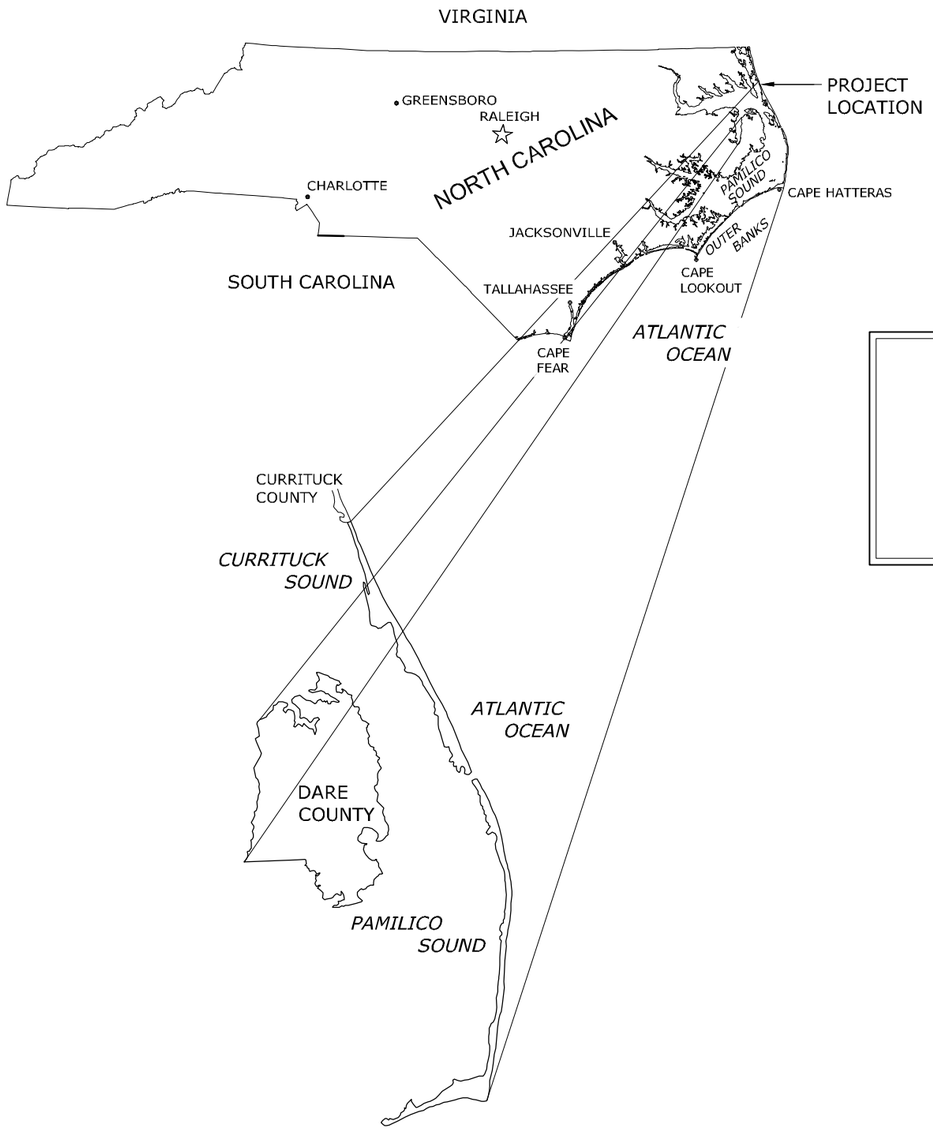
NORTH DARE COUNTY BEACHES
TOWNS KILL DEVIL HILLS AND KITTY HAWK WITH
SOUTHERN SHORES EXTENSION BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA



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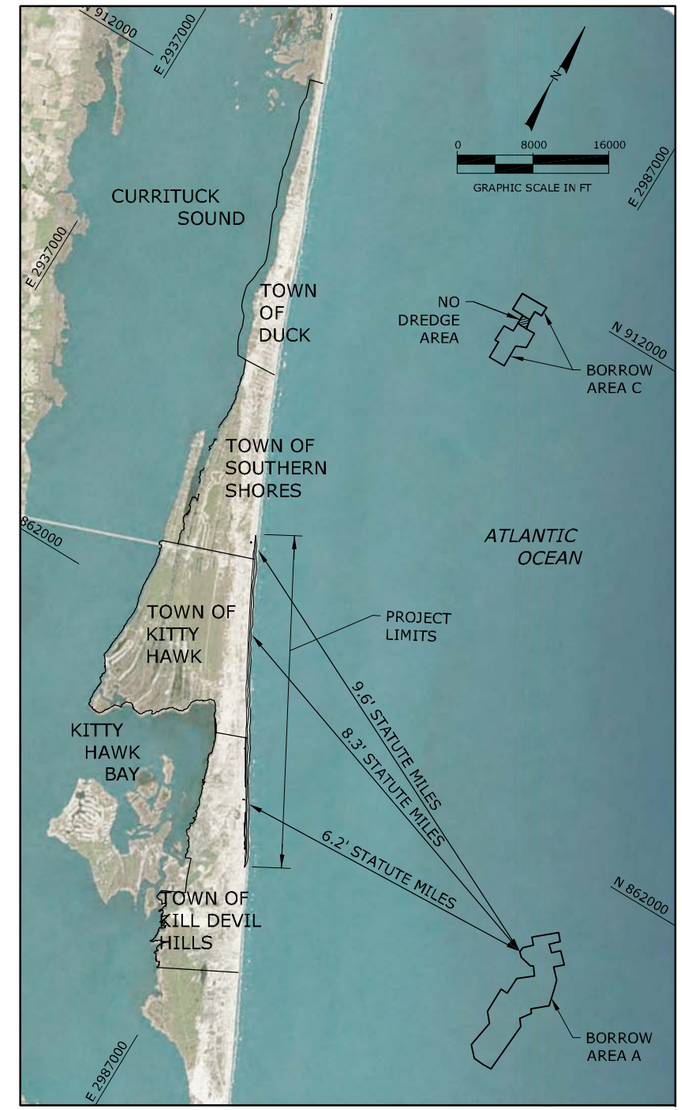

LOCATION MAP

COASTAL PLANNING & ENGINEERING, INC.
OF North Carolina, inc.
4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409
www.CPI.com
PH. (910)791-9494
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REVISIONS

No.	Date	Description
1	8/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Drawn by: GK
Date: 7/31/17
Plot Scale: AS NOTED
Checked by: JD
Reviewed by: KW
Submitted by: KW
Comm. No.: 6392089241
Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
COVER SHEET

DRAWING NO.
CS

TOWNS OF KILL DEVIL HILLS AND KITTY HAWK WITH SOUTHERN SHORES EXTENSION PAY PROFILES

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2969960.5	874051.1	62.60	-25+08	100
2970006.4	873962.8	62.60	-24+08	100
2970052.2	873873.9	62.60	-23+08	100
2970098.0	873785.0	62.60	-22+08	100
2970143.8	873696.1	62.60	-21+08	100
2970189.6	873607.2	62.60	-20+08	100
2970236.0	873518.5	62.60	-19+08	100
2970282.3	873429.9	62.60	-18+08	100
2970328.7	873341.3	62.60	-17+08	100
2970375.0	873252.7	62.60	-16+08	100
2970421.3	873164.1	62.60	-15+08	100
2970467.7	873075.4	62.60	-14+008	100
2970514.0	872986.8	62.60	-13+08	100
2970560.3	872898.2	62.60	-12+08	100
2970606.7	872809.6	62.60	-11+08	100
2970653.0	872721.0	62.60	-10+08	107
2970714.1	872632.2	62.60	-9+00	99
2970770.7	872549.8	62.60	-8+00	99
2970827.4	872467.5	62.60	-7+00	99
2970884.1	872385.1	62.60	-6+00	99
2970940.8	872302.7	62.60	-5+00	99
2970997.4	872220.3	62.60	-4+00	99
2971054.1	872137.9	62.60	-3+00	99
2971110.8	872055.5	62.60	-2+00	99
2971167.5	871973.1	62.60	-1+00	99
2971224.2	871890.8	62.60	0+00	100
2971270.3	871802.1	62.60	1+00	100
2971316.5	871713.4	62.60	2+00	100
2971362.6	871624.6	62.60	3+00	100
2971408.8	871535.9	62.60	4+00	100
2971454.9	871447.2	62.60	5+00	100
2971501.1	871358.5	62.60	6+00	100
2971547.2	871269.8	62.60	7+00	100
2971593.3	871181.1	62.60	8+00	100
2971639.5	871092.3	62.60	9+00	100
2971685.8	871003.3	62.60	10+00	100
2971732.3	870915.2	62.60	11+00	100
2971778.9	870826.7	62.60	12+00	100
2971825.5	870738.2	62.60	13+00	100
2971872.2	870649.8	62.60	14+00	100
2971918.8	870561.3	62.60	15+00	100
2971965.4	870472.9	62.60	16+00	100
2972012.1	870384.4	62.60	17+00	100
2972058.7	870295.9	62.60	18+00	100
2972105.3	870207.5	62.60	19+00	103
2972153.2	870116.7	62.60	20+03	97
2972198.7	870030.6	62.60	21+00	100
2972245.4	869942.2	62.60	22+00	100
2972292.1	869853.8	62.60	23+00	100
2972338.8	869765.4	62.60	24+00	100
2972385.6	869676.9	62.60	25+00	100
2972432.3	869588.5	62.60	26+00	100
2972479.0	869500.1	62.60	27+00	100
2972525.7	869411.7	62.60	28+00	100
2972572.4	869323.3	62.60	29+00	105
2972621.7	869230.0	62.60	30+05	95
2972665.9	869146.4	62.60	31+00	100
2972712.6	869058.0	62.60	32+00	100
2972759.3	868969.6	62.60	33+00	100
2972806.0	868881.2	62.60	34+00	100
2972852.8	868792.8	62.60	35+00	100
2972899.5	868704.4	62.60	36+00	100

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2972946.2	868616.0	62.60	37+00	100
2972992.9	868527.5	62.60	38+00	100
2973039.7	868439.1	62.60	39+00	124
2973097.5	868329.7	62.60	40+24	76
2973133.1	868262.3	62.60	41+00	100
2973179.8	868173.9	62.60	42+00	100
2973226.5	868085.5	62.60	43+00	100
2973273.3	867997.1	62.60	44+00	100
2973320.0	867908.6	62.60	45+00	100
2973366.7	867820.2	62.60	46+00	100
2973413.4	867731.8	62.60	47+00	100
2973460.1	867643.4	62.60	48+00	100
2973506.8	867555.0	62.60	49+00	128
2973566.7	867441.7	62.60	50+28	72
2973600.3	867378.1	62.60	51+00	100
2973647.0	867289.7	62.60	52+00	100
2973693.7	867201.3	62.60	53+00	100
2973740.4	867112.9	62.60	54+00	100
2973787.2	867024.5	62.60	55+00	100
2973833.9	866936.1	62.60	56+00	100
2973880.6	866847.6	62.60	57+00	100
2973927.3	866759.2	62.60	58+00	100
2973974.0	866670.8	62.60	59+00	100
2974044.0	866538.4	62.60	60+50	150
2974114.2	866405.6	62.60	62+00	100
2974160.9	866317.1	62.60	63+00	100
2974207.6	866228.7	62.60	64+00	100
2974254.3	866140.3	62.60	65+00	100
2974301.0	866051.9	62.60	66+00	100
2974347.7	865963.5	62.60	67+00	100
2974394.4	865875.0	62.60	68+00	100
2974441.1	865786.6	62.60	69+00	103
2974489.1	865695.8	62.60	70+03	97
2974534.6	865609.8	62.60	71+00	100
2974581.3	865521.4	62.60	72+00	100
2974628.0	865432.9	62.60	73+00	100
2974674.7	865344.5	62.60	74+00	100
2974721.4	865256.1	62.60	75+00	100
2974768.1	865167.7	62.60	76+00	100
2974814.9	865079.3	62.60	77+00	100
2974861.6	864990.9	62.60	78+00	100
2974908.3	864902.4	62.60	79+00	115
2974962.0	864800.8	62.60	80+15	85
2975001.7	864725.6	62.60	81+00	100
2975048.4	864637.2	62.60	82+00	100
2975095.2	864548.8	62.60	83+00	100
2975141.9	864460.4	62.60	84+00	100
2975188.6	864371.9	62.60	85+00	100
2975235.3	864283.5	62.60	86+00	100
2975282.0	864195.1	62.60	87+00	100
2975328.7	864106.7	62.60	88+00	157
2975401.9	863968.2	62.60	89+57	143
2975422.6	863930.1	61.50	90+00	100
2975470.4	863842.3	61.50	91+00	100
2975518.2	863754.4	61.50	92+00	100
2975566.0	863666.6	61.50	93+00	100
2975613.8	863578.7	61.50	94+00	100
2975661.6	863490.9	61.50	95+00	100
2975709.3	863403.0	61.50	96+00	100
2975757.1	863315.2	61.50	97+00	100
2975804.9	863227.3	61.50	98+00	100
2975852.7	863139.5	61.50	99+00	99

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2975900.2	863052.2	61.50	99+99	101
2975951.1	862965.4	61.50	101+00	100
2976001.7	862879.2	61.50	102+00	100
2976052.3	862792.9	61.50	103+00	100
2976102.9	862706.7	61.50	104+00	100
2976153.5	862620.4	61.50	105+00	100
2976204.1	862534.2	61.50	106+00	100
2976254.7	862447.9	61.50	107+00	100
2976305.3	862361.7	61.50	108+00	100
2976355.9	862275.4	61.50	109+00	99
2976406.1	862189.9	61.50	109+99	101
2976457.1	862102.9	59.60	111+00	100
2976507.7	862016.6	59.60	112+00	100
2976558.3	861930.4	59.60	113+00	100
2976608.9	861844.1	59.60	114+00	100
2976659.5	861757.9	59.60	115+00	100
2976710.1	861671.6	59.60	116+00	100
2976760.7	861585.4	59.60	117+00	100
2976811.3	861499.1	59.60	118+00	100
2976861.9	861412.9	59.60	119+00	99
2976911.9	861327.7	59.60	119+99	101
2976963.1	861240.4	59.60	121+00	100
2977013.7	861154.1	59.60	122+00	100
2977064.4	861067.9	59.60	123+00	100
2977115.0	860981.6	59.60	124+00	100
2977165.6	860895.4	59.60	125+00	100
2977216.2	860809.1	59.60	126+00	100
2977266.8	860722.9	59.60	127+00	100
2977317.4	860636.6	59.60	128+00	100
2977368.0	860550.4	59.60	129+00	133
2977435.1	860436.0	59.60	130+33	67
2977467.0	860376.6	59.60	131+00	100
2977514.3	860288.5	59.60	132+00	100
2977561.6	860200.4	59.60	133+00	100
2977608.9	860112.3	59.60	134+00	100
2977656.2	860024.2	59.60	135+00	100
2977703.6	859936.1	59.60	136+00	100
2977750.9	859848.0	59.60	137+00	128
2977811.3	859735.5	59.60	138+28	72
2977849.5	859674.1	59.60	139+00	100
2977902.3	859589.2	59.60	140+00	100
2977955.1	859504.3	59.60	141+00	100
2978007.9	859419.4	59.60	142+00	100
2978060.7	859334.5	59.60	143+00	100
2978113.5	859249.5	59.60	144+00	100
2978166.3	859164.6	59.60	145+00	100
2978219.1	859079.7	59.60	146+00	100
2978271.9	858994.8	59.60	147+00	100
2978324.7	858909.9	59.60	148+00	100
2978377.5	858824.9	59.60	149+00	100
2978430.3	858740.1	59.60	150+00	100
2978481.0	858653.8	59.60	151+00	100
2978531.6	858567.5	59.60	152+00	100
2978582.2	858481.3	59.60	153+00	100
2978632.8	858395.0	59.60	154+00	100
2978683.4	858308.8	59.60	155+00	100
2978739.9	858226.3	59.60	156+00	100
2978796.4	858143.8	59.60	157+00	100
2978852.9	858061.3	59.60	158+00	100
2978909.4	857978.8	59.60	159+00	101
2978966.6	857895.3	59.60	160+01	99
2979013.5	857808.3	59.60	161+00	100

