

NOTES:
 STAGGER 32'-0" WALES IN MAIN WALL SO THAT ALTERNATE JOINTS BREAK ON EACH PILE CLUSTER.
 PILE CLUSTERS CONTAINING THREE PILES SHALL BE WRAPPED WITH 5 TURNS OF WIRE ROPE FOR FENDER SYSTEM AT LOCATIONS SPECIFIED AND SECURED WITH THREE STAINLESS STEEL CLAMPS AT EACH END.
 STAINLESS STEEL THREADED BARS SHALL CONFORM TO ASTM A193 GRADE B8M.
 STAINLESS STEEL NUTS SHALL CONFORM TO ASTM F594 TYPE 316.
 STAINLESS STEEL WASHERS SHALL BE COMPATIBLE WITH THREADED RODS AND NUTS.
 TORQUE NUTS ON 1" Ø THREADED RODS TO 150 FT-LB.
 THREADS OF RODS SHALL BE KEPT FREE OF DIRT, DEBRIS, AND SAND TO PREVENT GALLING AND SEIZING DURING INSTALLATION AND TIGHTENING.
 STAINLESS STEEL SPLICE PLATES SHALL CONFORM TO ASTM A240 TYPE 316.

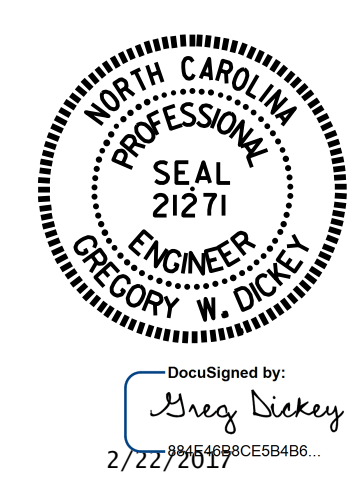
STRUCTURAL COMPOSITE MEMBERS					
ITEM	UNIT	LENGTH	SIZE	NO.	TOTAL
COMPOSITE PILE	LIN. FT.	60'-0"	14"	174	10,440'-0"
10" x 10" COMPOSITE LUMBER	LIN. FT.	32'-0"	10" x 10"	54	1,728'-0"
10" x 10" COMPOSITE LUMBER	LIN. FT.	16'-0"	10" x 10"	144	2,304'-0"
6" x 10" PLASTIC LUMBER	LIN. FT.	16'-0"	6" x 10"	24	448'-0"
4" x 6" PLASTIC LUMBER	LIN. FT.	4'-0"	4" x 6"	84	336'-0"
2" x 12" PLASTIC LUMBER	LIN. FT.	2'-4"	2" x 12"	448	1,045'-4"
2" x 6" PLASTIC LUMBER	LIN. FT.	16'-0"	2" x 6"	112	1,792'-0"

STRUCTURAL HARDWARE			
ITEM	UNIT	NO.	TOTAL
WIRE ROPE FOR FENDER SYSTEM	LIN. FT.	—	3,680'-0"
3/4" STAINLESS STEEL CABLE CLAMPS	LBS.	528	528 LBS
1" Ø STAINLESS STEEL THREADED BAR	LIN. FT.	—	4,037'-0"
	LBS.		21,160 LBS.
1" STAINLESS STEEL WASHER	19 LBS/100	7,876	1497 LBS.
1" STAINLESS STEEL HEX NUT	27.3 LBS/100	7,876	2150 LBS.
1/2" Ø STAINLESS STEEL THREADED BAR	LIN. FT.	—	77'-0"
	LBS.		46 LBS
1/2" STAINLESS STEEL WASHER	3.8 LBS/100	168	7 LBS.
1/2" STAINLESS STEEL HEX NUT	3.4 LBS/100	168	6 LBS.
3/8" Ø STAINLESS STEEL BOLT	20 LBS/100	252	50.4 LBS.
3/8" STAINLESS STEEL WASHER	1.4 LBS/100	504	1,242 LBS.
3/8" STAINLESS STEEL HEX NUT	1.5 LBS/100	252	2,810 LBS.
#10x3" STAINLESS STEEL DECK SCREWS	1.5 LBS/100	3080	46.2 LBS.
2'-9" x 8" x 3/4" STAINLESS STEEL P	57.5 LBS EACH	368	21,160 LBS.

NOTE: WITH APPROVAL OF THE ENGINEER THE CONTRACTOR MAY ELECT TO USE STAINLESS STEEL BOLTS IN PLACE OF THREADED BAR AT FEASIBLE LOCATIONS AS LONG AS THE MATERIAL PROPERTIES ARE THE SAME.

PROJECT NO. B-5938
CARTERET COUNTY
 BRIDGE NO. 68

SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
**FENDER SYSTEM
 DETAILS**

DRAWN BY: M.A. LEE DATE: 5/2015
 CHECKED BY: W.M. CLARKE DATE: 5/2015

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	F-4
1			3			TOTAL SHEETS
2			4			-