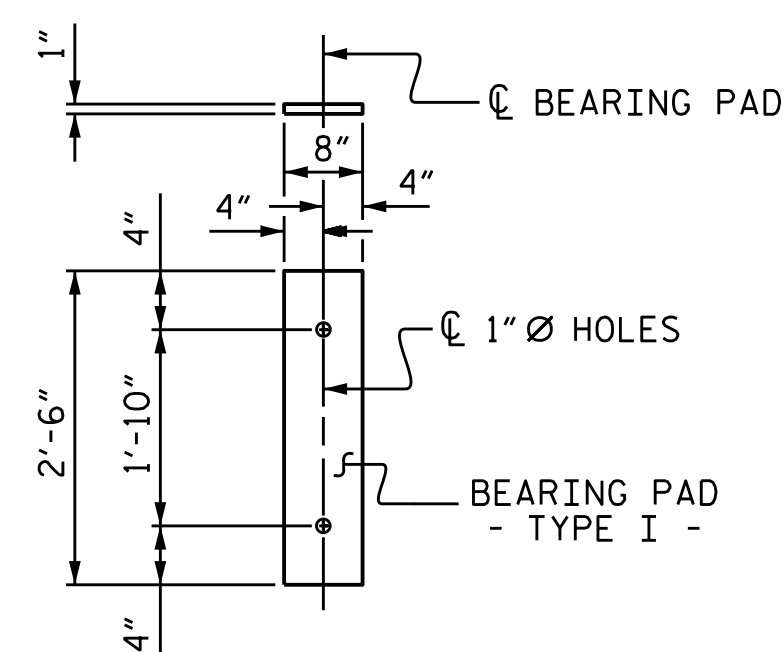
SECTION S-S  
AT DAM IN OPEN JOINT  
(THIS IS TO BE USED ONLY  
WHEN SLIP FORM IS USED)

Ø 1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS. (NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED)



ELEVATION AT EXPANSION JOINTS

GRADE 270 STRANDS	
	0.6" Ø L.R.
AREA ( SQUARE INCHES )	0.217
ULTIMATE STRENGTH ( LBS. PER STRAND )	58,600
APPLIED PRESTRESS ( LBS. PER STRAND )	43,950



FIXED END  
(TYPE I - 24 REQ'D)  
ELASTOMERIC  
BEARING DETAILS

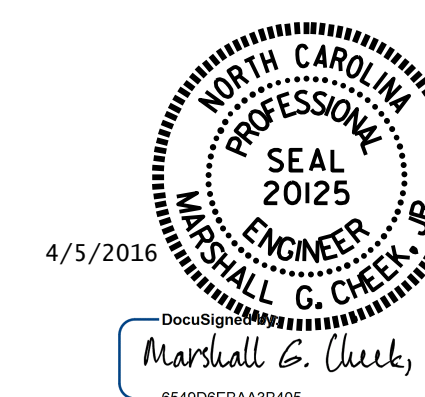
ELASTOMER IN ALL BEARINGS SHALL BE 50 DUROMETER HARDNESS.

PROJECT NO. B-5410  
JACKSON COUNTY  
STATION: 14+13.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

3'-0" X 1'-9"  
PRESTRESSED CONCRETE  
CORED SLAB UNIT  
120° SKEW



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-7
1			3			TOTAL SHEETS 17
2			4			

DRAWN BY : M. POOLE DATE : 02-16  
CHECKED BY : M. G. CHEEK DATE : 2-12-16