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2979060.9	857720.3	59.60	162+00	100
2979108.4	857632.3	59.60	163+00	100
2979155.9	857544.2	59.60	164+00	100
2979203.3	857456.2	59.60	165+00	100
2979250.8	857368.2	59.60	166+00	100
2979298.3	857280.2	59.60	167+00	100
2979345.8	857192.2	59.60	168+00	100
2979393.3	857104.2	59.60	169+00	72
2979427.7	857040.4	59.60	169+72	127
2979492.3	856930.5	59.60	171+00	100
2979542.9	856844.2	59.60	172+00	100
2979593.6	856758.0	59.60	173+00	100
2979644.2	856671.8	59.60	174+00	81
2979685.3	856601.8	59.60	174+79	119
2979745.4	856499.3	59.60	176+00	100
2979796.1	856413.0	59.60	177+00	100
2979846.7	856326.8	59.60	178+00	100
2979897.3	856240.5	59.60	179+00	90
2979942.7	856163.1	59.60	179+90	110
2979998.5	856068.1	59.60	181+00	100
2980049.2	855981.8	59.60	182+00	100
2980099.8	855895.6	59.60	183+00	100
2980150.4	855809.4	59.60	184+00	90
2980195.8	855732.1	59.60	184+90	110
2980251.7	855636.9	59.60	186+00	100
2980302.3	855550.6	59.60	187+00	100
2980352.9	855464.4	59.60	188+00	100
2980403.5	855378.1	59.60	189+00	89
2980448.5	855301.2	59.60	189+89	111
2980504.7	855205.6	59.60	191+00	100
2980555.3	855119.4	59.60	192+00	100
2980605.9	855033.1	59.60	193+00	100
2980656.5	854946.9	59.60	194+00	92
2980703.2	854867.4	59.60	194+92	108
2980757.8	854774.4	59.60	196+00	100
2980808.4	854688.2	59.60	197+00	100
2980859.0	854601.9	59.60	198+00	100
2980909.7	854515.7	59.60	199+00	95
2980957.8	854433.7	59.60	199+95	105
2981009.4	854342.3	59.60	201+00	100
2981058.6	854255.3	59.60	202+00	100
2981107.7	854168.2	59.60	203+00	100
2981156.9	854081.1	59.60	204+00	86
2981199.1	854006.4	59.60	204+86	114
2981255.2	853907.0	59.60	206+00	100
2981304.4	853819.9	59.60	207+00	100
2981353.6	853732.8	59.60	208+00	100
2981402.8	853645.7	59.60	209+00	77
2981440.4	853579.1	60.50	209+76	123
2981501.1	853471.6	60.50	211+00	100
2981550.3	853384.5	60.50	212+00	100
2981599.5	853297.4	60.50	213+00	100
2981648.6	853210.4	60.50	214+00	89
2981692.5	853132.7	60.50	214+89	111
2981747.0	853036.2	60.50	216+00	100
2981796.1	852949.1	60.50	217+00	100
2981845.3	852862.1	60.50	218+00	100
2981894.5	852775.0	60.50	219+00	102
2981944.6	852686.2	60.50	220+02	98
2981992.8	852600.8	60.50	221+00	100
2982042.1	852513.8	60.50	222+00	100
2982091.3	852426.8	60.50	223+00	100

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2982140.5	852339.7	60.50	224+00	94
2982186.6	852258.2	60.50	224+94	106
2982239.0	852165.6	60.50	226+00	100
2982288.2	852078.6	60.50	227+00	100
2982337.4	851991.5	60.50	228+00	100
2982386.6	851904.5	60.50	229+00	85
2982428.6	851830.2	60.50	229+85	115
2982485.0	851730.4	60.50	231+00	100
2982534.3	851643.3	60.50	232+00	100
2982583.5	851556.3	60.50	233+00	100
2982632.7	851469.2	60.50	234+00	114
2982689.1	851369.5	60.50	235+15	85
2982731.1	851295.1	60.50	236+00	100
2982780.3	851208.1	60.50	237+00	100
2982829.5	851121.0	60.50	238+00	100
2982878.7	851033.9	60.50	239+00	144
2982949.5	850908.8	60.50	240+44	56
2982975.5	850858.9	60.50	241+00	100
2983021.8	850770.3	60.50	242+00	100
2983068.2	850681.7	60.50	243+00	100
2983114.5	850593.1	60.50	244+00	114
2983167.1	850492.4	60.50	245+14	86
2983207.1	850415.8	60.50	246+00	100
2983253.5	850327.2	60.50	247+00	100
2983299.8	850238.6	60.50	248+00	100
2983346.2	850150.0	60.50	249+00	83
2983384.8	850076.1	61.90	249+83	117
2983440.5	849973.6	61.90	251+00	99.9
2983488.3	849885.8	61.90	252+00	100
2983536.0	849797.9	61.90	253+00	100
2983583.8	849710.1	61.90	254+00	101
2983632.2	849621.0	61.90	255+01	100
2983679.3	849534.4	61.90	256+00	100
2983727.1	849446.5	61.90	257+00	100
2983774.8	849358.7	61.90	258+00	100
2983822.6	849270.8	61.90	259+00	119
2983879.6	849166.0	61.90	260+19	81
2983917.2	849094.6	61.90	261+00	100
2983963.8	849006.1	61.90	262+00	100
2984010.5	848917.7	61.90	263+00	100
2984057.1	848829.2	61.90	264+00	85
2984096.8	848753.8	61.90	264+85	115
2984150.3	848652.3	61.90	266+00	100
2984196.9	848563.8	61.90	267+00	100
2984243.6	848475.3	61.90	268+00	151
2984314.0	848341.7	62.20	269+51	149
2984383.5	848209.9	62.20	271+00	100
2984430.1	848121.5	62.20	272+00	100
2984476.7	848033.0	62.20	273+00	100
2984523.3	847944.5	62.20	274+00	67
2984554.5	847885.4	62.20	274+67	133
2984616.6	847767.6	62.20	276+00	100
2984663.2	847679.1	62.20	277+00	100
2984709.8	847590.7	62.20	278+00	100
2984756.5	847502.2	62.20	279+00	83
2984795.0	847429.1	62.20	279+83	117
2984853.8	847327.5	62.20	281+00	100
2984903.9	847241.0	62.20	282+00	100
2984954.0	847154.4	62.20	283+00	100
2985004.0	847067.9	62.20	284+00	92
2985050.2	846988.1	62.20	284+92	108
2985104.2	846894.8	62.20	286+00	100

Point Table

EASTING	NORTHING	AZIMUTH	STATION	PERPENDICULAR DISTANCE TO NEXT
2985154.3	846808.2	62.20	287+00	100
2985204.3	846721.6	62.20	288+00	100
2985254.4	846635.1	62.20	289+00	102
2985305.3	846547.0	62.20	290+02	98
2985347.6	846458.3	62.20	291+00	100
2985390.6	846368.0	62.20	292+00	100
2985433.7	846277.8	62.20	293+00	100
2985476.7	846187.5	62.20	294+00	99
2985519.2	846098.4	62.20	294+99	101
2985562.8	846007.0	62.20	296+00	100
2985605.9	845916.7	62.20	297+00	100
2985648.9	845826.5	62.20	298+00	100
2985692.0	845736.2	62.20	299+00	96
2985733.2	845649.7	62.20	299+96	104
2985782.2	845557.7	62.20	301+00	100
2985829.1	845469.5	62.20	302+00	100
2985876.1	845381.2	62.20	303+00	100
2985923.1	845292.9	62.20	304+00	85
2985963.1	845217.8	62.20	304+85	115
2986017.1	845116.4	62.20	306+00	100
2986064.1	845028.1	62.20	307+00	100
2986111.1	844939.8	62.20	308+00	100
2986158.1	844851.6	62.20	309+00	74
2986193.1	844785.8	62.00	309+74	126
2986252.1	844675.0	62.00	311+00	100
2986299.0	844586.7	62.00	312+00	100
2986346.0	844498.5	62.00	313+00	100
2986393.0	844410.2	62.00	314+00	92
2986436.0	844329.4	62.00	314+92	108
2986487.0	844233.7	62.00	316+00	100
2986534.0	844145.4	62.00	317+00	100
2986581.0	844057.1	62.00	318+00	100
2986628.0	843968.8	62.00	319+00	109
2986679.0	843873.0	62.00	320+09	91
2986721.8	843792.2	62.00	321+00	100
2986768.5	843703.8	62.00	322+00	100
2986815.3	843615.4	62.00	323+00	100
2986862.1	843527.0	62.00	324+00	123
2986909.0	843438.4	62.00	325+00	-

VERTICAL CONTROL DATA

ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). THE APPROXIMATE RELATION BETWEEN NAVD88 AND OTHER DATUMS AT NOAA TIDAL BENCHMARK 8658559 (WILMINGTON PIER) FOR THE PROJECT ARE AS FOLLOWS:

MEAN HIGHER HIGH WATER	1.50	FEET
MEAN HIGH WATER	1.18	FEET
NAVD88	0.00	FEET
MEAN SEA LEVEL	-0.42	FEET
NGVD29	-0.96	FEET
MEAN LOW WATER	-2.05	FEET
MEAN LOWER LOW WATER	-2.19	FEET

BENCHMARK CONTROL POINTS

ID	EASTING	NORTHING	ELEV.	DESC.
FW0050	2,970,021.75	871,368.17	30.85	DISK
FW0061	2,977,204.86	859,358.84	9.17	DISK
DK3521	2,979,783.79	854,412.25	11.64	DISK

NOTES:

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2. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. SURVEYS FOR PAYMENT (BEFORE AND AFTER DREDGE) SHALL COMMENCE AT THE COORDINATES SHOWN AND CONTINUE A MINIMUM DISTANCE OF 250 FT. SEAWARD OF THE CONSTRUCTION TOE OF FILL ALONG THE AZIMUTH PROVIDED.
4. EACH STATION DESIGNATED AS A PAYMENT PROFILE SHALL BE SURVEYED BY THE CONTRACTOR BEFORE AND AFTER BEACH PLACEMENT FOR THE PURPOSE OF CALCULATING PAYMENT QUANTITIES. NO SUBSTITUTES IN PAY PROFILE STATIONS OR AZIMUTHS SHALL BE CONSIDERED.

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www.CBI.com
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FAX (910) 791-4129

REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED
		STARTER DUNE

Designed by: JD
Drawn by: HN
Date: 7/31/17
Plot Scale: AS NOTED
Checked by: JD
Reviewed by: KW
Submitted by: KW
Comm. No.: 6362089241

Reference Files:

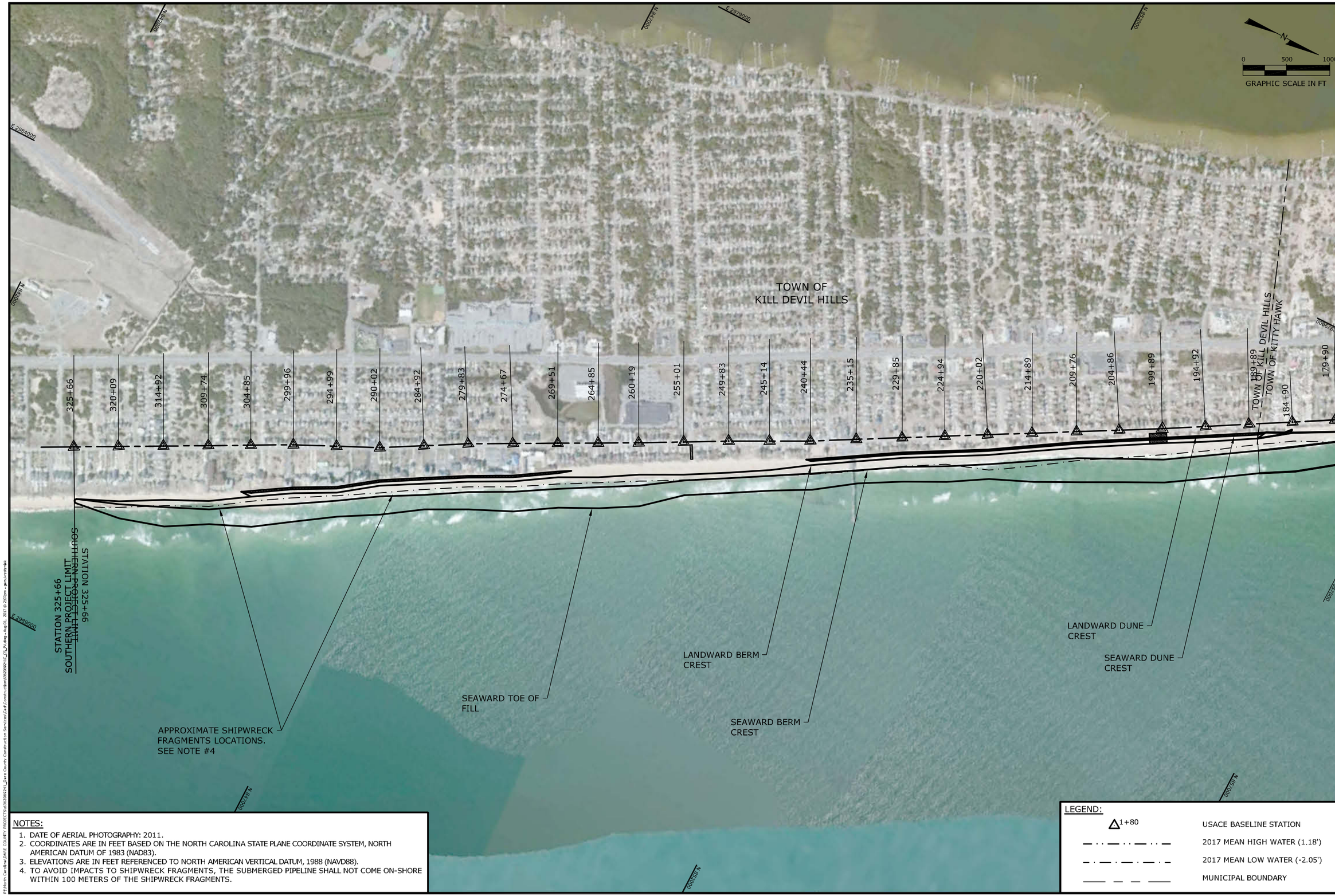
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
CONTROL DATA

DRAWING NO.

CD-1

SHEET 2 OF 26

P:\North Carolina\DARE COUNTY PROJECTS\6362089241_Dare County Construction Services\Cad\Construction\6362089241C_CD.dwg - Aug 01, 2017 @ 2:05pm - gary.krystyniak



NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2011.
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3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. TO AVOID IMPACTS TO SHIPWRECK FRAGMENTS, THE SUBMERGED PIPELINE SHALL NOT COME ON-SHORE WITHIN 100 METERS OF THE SHIPWRECK FRAGMENTS.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

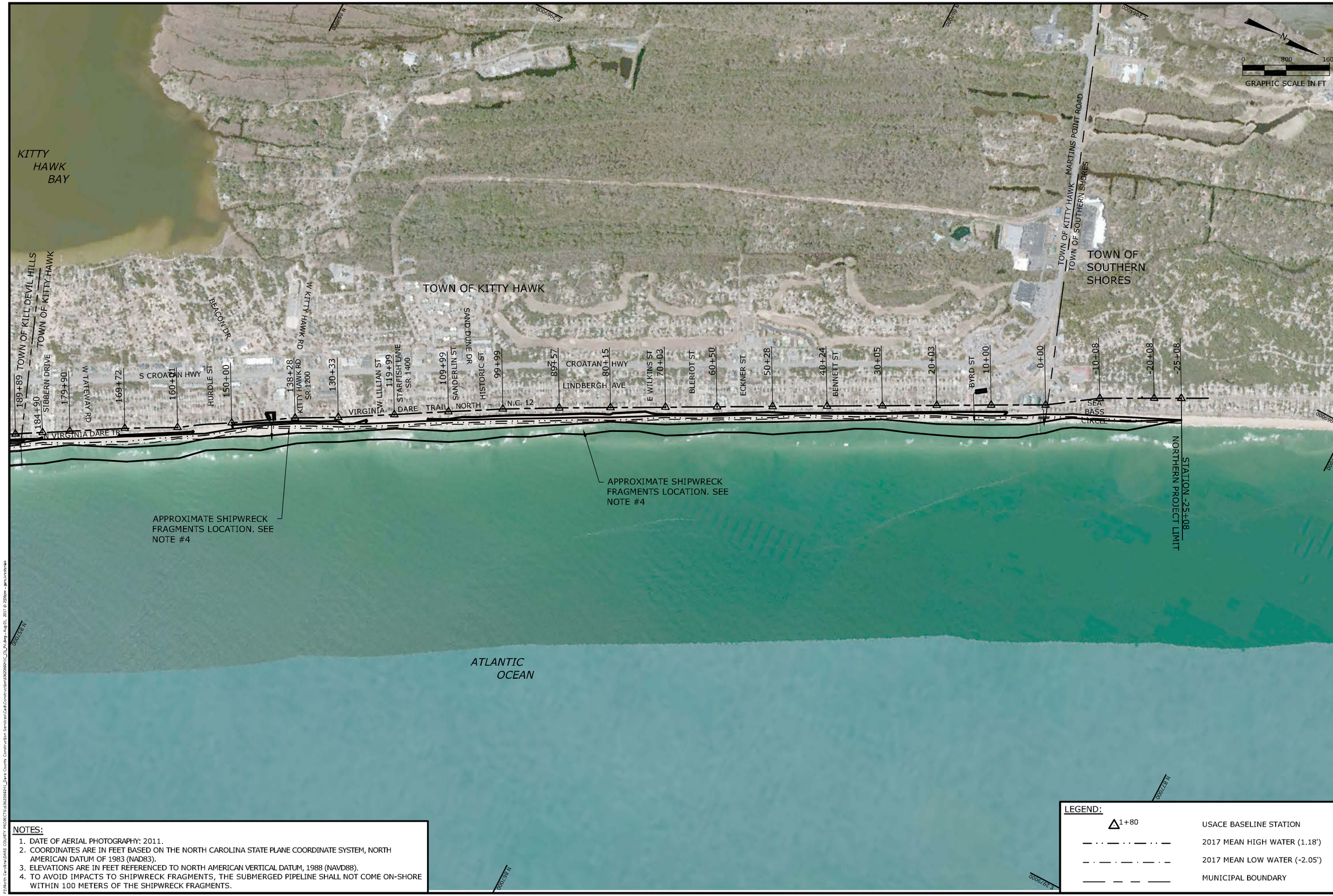
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Reference Files:

