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BILL OF MATERIAL FOR ONE 25'-7¾" CORED SLAB UNIT

				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B1	2	#4	STR	25'-3"	34	25'-3"	34
S1	8	#5	3	3'-9"	31	3'-9"	31
S2	56	#4	3	4'-10"	181	4'-10"	181
✳ S3	34	#5	1	5'-7"	198		
REINFORCING STEEL			LBS.		246		246
✳ EPOXY COATED REINFORCING STEEL			LBS.		198		
5000 P.S.I. CONCRETE			CU. YDS.		3.5		3.5
0.6" Ø L.R. STRANDS			No.		8		8

BILL OF MATERIAL FOR ONE 35'-7¾" CORED SLAB UNIT

				EXTERIOR UNIT		INTERIOR UNIT	
BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT	LENGTH	WEIGHT
B3	4	#4	STR	18'-7"	50	18'-7"	50
S1	8	#5	3	3'-9"	31	3'-9"	31
S2	76	#4	3	4'-10"	245	4'-10"	245
✳ S3	44	#5	1	5'-7"	256		
REINFORCING STEEL			LBS.		326		326
✳ EPOXY COATED REINFORCING STEEL			LBS.		256		
5000 P.S.I. CONCRETE			CU. YDS.		4.7		4.7
0.6" Ø L.R. STRANDS			No.		11		11

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	25'-7¾" UNIT					
✳ B8	20	20	#5	STR	25'-3"	527
✳ S4	68	68	#5	2	7'-2"	508
✳ EPOXY COATED REINFORCING STEEL				LBS.		1035
CLASS AA CONCRETE				CU.YDS.		6.6
TOTAL VERTICAL CONCRETE BARRIER RAIL				LN.FT.		51.42

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
	35'-7¾" UNIT					
✳ B10	40	40	#5	STR	17'-5"	727
✳ S4	88	88	#5	2	7'-2"	658
✳ EPOXY COATED REINFORCING STEEL				LBS.		1385
CLASS AA CONCRETE				CU.YDS.		9.2
TOTAL VERTICAL CONCRETE BARRIER RAIL				LN.FT.		71.42

GUTTERLINE ASPHALT THICKNESS & RAIL HEIGHT

	ASPHALT OVERLAY THICKNESS	RAIL HEIGHT
	@ MID-SPAN	@ MID-SPAN
25'-7¾" UNITS	1⅞"	3'-7⅞"
35'-7¾" UNITS	1½"	3'-7½"

CORED SLABS REQUIRED

	NUMBER	LENGTH	TOTAL LENGTH
25'-7¾" UNIT			
EXTERIOR C.S.	2	25'-7¾"	51'-3½"
INTERIOR C.S.	9	25'-7¾"	230'-9¾"
TOTAL	11		282'-1¼"

CORED SLABS REQUIRED

	NUMBER	LENGTH	TOTAL LENGTH
35'-7¾" UNIT			
EXTERIOR C.S.	2	35'-7¾"	71'-3½"
INTERIOR C.S.	9	35'-7¾"	320'-9¾"
TOTAL	11		392'-1¼"

DEAD LOAD DEFLECTION AND CAMBER

	3'-0" x 1'-6"
25'-7¾" CORED SLAB UNIT	0.6" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	3/16" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD✳✳	1/16" ↓
FINAL CAMBER	1/8" ↑

✳✳ INCLUDES FUTURE WEARING SURFACE

DEAD LOAD DEFLECTION AND CAMBER

	3'-0" x 1'-6"
35'-7¾" CORED SLAB UNIT	0.6" Ø L.R. STRAND
CAMBER (SLAB ALONE IN PLACE)	5/8" ↑
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD✳✳	1/8" ↓
FINAL CAMBER	1/2" ↑

✳✳ INCLUDES FUTURE WEARING SURFACE

CONCRETE RELEASE STRENGTH

UNIT	PSI
25'-7¾" UNITS	4000
35'-7¾" UNITS	4000

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

PROJECT NO. B-5139
PASQUOTANK COUNTY
STATION: 19+44.50 -L-

SHEET 5 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

STANDARD
3'-0" X 1'-6"
PRESTRESSED CONCRETE
CORED SLAB UNIT
90° SKEW

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-9
1			3			TOTAL SHEETS
2			4			22

NORTH CAROLINA PROFESSIONAL SEAL 22072 ENGINEER JOHN ARTHUR DILWORTH
3/4/2015

WETHERILL ENGINEERING
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License: F-0377
TRANSPORTATION PLANNING/DESIGN - BRIDGE/STRUCTURE DESIGN
CIVIL/SITE DESIGN - GIS/GPS - CONSTRUCTION OBSERVATION

DRAWN BY: J. PENDERGRAFT DATE: 11-14
CHECKED BY: J. DILWORTH DATE: 11-14

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