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BILL OF MATERIAL

WING 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H1	4	#4	STR	8'-7"	23
H2	2	#4	STR	8'-1"	11
H3	2	#4	STR	3'-1"	4
H4	10	#4	1	3'-3"	22
H5	2	#4	STR	8'-11"	12
N1	3	#5	2	7'-10"	25
N2	3	#5	2	7'-1"	22
N3	3	#4	2	6'-2"	12
N4	3	#4	2	5'-3"	11
S1	3	#6	STR	6'-0"	27
T1	3	#5	STR	10'-6"	33
V1	3	#4	STR	5'-10"	12
V2	3	#4	STR	5'-1"	10
V3	3	#4	STR	4'-2"	8
V4	3	#4	STR	3'-3"	7
Z1	4	#4	3	4'-8"	12
Z2	4	#4	3	4'-0"	11
Z3	4	#4	3	3'-3"	9

REINFORCING STEEL 271 LBS

CLASS A CONCRETE 3.73 CY

WING 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H6	4	#4	STR	24'-1"	64
H7	2	#4	STR	22'-8"	30
H8	2	#4	STR	10'-6"	14
H9	10	#4	1	3'-3"	22
H10	2	#4	STR	24'-3"	32
N5	3	#5	2	8'-2"	26
N6	6	#5	2	7'-5"	46
N7	6	#4	2	6'-8"	27
N8	6	#4	2	6'-0"	24
N9	6	#4	2	5'-3"	21
S1	3	#6	STR	6'-0"	27
T2	3	#5	STR	26'-0"	81
V5	3	#4	STR	6'-2"	12
V6	6	#4	STR	5'-5"	22
V7	6	#4	STR	4'-8"	19
V8	6	#4	STR	4'-0"	16
V9	6	#4	STR	3'-3"	13
Z4	6	#4	3	4'-9"	19
Z5	7	#4	3	4'-3"	20
Z6	7	#4	3	3'-9"	18
Z7	7	#4	3	3'-3"	15

REINFORCING STEEL 568 LBS

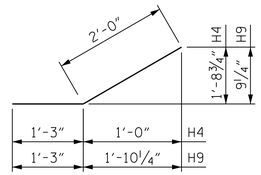
CLASS A CONCRETE 9.39 CY

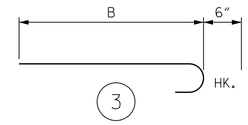
REINFORCING STEEL
FOR 2 WINGS 839 LBS

CLASS A CONCRETE
2 WINGS 13.12 CY
1 HEADWALLS 0.91 CY
1 END CURTAIN WALLS 1.00 CY
TOTAL 15.03 CY

BAR TYPES

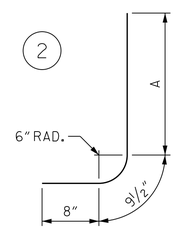
1





DIMENSION B	
BAR	LENGTH
Z1	4'-2"
Z2	3'-6"
Z3	2'-9"
Z4	4'-3"
Z5	3'-9"
Z6	3'-3"
Z7	2'-9"

2



DIMENSION A	
BAR	LENGTH
N1	6'-4½"
N2	5'-7½"
N3	4'-8½"
N4	3'-9½"
N5	6'-8½"
N6	5'-11½"
N7	5'-2½"
N8	4'-6½"
N9	3'-9½"

ALL BAR DIMENSIONS ARE OUT TO OUT.

PROJECT NO. W-5107
JOHNSTON COUNTY
STATION: 118+94.95 -L-

SHEET 5 OF 6

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

WINGS FOR
CONCRETE BOX CULVERT

H = 6'-0" SLOPE = 3:1

NORTH CAROLINA PROFESSIONAL SEAL 027799 ENGINEER PAUL A. de PAOLI
DocuSigned by:
11/20/2014

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

REVISIONS						
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			
2			4			

SHEET NO. C-35
TOTAL SHEETS 36

DRAWN BY : J.S. ISRAELNAIM DATE : 07/14
CHECKED BY : P.A. de PAOLI DATE : 07/14
DESIGN ENGINEER OF RECORD : P.A. de PAOLI DATE : 07/14

11/20/2014
10:29:49 AM
User: blanning
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