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
OVERALL PLAN VIEW

DRAWING NO.
OV-1



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LEGEND:

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— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

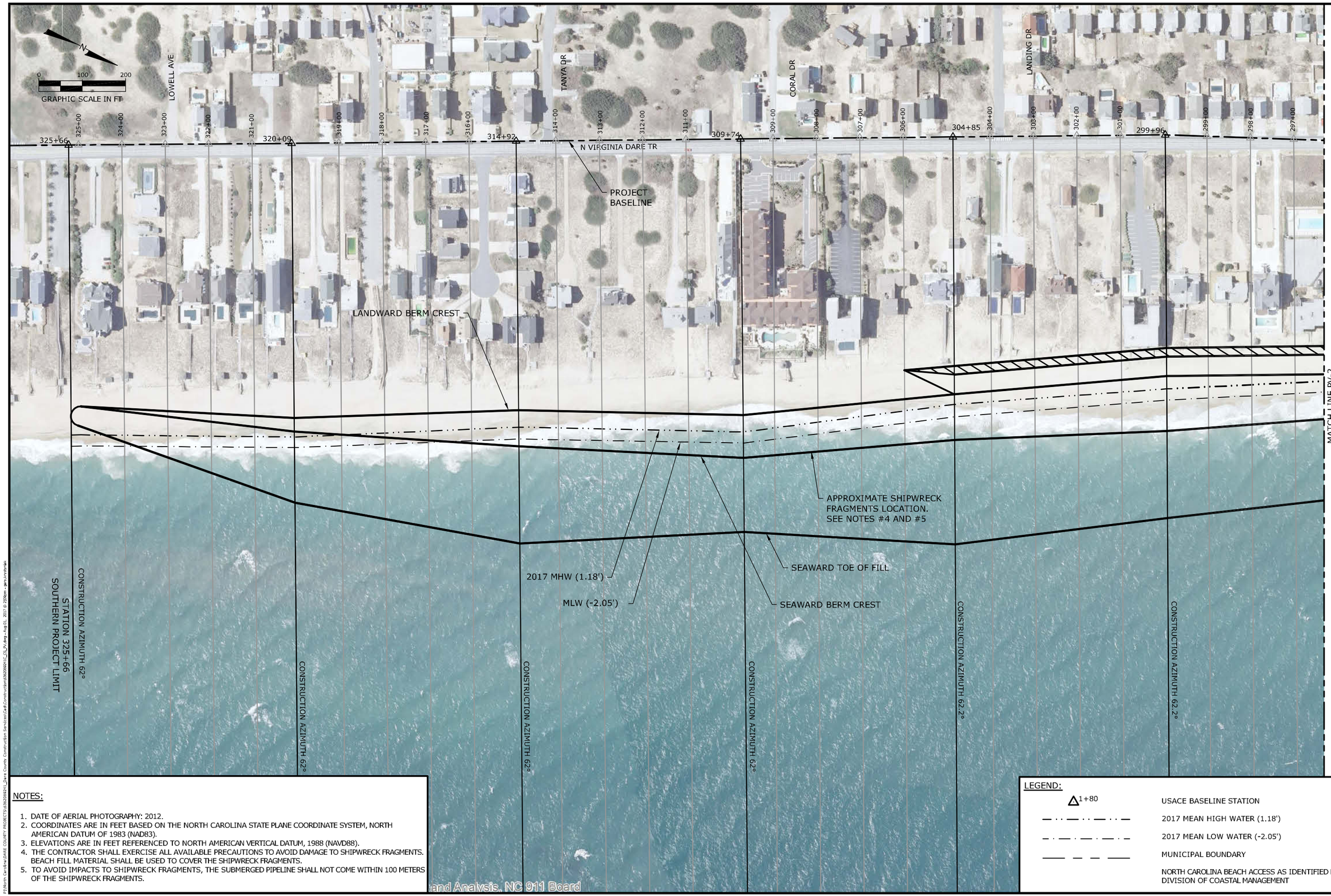
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Reference Files:

Designed by: JD	Checked by: JD
Drawn by: GK	Reviewed by: KW
Date: 7/31/17	Submitted by: KW
Plot Scale: AS NOTED	Comm. No.: 6362089241

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
OVERALL PLAN VIEW

DRAWING NO.
OV-2



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4. THE CONTRACTOR SHALL EXERCISE ALL AVAILABLE PRECAUTIONS TO AVOID DAMAGE TO SHIPWRECK FRAGMENTS. BEACH FILL MATERIAL SHALL BE USED TO COVER THE SHIPWRECK FRAGMENTS.
5. TO AVOID IMPACTS TO SHIPWRECK FRAGMENTS, THE SUBMERGED PIPELINE SHALL NOT COME WITHIN 100 METERS OF THE SHIPWRECK FRAGMENTS.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · —	2017 MEAN LOW WATER (-2.05')
— — — —	MUNICIPAL BOUNDARY
	NORTH CAROLINA BEACH ACCESS AS IDENTIFIED BY DIVISION OF COASTAL MANAGEMENT

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REVISIONS

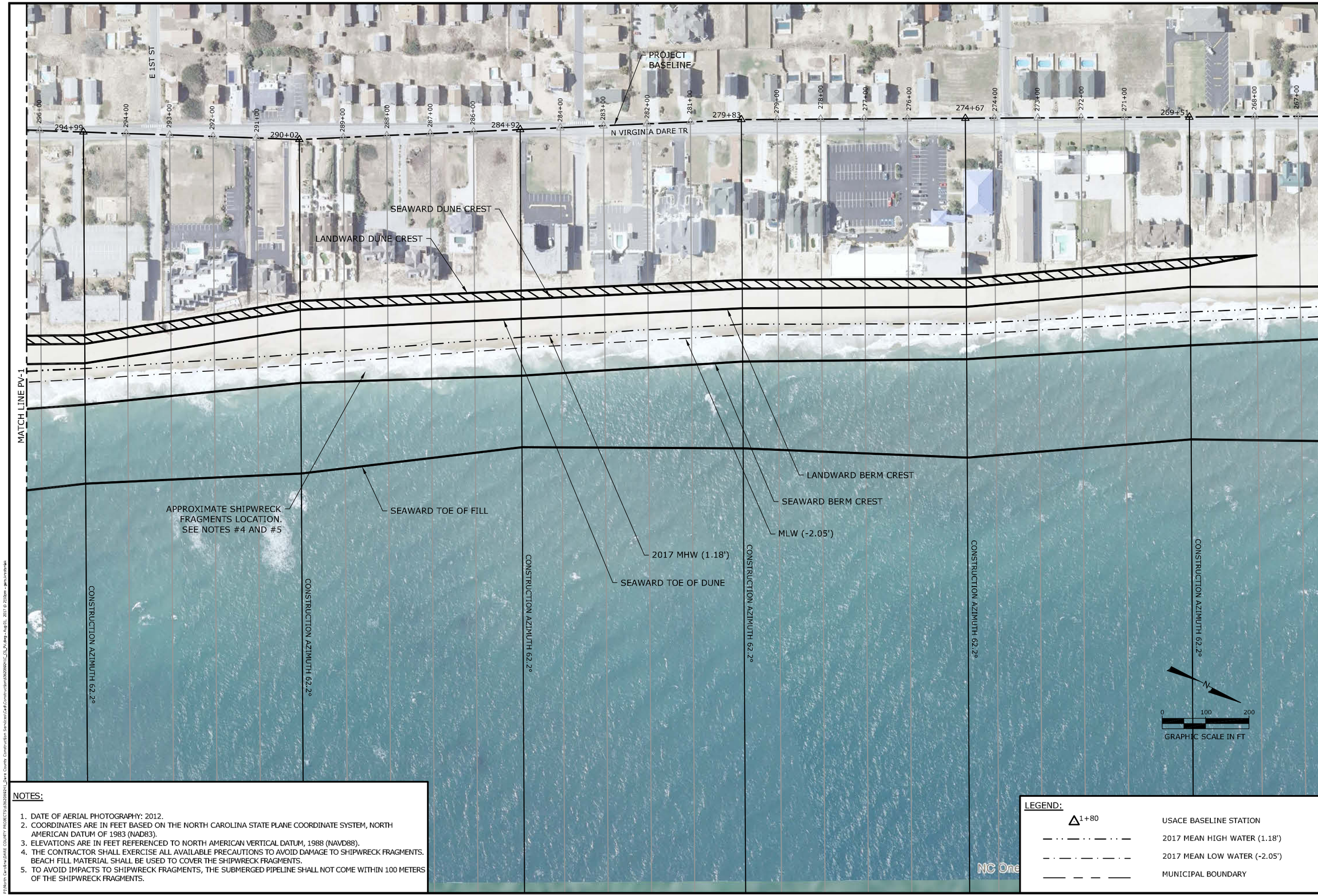
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-1



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5. TO AVOID IMPACTS TO SHIPWRECK FRAGMENTS, THE SUBMERGED PIPELINE SHALL NOT COME WITHIN 100 METERS OF THE SHIPWRECK FRAGMENTS.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-2

NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
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3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
— — — —	MUNICIPAL BOUNDARY
▨	CONSTRUCTION ACCESS

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FAX (910) 791-4129

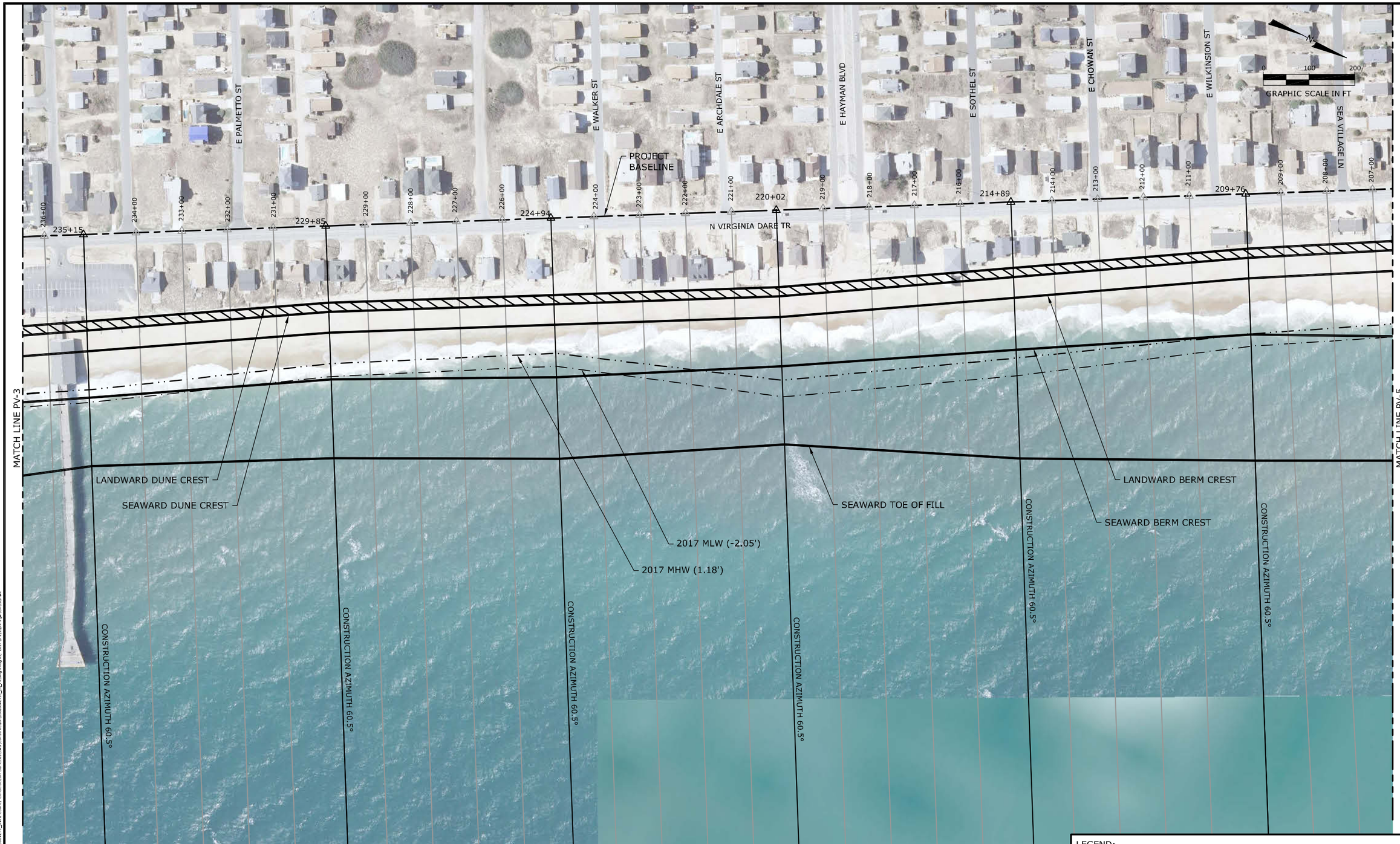
No.	Date	Description
1	8/22/11	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATTER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 93922092241
Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-3

SHEET 7 OF 26



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LEGEND:

$\triangle^{1+80}$	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

No.	Date	Description
1	8/22/11	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TERRAFIT FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Drawn by: GK
Date: 7/31/17
Plot Scale: AS NOTED
Checked by: JD
Reviewed by: KW
Submitted by: KW
Comm. No.: 63920892241
Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-4

SHEET 8 OF 26

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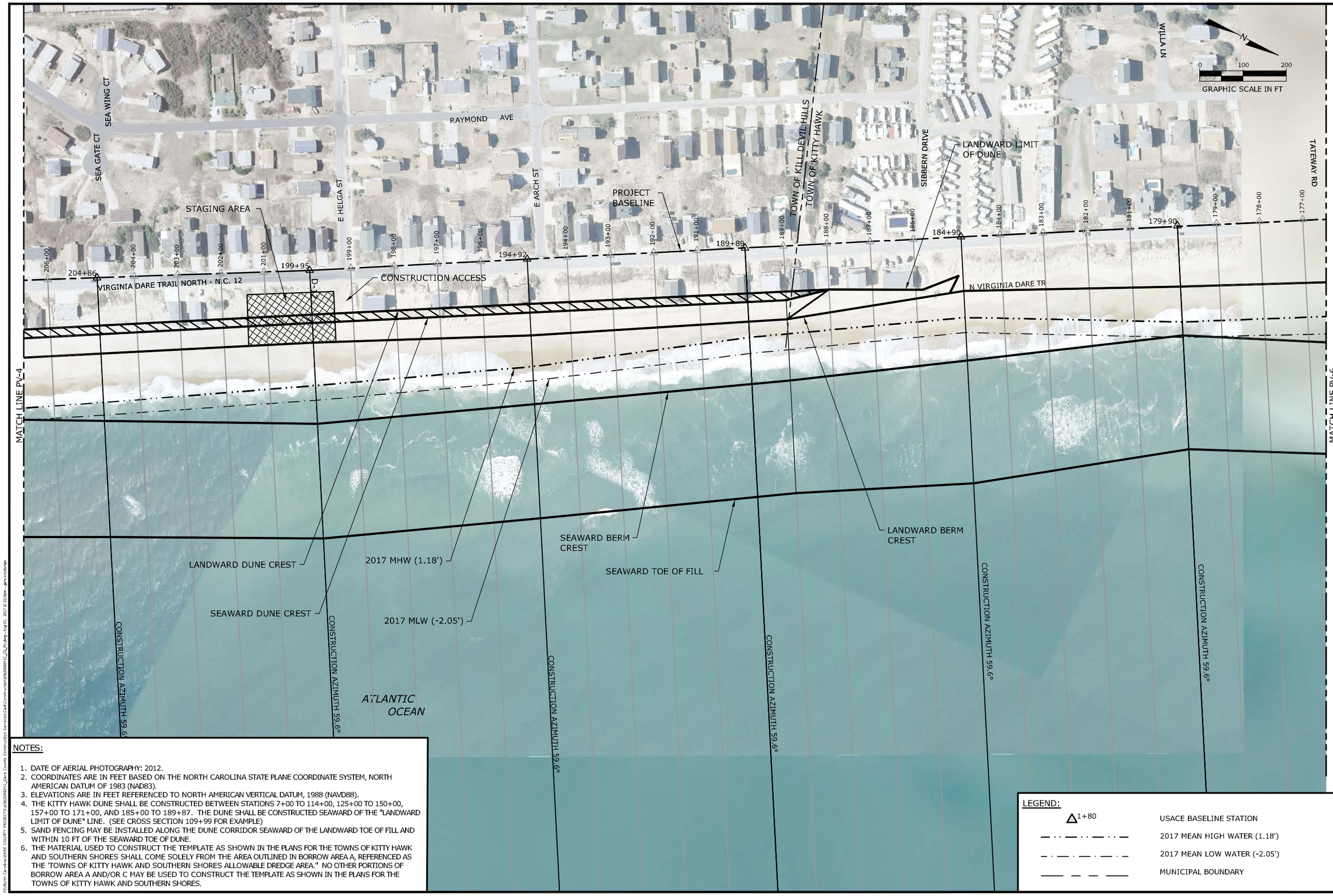

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5. SAND FENCING MAY BE INSTALLED ALONG THE DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.
6. THE MATERIAL USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES SHALL COME SOLELY FROM THE AREA OUTLINED IN BORROW AREA A, REFERENCED AS THE 'TOWNS OF KITTY HAWK AND SOUTHERN SHORES ALLOWABLE DREDGE AREA." NO OTHER PORTIONS OF BORROW AREA A AND/OR C MAY BE USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES.

LEGEND:

△ 1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATED DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-5

SHEET 9 OF 26

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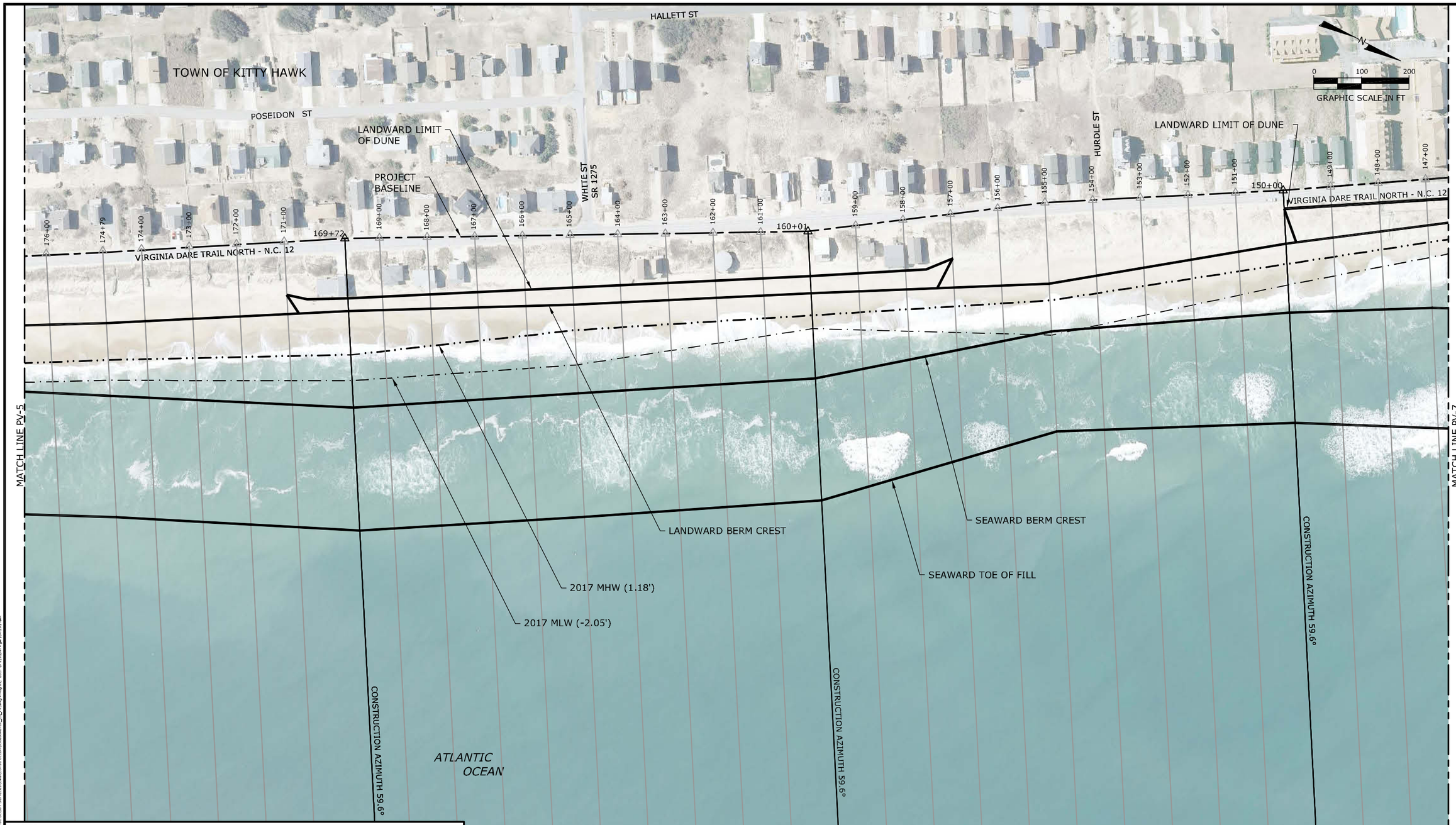

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3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
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5. SAND FENCING MAY BE INSTALLED ALONG THE DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.
6. THE MATERIAL USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES SHALL COME SOLELY FROM THE AREA OUTLINED IN BORROW AREA A, REFERENCED AS THE 'TOWNS OF KITTY HAWK AND SOUTHERN SHORES ALLOWABLE DREDGE AREA." NO OTHER PORTIONS OF BORROW AREA A AND/OR C MAY BE USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

No.	Date	Description
1	8/22/11	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6392/0892/41
Reference files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-6

SHEET 10 OF 26

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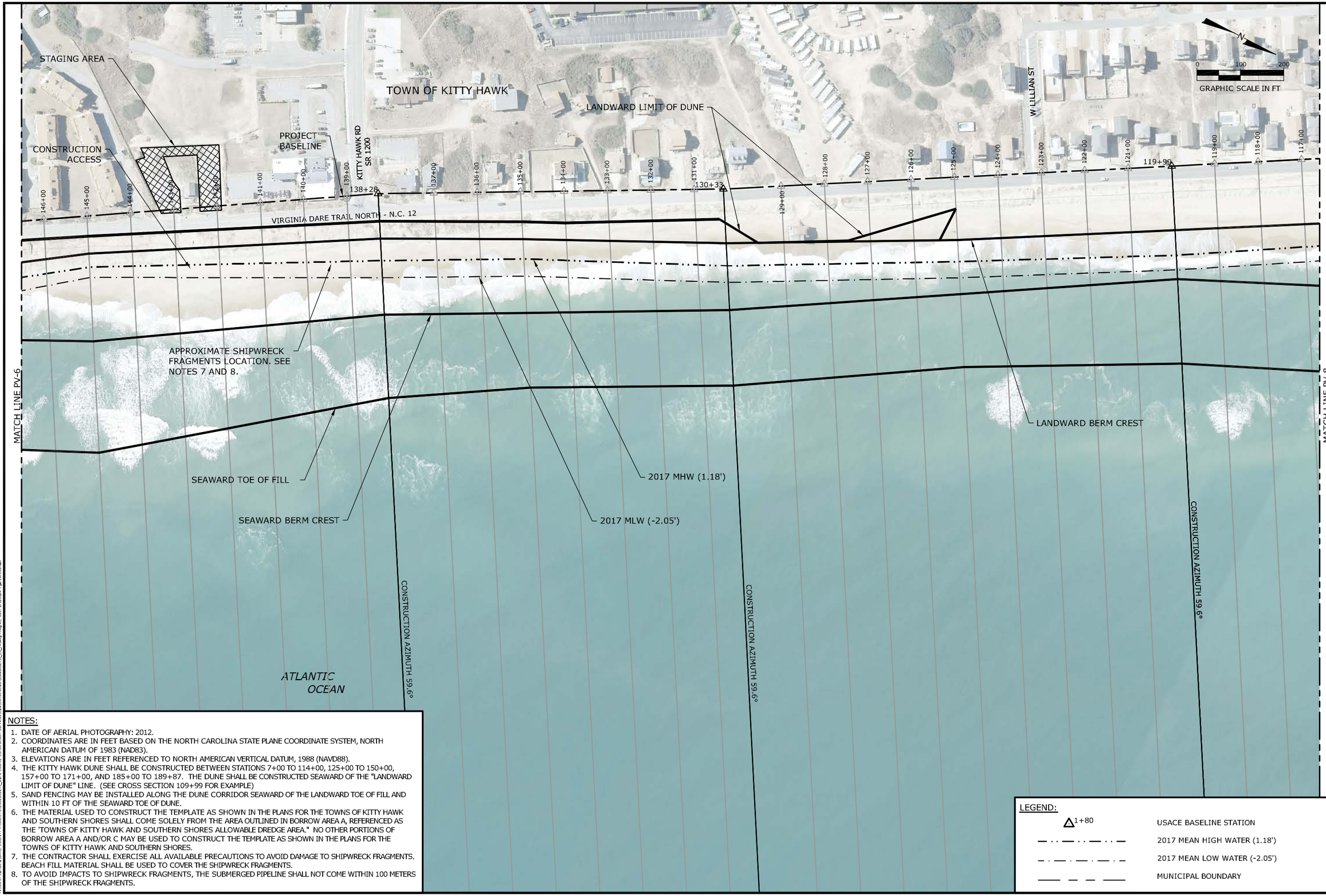

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LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

COASTAL PLANNING & ENGINEERING, INC.
OF North Carolina, inc.
4038 MASONBORO LOOP RD.
WILMINGTON, NC 28409
www.CBI.com
PH. (910)791-9494
FAX (910) 791-4129

REVISIONS

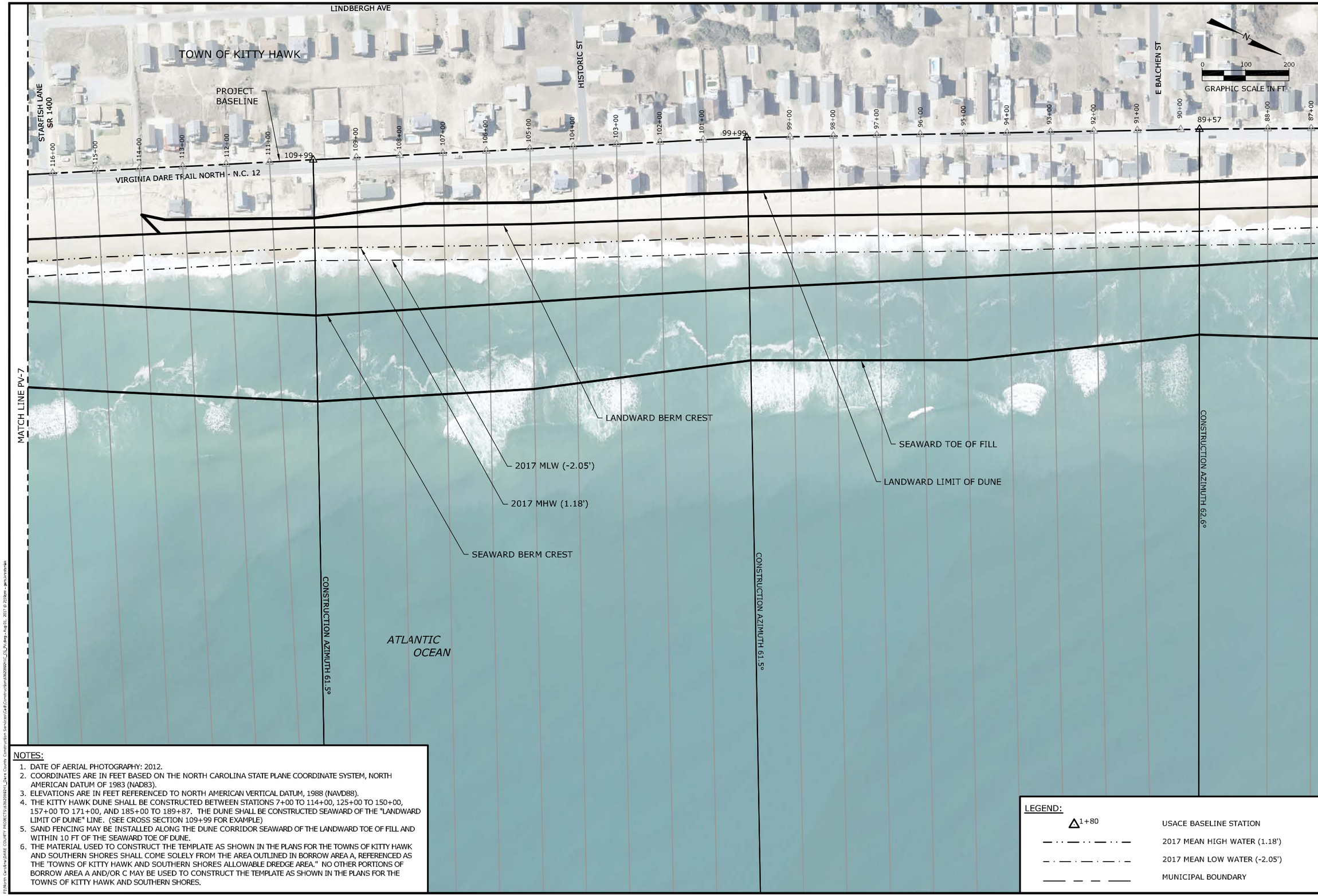
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Reference Files:

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-7



NOTES:

1. DATE OF AERIAL PHOTOGRAPHY: 2012.
2. COORDINATES ARE IN FEET BASED ON THE NORTH CAROLINA STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (NAD83).
3. ELEVATIONS ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
4. THE KITTY HAWK DUNE SHALL BE CONSTRUCTED BETWEEN STATIONS 7+00 TO 114+00, 125+00 TO 150+00, 157+00 TO 171+00, AND 185+00 TO 189+87. THE DUNE SHALL BE CONSTRUCTED SEAWARD OF THE "LANDWARD LIMIT OF DUNE" LINE. (SEE CROSS SECTION 109+99 FOR EXAMPLE)
5. SAND FENCING MAY BE INSTALLED ALONG THE DUNE CORRIDOR SEAWARD OF THE LANDWARD TOE OF FILL AND WITHIN 10 FT OF THE SEAWARD TOE OF DUNE.
6. THE MATERIAL USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES SHALL COME SOLELY FROM THE AREA OUTLINED IN BORROW AREA A, REFERENCED AS THE 'TOWNS OF KITTY HAWK AND SOUTHERN SHORES ALLOWABLE DREDGE AREA." NO OTHER PORTIONS OF BORROW AREA A AND/OR C MAY BE USED TO CONSTRUCT THE TEMPLATE AS SHOWN IN THE PLANS FOR THE TOWNS OF KITTY HAWK AND SOUTHERN SHORES.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
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No.	Date	Description
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2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
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Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241
Reference Files:

NORTH DARE COUNTY BEACHES
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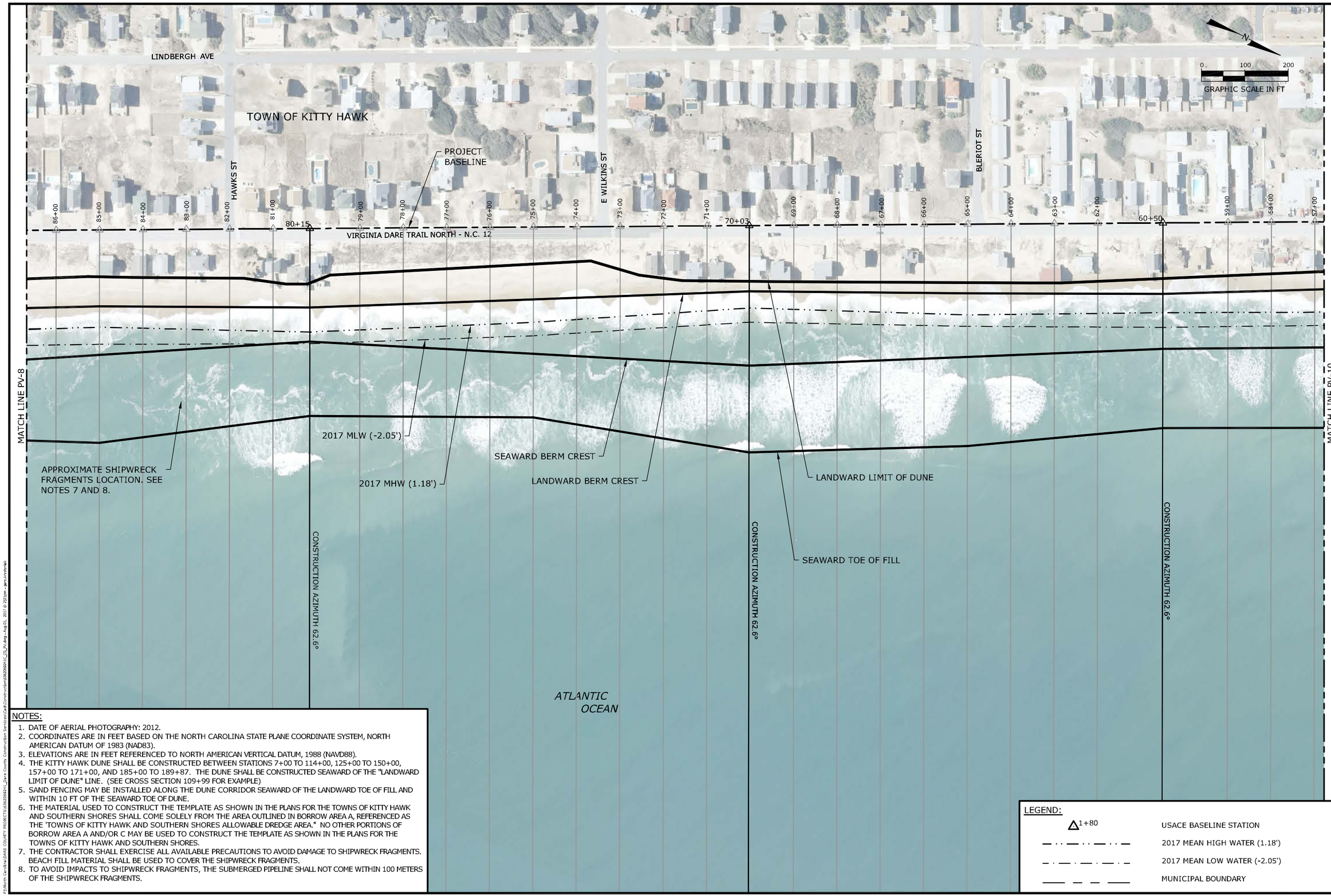
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-8



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7. THE CONTRACTOR SHALL EXERCISE ALL AVAILABLE PRECAUTIONS TO AVOID DAMAGE TO SHIPWRECK FRAGMENTS. BEACH FILL MATERIAL SHALL BE USED TO COVER THE SHIPWRECK FRAGMENTS.
8. TO AVOID IMPACTS TO SHIPWRECK FRAGMENTS, THE SUBMERGED PIPELINE SHALL NOT COME WITHIN 100 METERS OF THE SHIPWRECK FRAGMENTS.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

No.	Date	Description
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2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

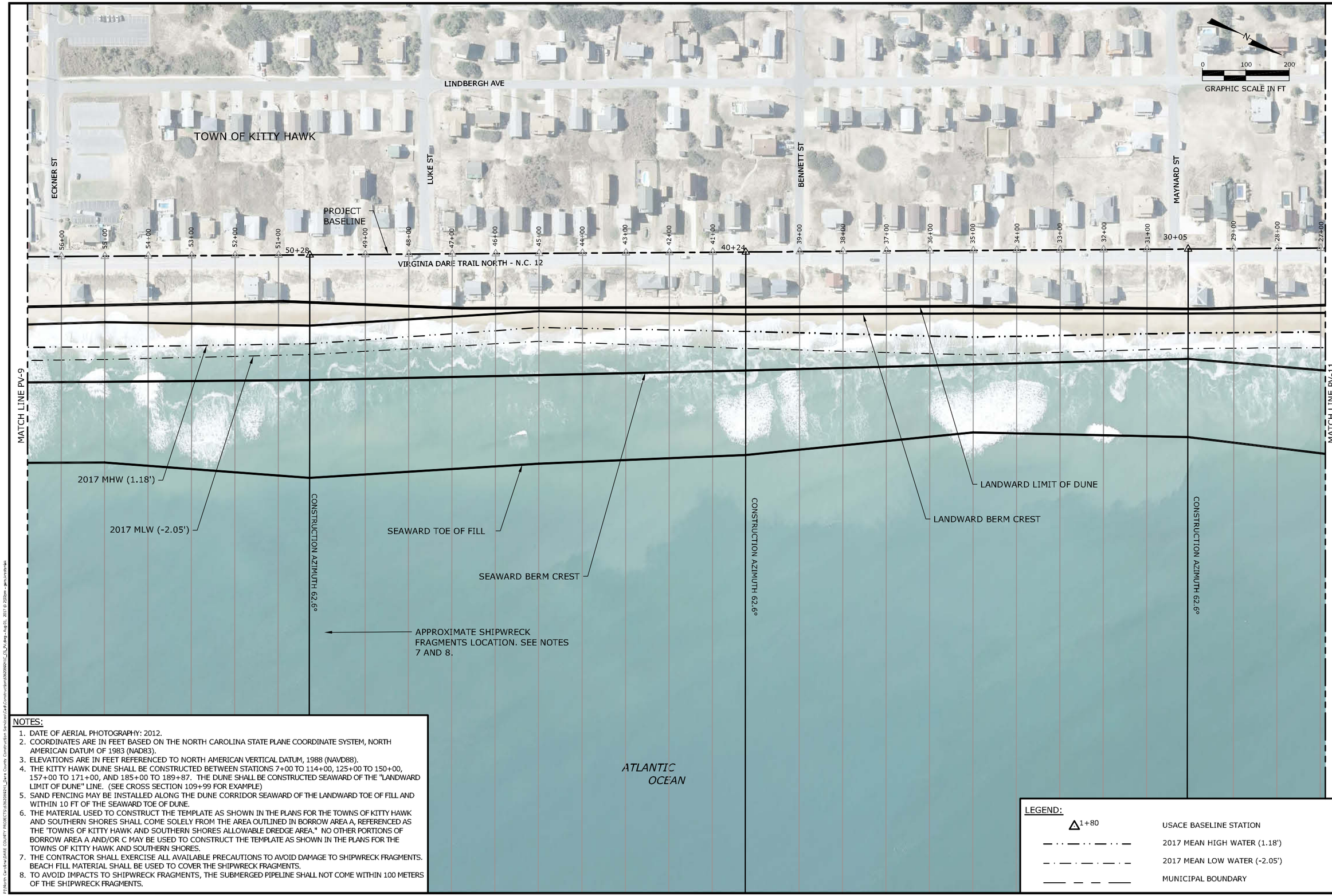
Reference Files:

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-9

SHEET 13 OF 26



NOTES:

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8. TO AVOID IMPACTS TO SHIPWRECK FRAGMENTS, THE SUBMERGED PIPELINE SHALL NOT COME WITHIN 100 METERS OF THE SHIPWRECK FRAGMENTS.

LEGEND:

△1+80	USACE BASELINE STATION
— · · — · · — · · —	2017 MEAN HIGH WATER (1.18')
— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
—— — — ——	MUNICIPAL BOUNDARY

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REVISIONS

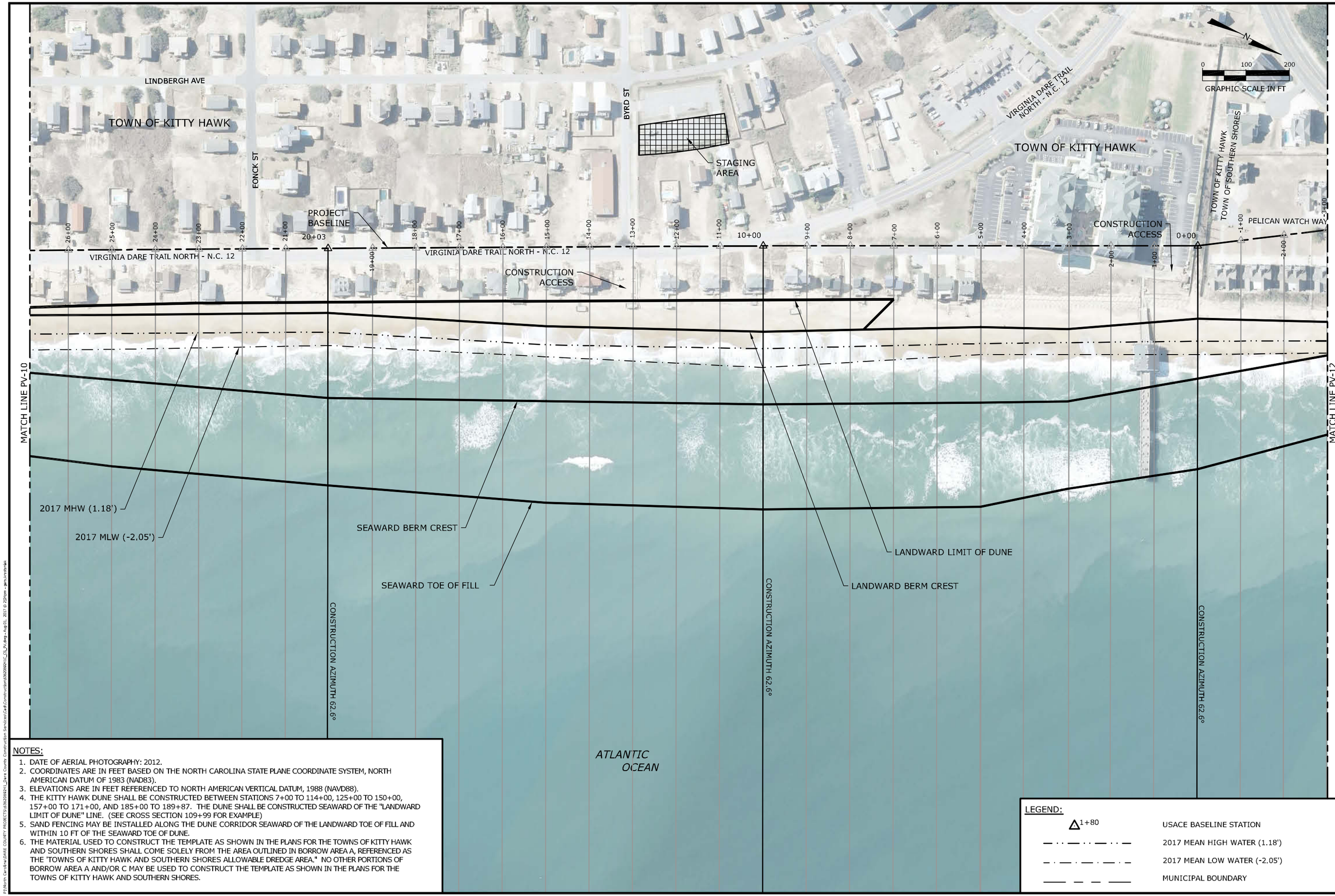
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Reference Files:

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-10



NOTES:

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LEGEND:

1+80	USACE BASELINE STATION
	2017 MEAN HIGH WATER (1.18')
	2017 MEAN LOW WATER (-2.05')
	MUNICIPAL BOUNDARY

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REVISIONS

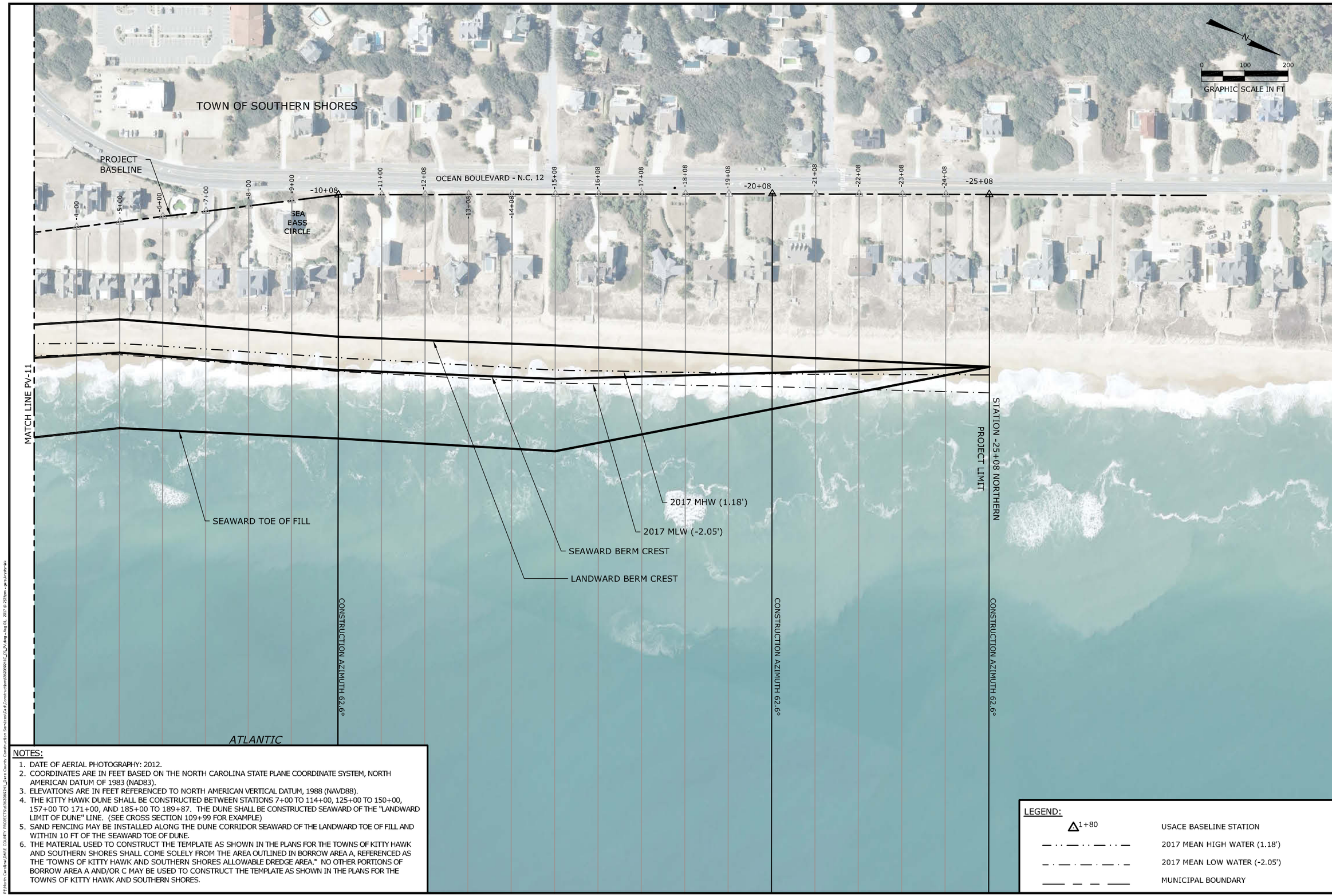
No.	Date	Description
1	6/20/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATER DUNE

Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 93920392241

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

DRAWING NO.
PV-11



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— · — · — · — · —	2017 MEAN LOW WATER (-2.05')
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REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE

Designed by: JD
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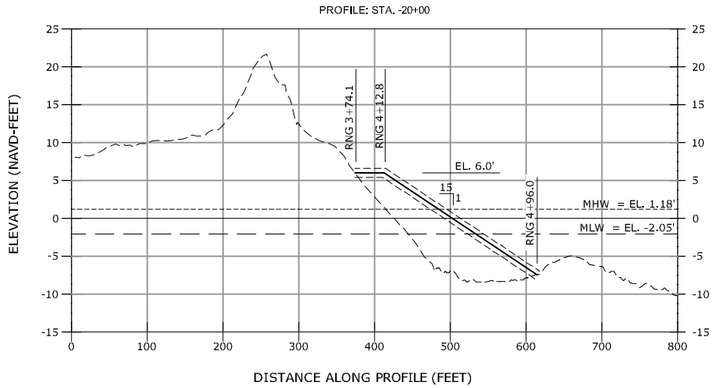
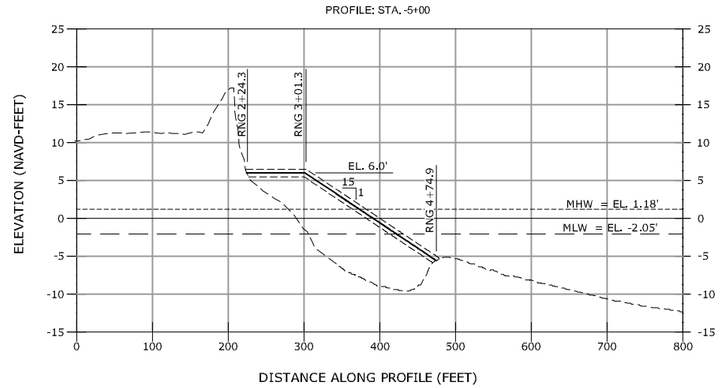
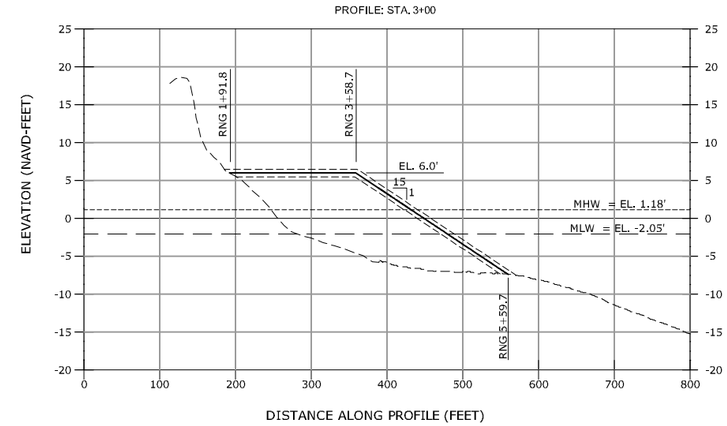
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 6362089241
Reference Files:

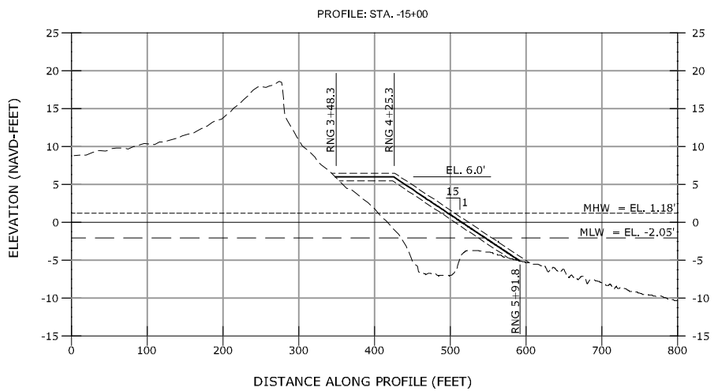
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
PLAN VIEW

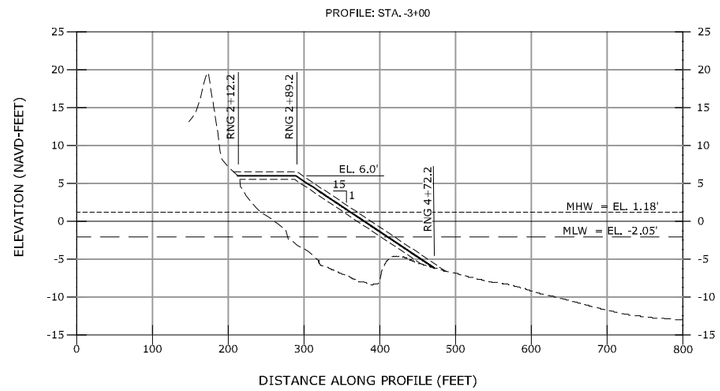
DRAWING NO.
PV-12

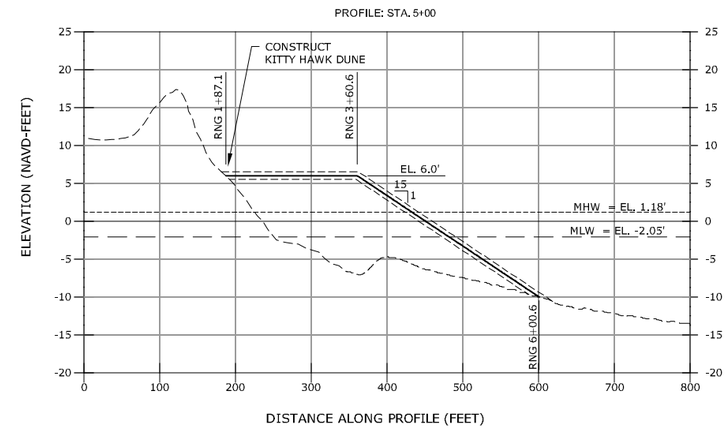


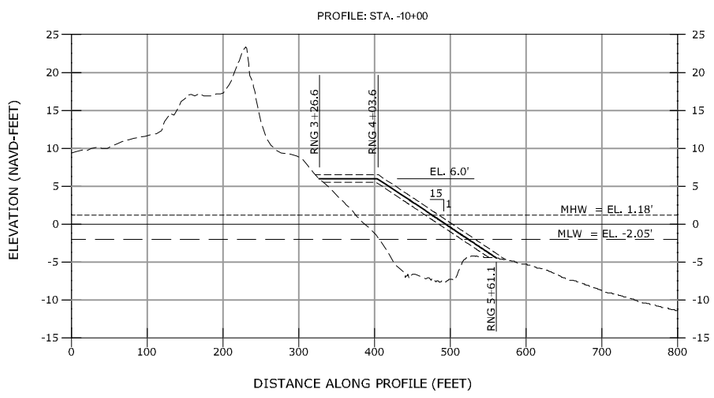


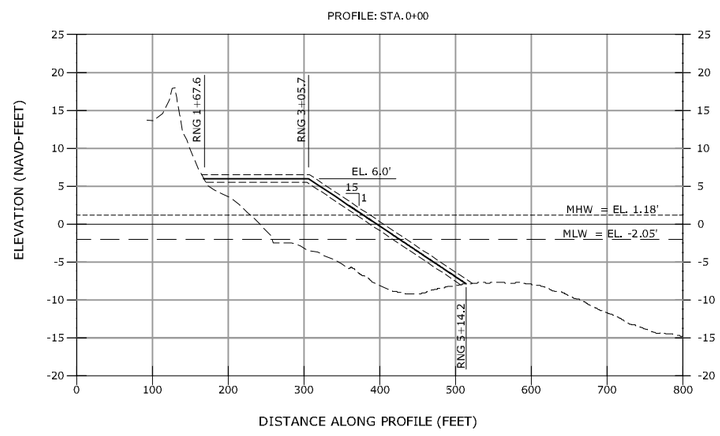


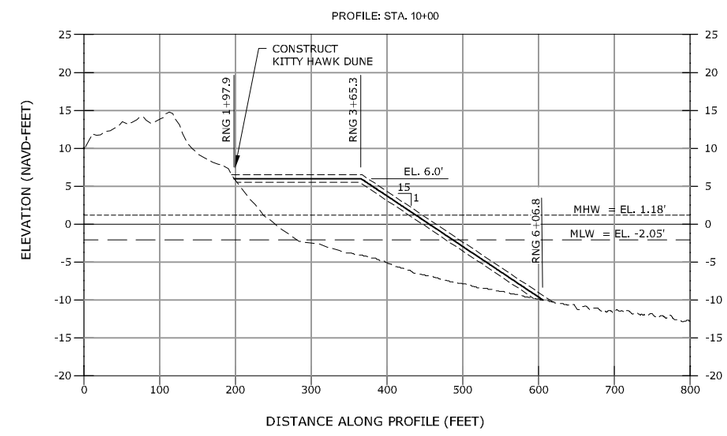












NOTES:

1. ELEVATIONS SHOWN ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. PRE-CONSTRUCTION SURVEY PERFORMED JUNE 3-11, 2017 BY GREAT LAKES DREDGE AND DOCK COMPANY.
3. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED WITHIN THE LIMITS OF THE TEMPORARY DUNE STOCKPILE LOCATION AS SHOWN IN THE PLANS OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION IS OPTIONAL. IF THE DUNE MATERIAL IS PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).
4. THE KITTY HAWK DUNE SHALL BE CONSTRUCTED BETWEEN STATIONS 7+00 TO 114+00, 125+00 TO 150+00, 157+00 TO 171+00 AND 185+00 TO 189+00 FOR A TOTAL OF 15,190 LINEAR FEET. THE KITTY HAWK DUNE SHALL TIE INTO THE SEAWARD EDGE OF THE EXISTING STRUCTURES AS BEST AS PRACTICAL OR THE EXISTING SEAWARD FACE OF THE DUNE, WHICHEVER IS FARTHER SEAWARD.
5. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED AT THE LANDWARD BERM CREST OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN A TEMPORARY STOCKPILE AT THE LANDWARD BERM CREST IS OPTIONAL. IF THE DUNE MATERIAL IS TEMPORARILY STOCKPILED AT THE LANDWARD BERM CREST, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN A TEMPORARY STOCKPILE, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).

LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

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REVISIONS

No.	Date	Description
1	8/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATER DUNE

Reference Files:

Designed by: JD
Drawn by: CRK
Date: 7/31/17
Plot Scale: AS NOTED
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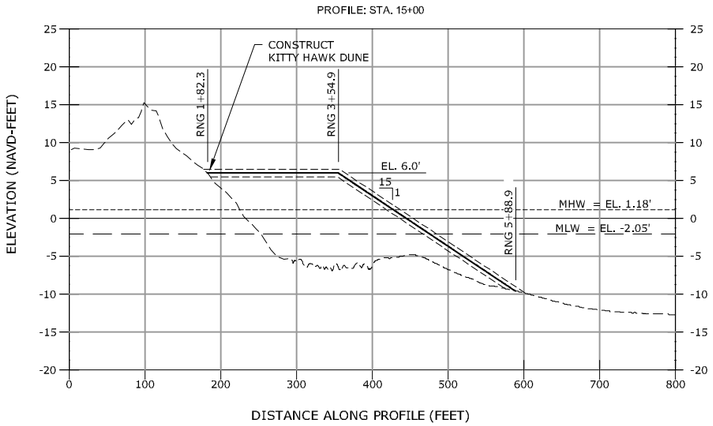
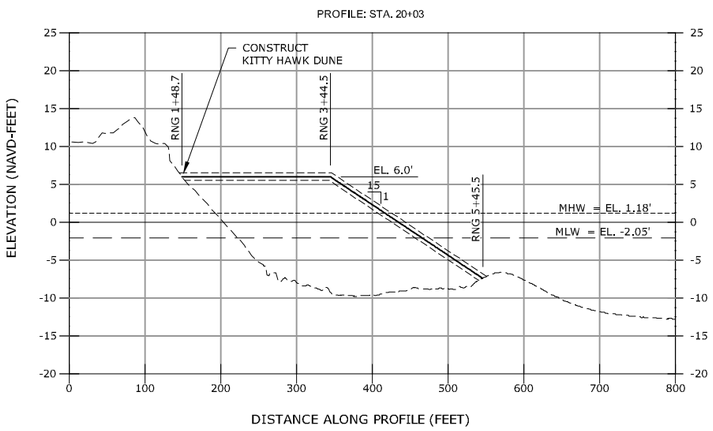
Reviewed by: KW
Submitted by: KW
Comm. No.: 0392039241

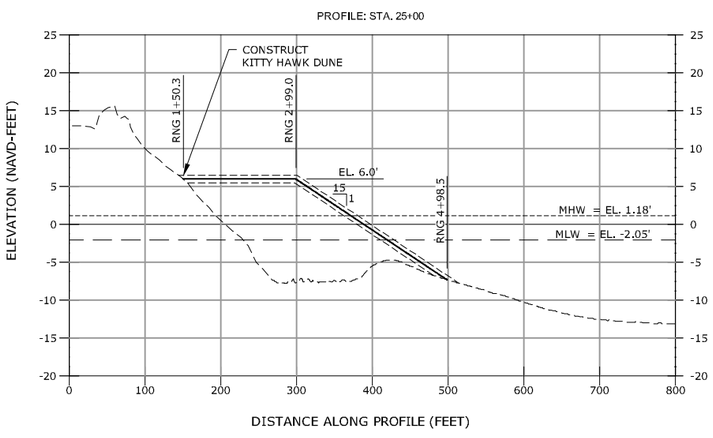
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

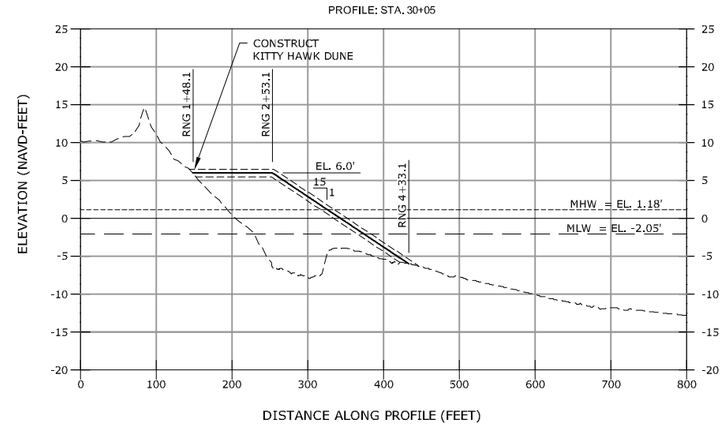
DRAWING NO.
XS-1

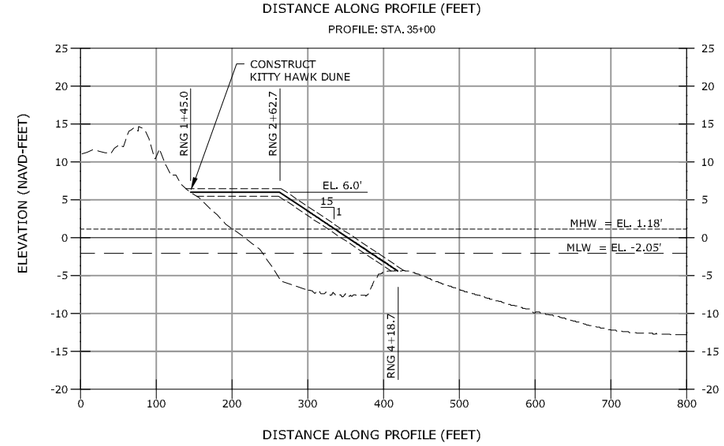
P:\North Carolina\DARE COUNTY PROJECTS\0392039241_Dare County Construction Services\Cad\Construction\0392039241C_XS.dwg - Aug 01, 2017 @ 2:02pm - jpurvis\crkirk

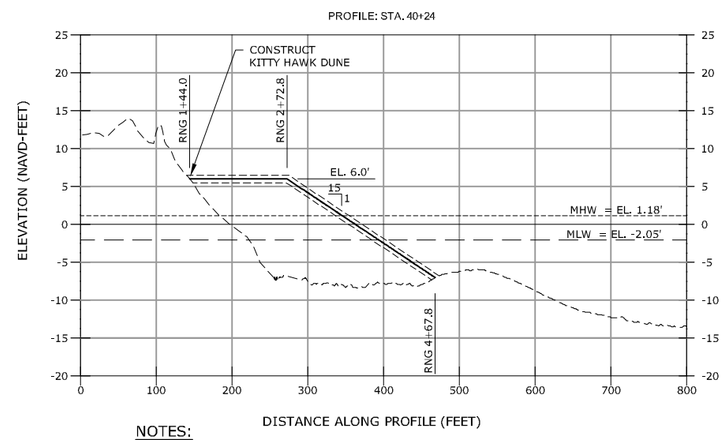


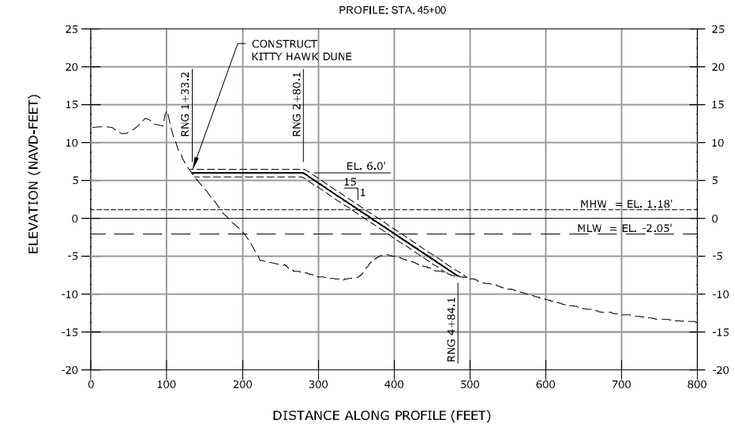


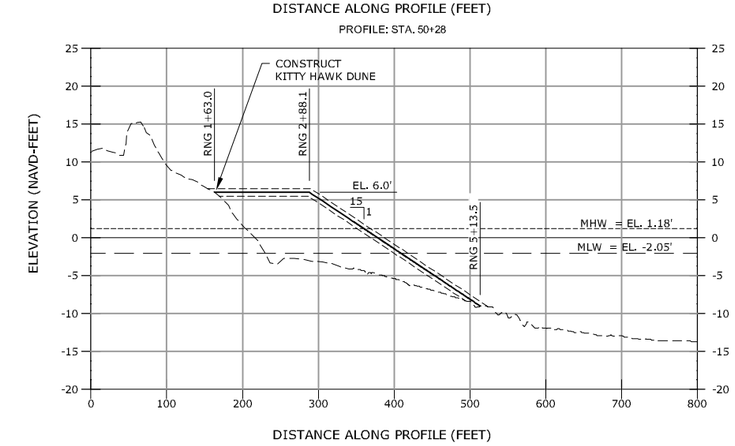


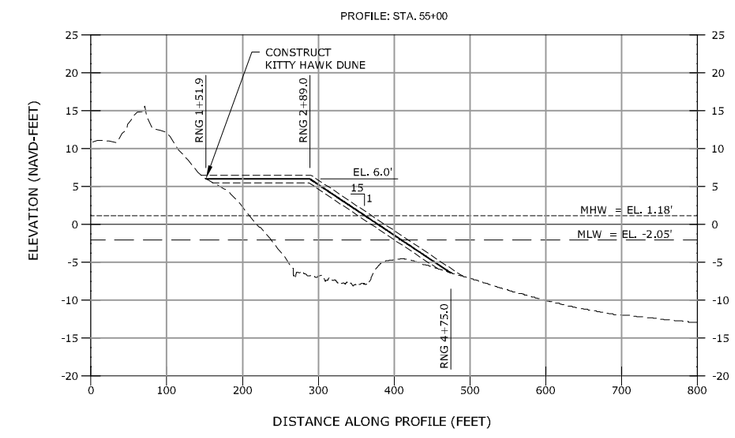












LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

NOTES:

1. ELEVATIONS SHOWN ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
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REVISIONS

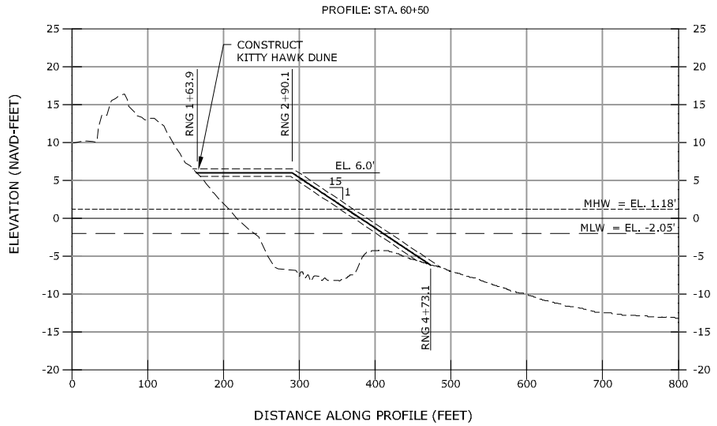
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATION DUNE

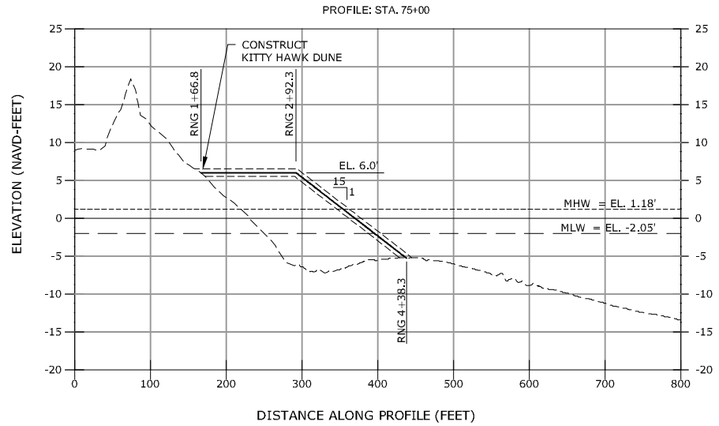
Designed by: JD
Checked by: JD
Drawn by: GK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Contrs. No.: 0302009241
Reference Files:

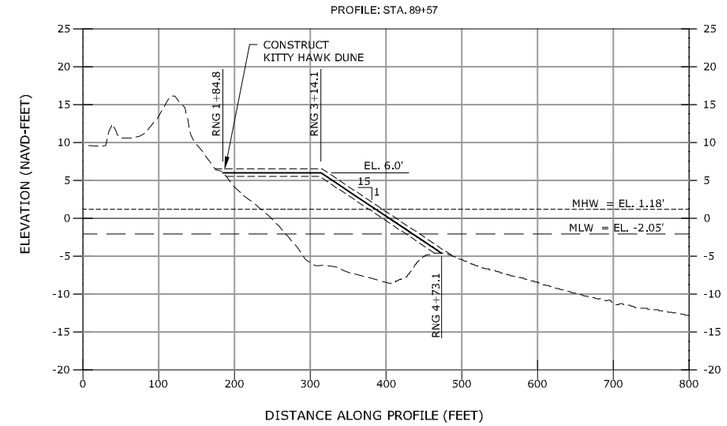
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

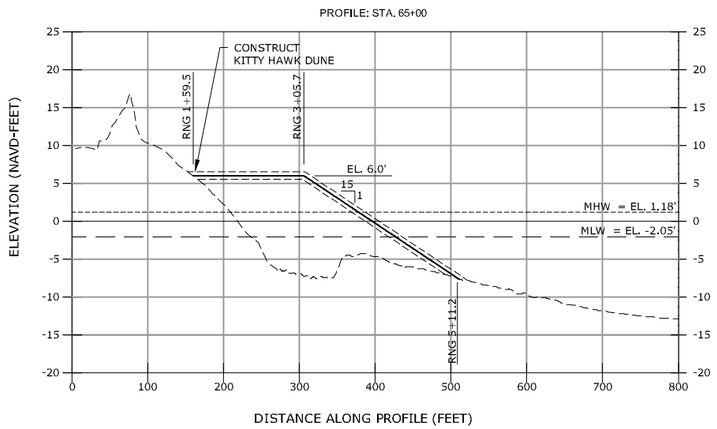
DRAWING NO.
XS-2

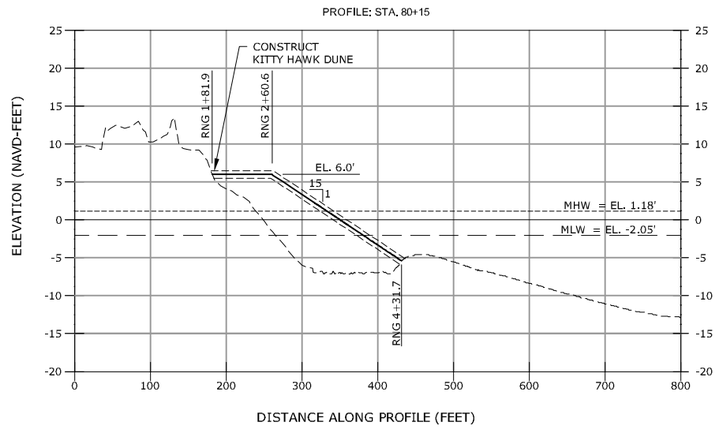
P:\North Carolina\DARE COUNTY PROJECTS\63\0209241_Dare County Construction Services\Cad\Construction\63\0209241C_XS.dwg - Aug 01, 2017 @ 2:02pm - gary.kirkham\kak

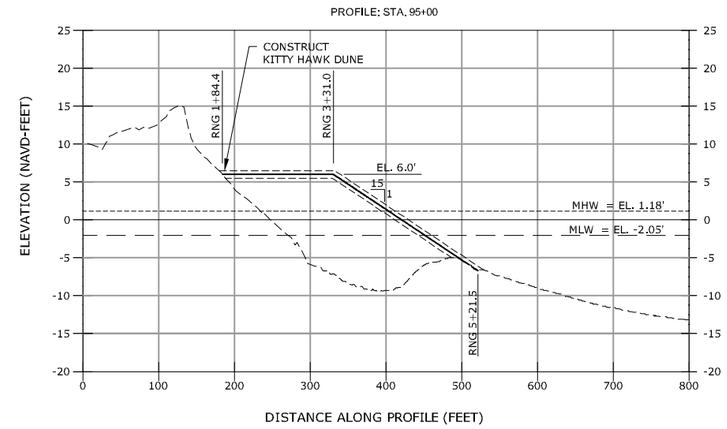


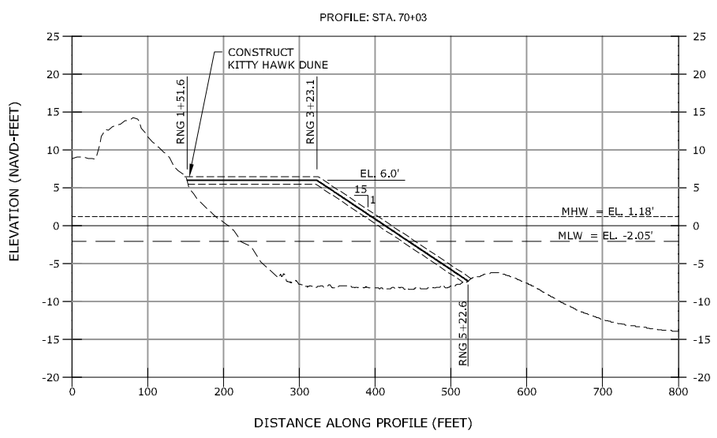


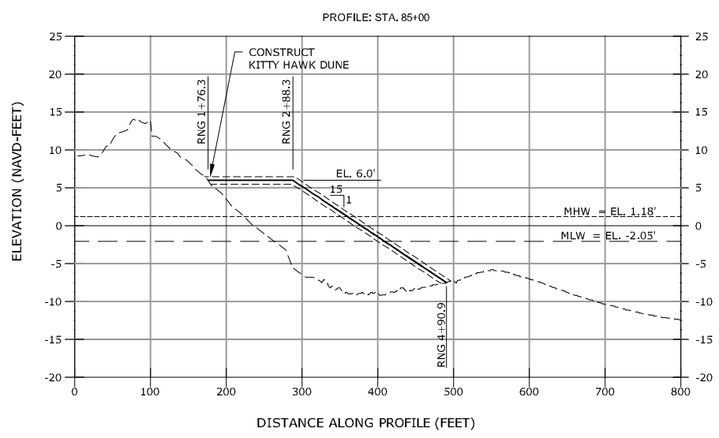


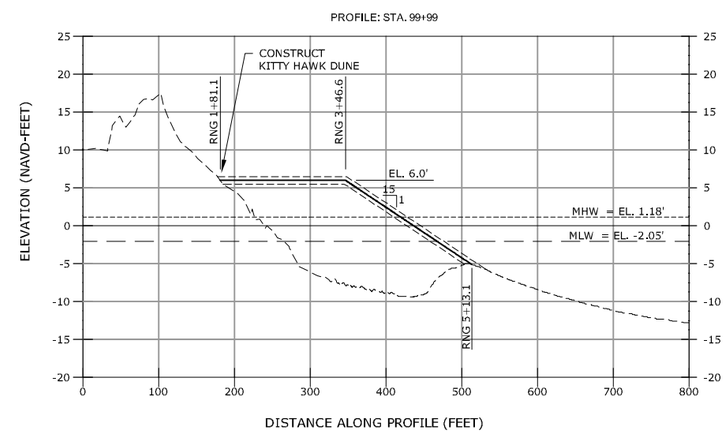












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- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

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REVISIONS

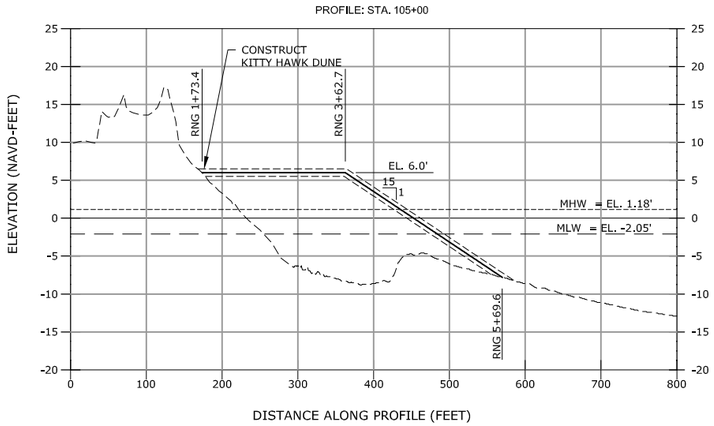
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATION DUNE

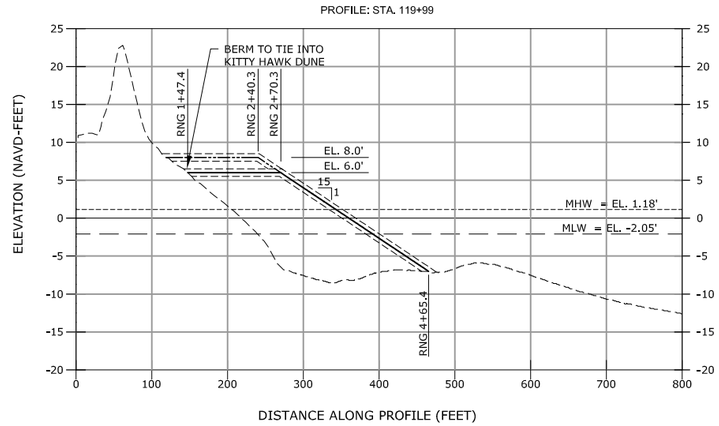
Designed by: JD
Drawn by: GRK
Date: 7/31/17
Checked by: JD
Reviewed by: KW
Submitted by: KW
Plot Scale: AS NOTED
Contrs. No.: 6362092241
Reference Files:

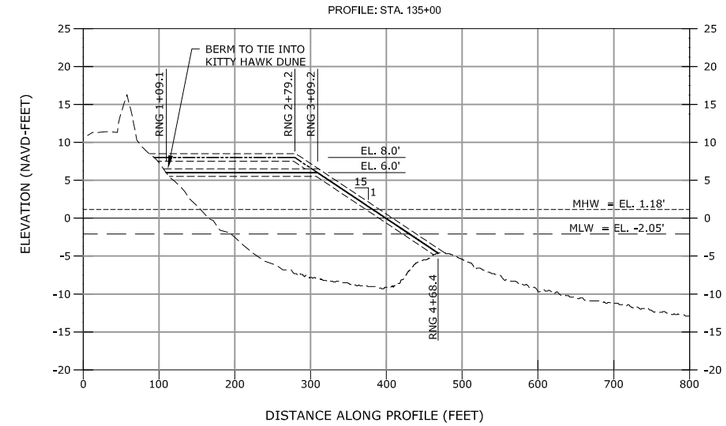
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH F/L PROFILES

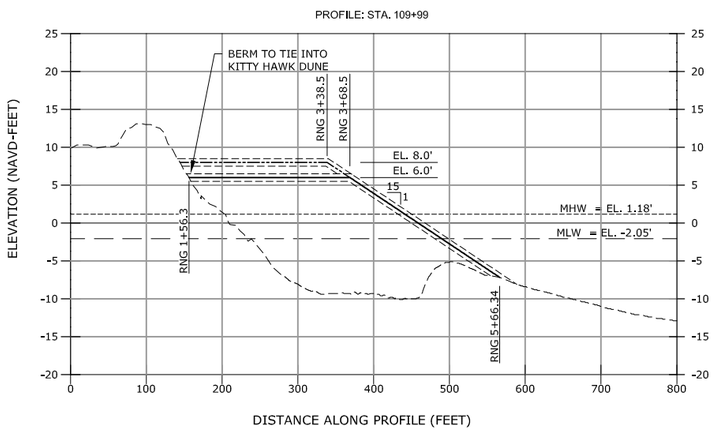
DRAWING NO.
XS-3

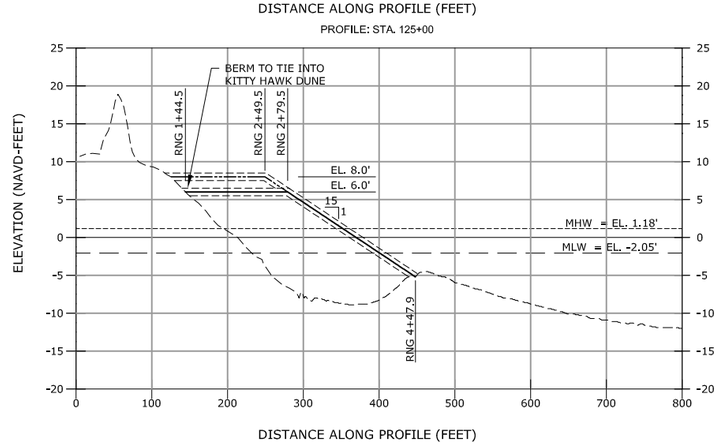
P:\North Carolina\DARE COUNTY PROJECTS\636209241_Dare County Construction Services\Cad\Construction\636209241C_XS.dwg - Aug 01, 2017 @ 2:03pm - gary.krynitski

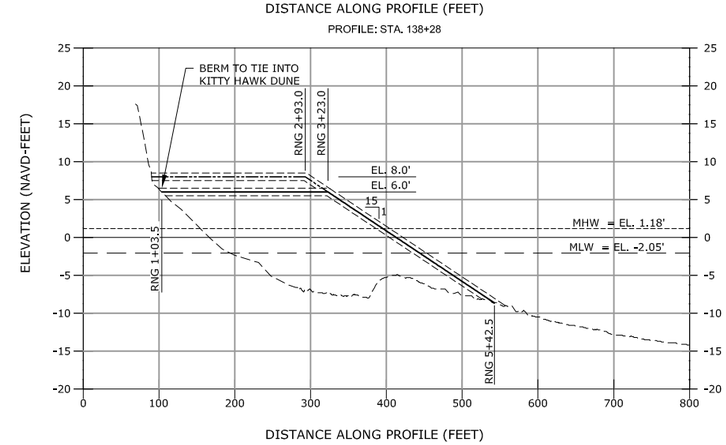


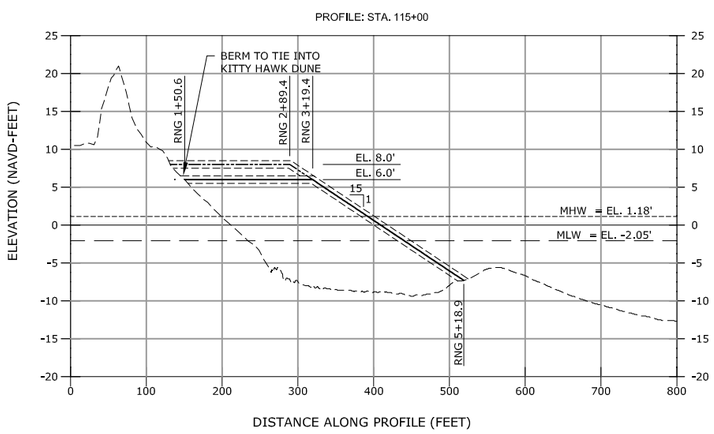


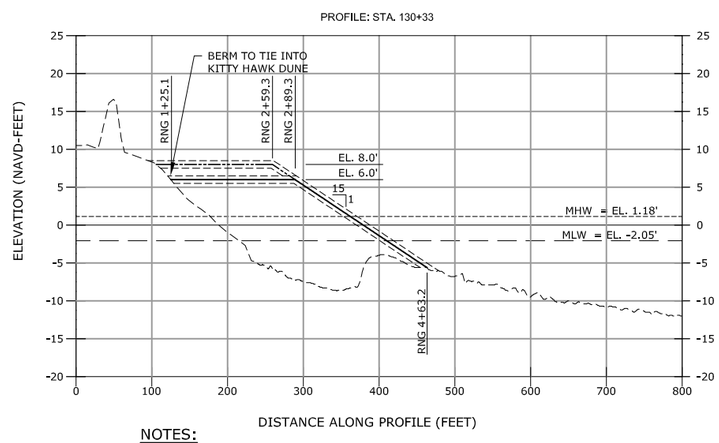


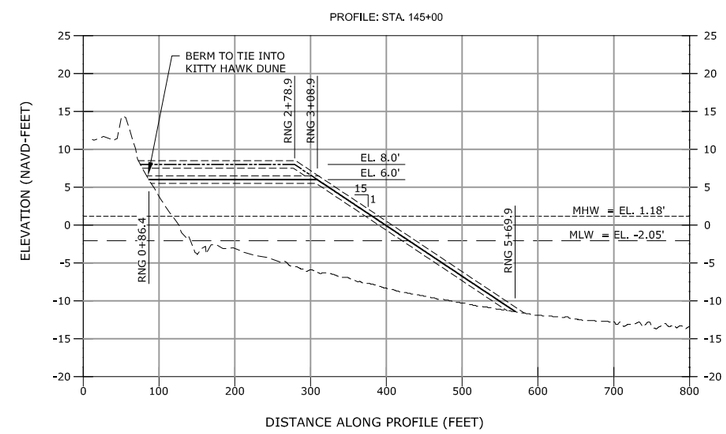












LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

NOTES:

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REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE
3	9/15/17	BERM CREST STATIONS 109+99 TO 130+00

Designed by: JD	Checked by: JD
Drawn by: CRK	Reviewed by: KW
Date: 7/31/17	Submitted by: KW
Plot Scale: AS NOTED	Comm. No.: 636208924

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

DRAWING NO.

XS-4

SHEET 20 OF 26

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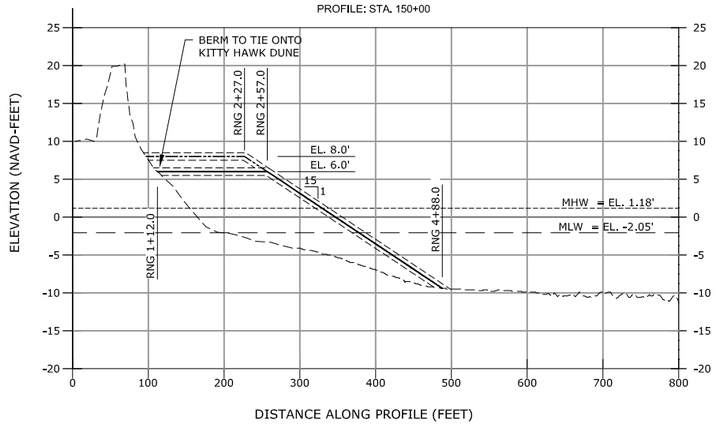

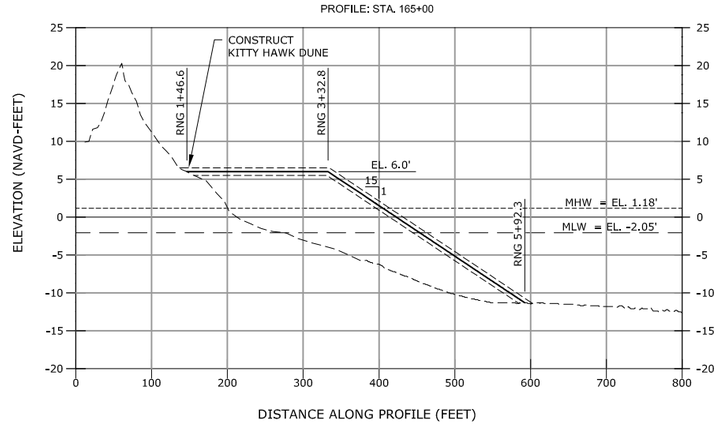

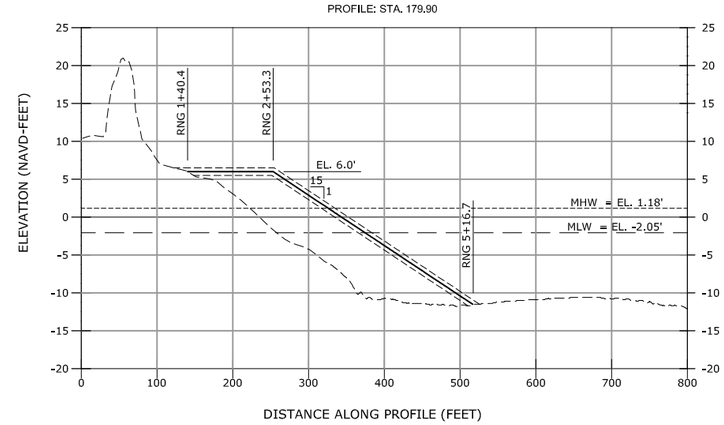

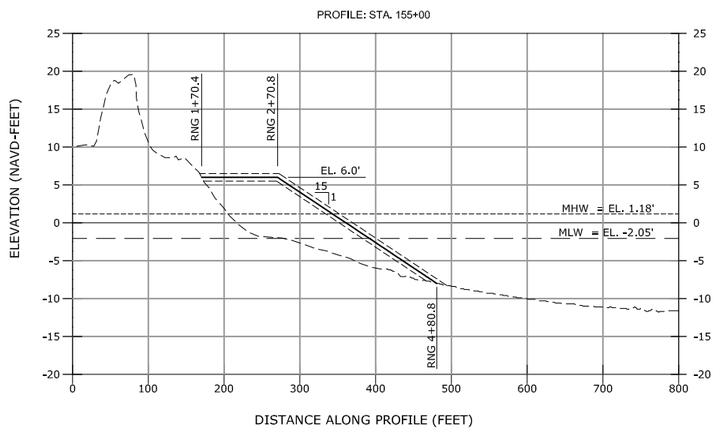

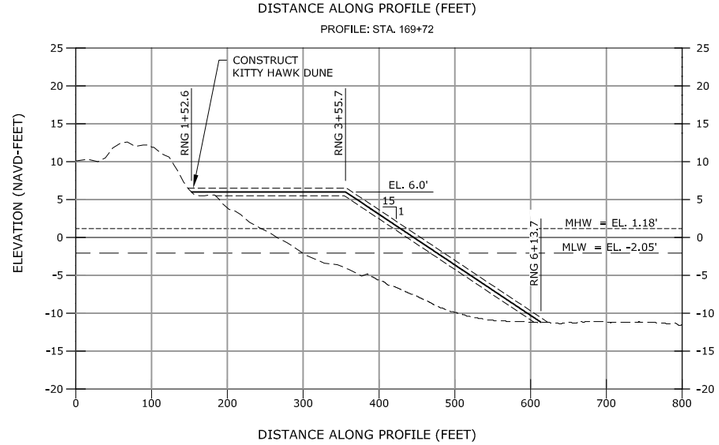

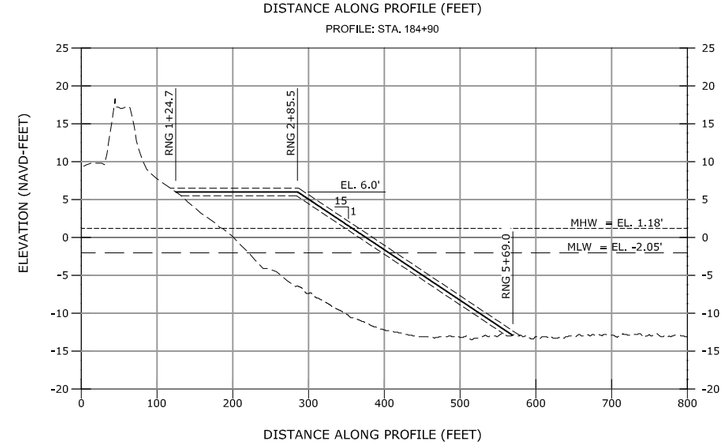

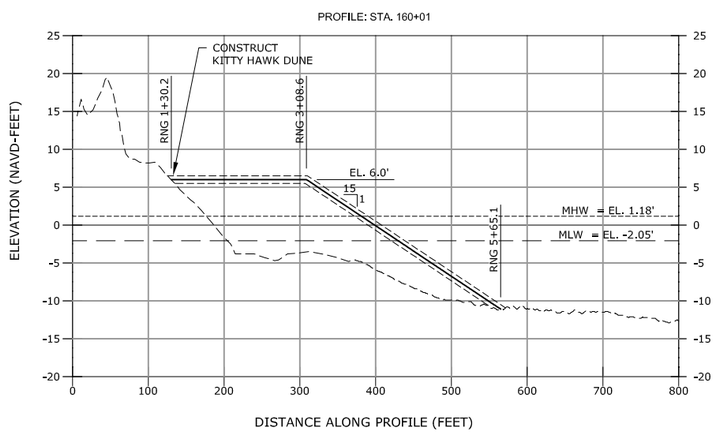

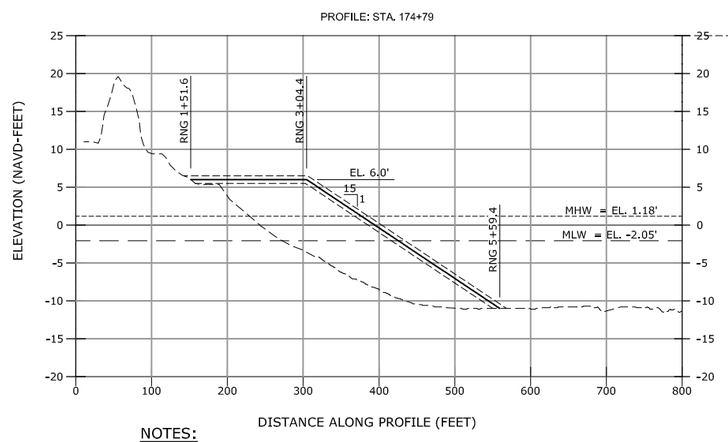

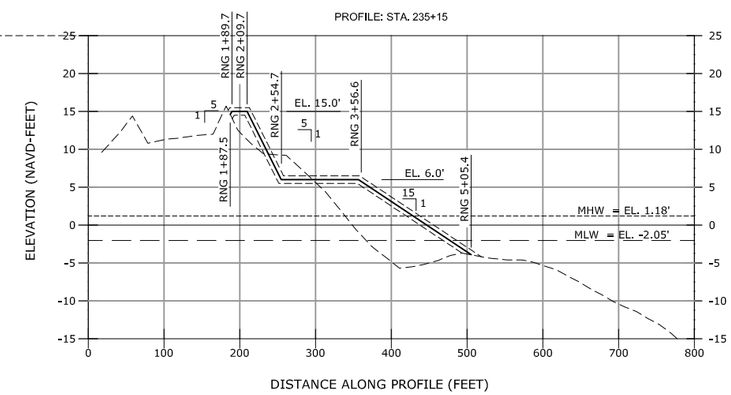

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3. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED WITHIN THE LIMITS OF THE TEMPORARY DUNE STOCKPILE LOCATION AS SHOWN IN THE PLANS OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION IS OPTIONAL. IF THE DUNE MATERIAL IS PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).
4. THE KITTY HAWK DUNE SHALL BE CONSTRUCTED BETWEEN STATIONS 7+00 TO 114+00, 125+00 TO 150+00, 157+00 TO 171+00 AND 185+00 TO 189+00 FOR A TOTAL OF 15,190 LINEAR FEET. THE KITTY HAWK DUNE SHALL TIE INTO THE SEAWARD EDGE OF THE EXISTING STRUCTURES AS BEST AS PRACTICAL OR THE EXISTING SEAWARD FACE OF THE DUNE, WHICHEVER IS FARTHER SEAWARD.
5. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED AT THE LANDWARD BERM CREST OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN A TEMPORARY STOCKPILE AT THE LANDWARD BERM CREST IS OPTIONAL. IF THE DUNE MATERIAL IS TEMPORARILY STOCKPILED AT THE LANDWARD BERM CREST, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN A TEMPORARY STOCKPILE, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).

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FAX (910) 791-4129

REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STARTER DUNE
3	9/15/17	BERM CREST STATIONS 159+99 TO 150+00

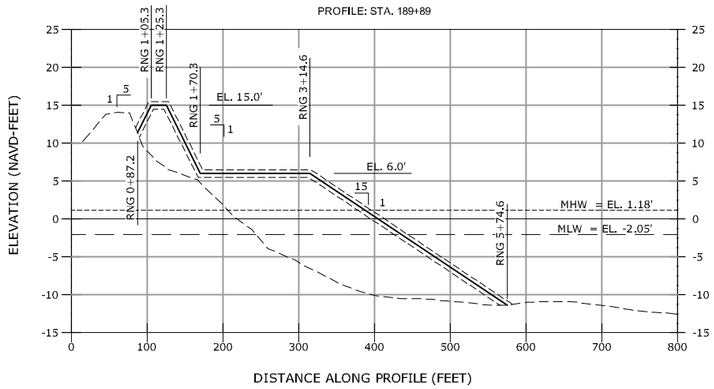
Designed by: JD
Checked by: JD
Drawn by: CRK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Comm. No.: 636208924.1

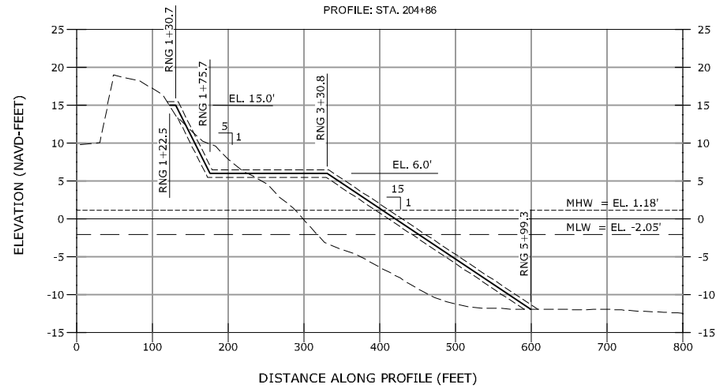
Reference Files:

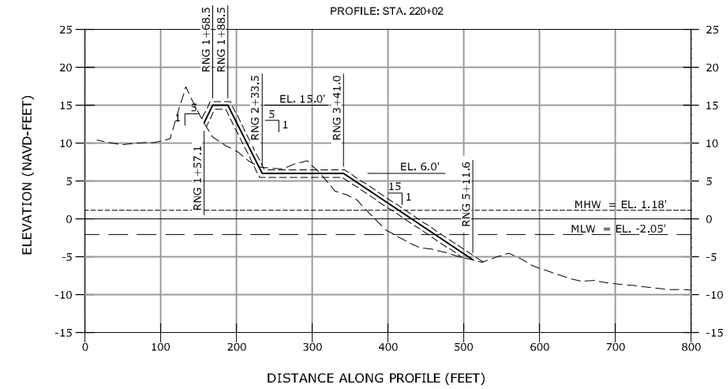
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

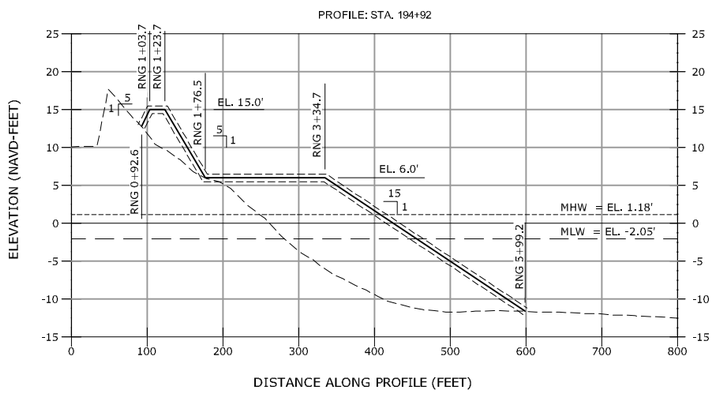
DRAWING NO.
XS-5

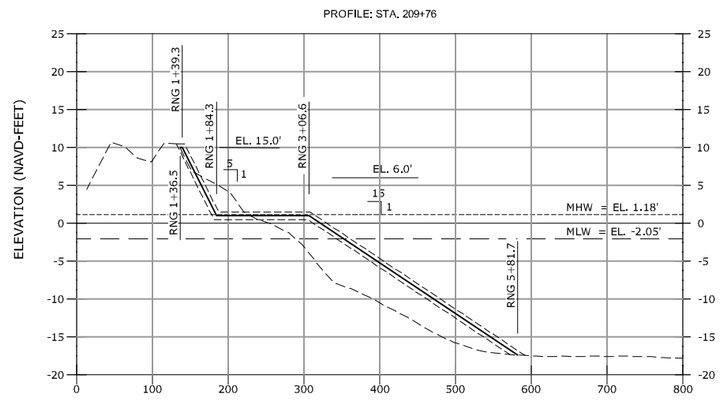
P:\North Carolina\DARE COUNTY PROJECTS\636208924_Dare County Construction Services\Cad\Construction\636208924.0_XS-5-2017.dwg - Sep 15, 2017 @ 11:15pm - gary.krystyniak

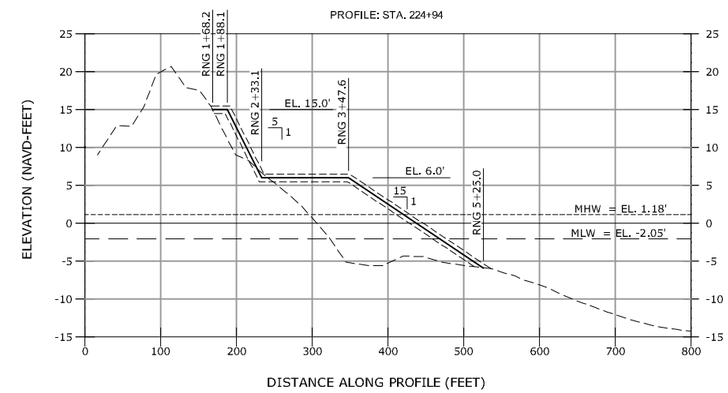


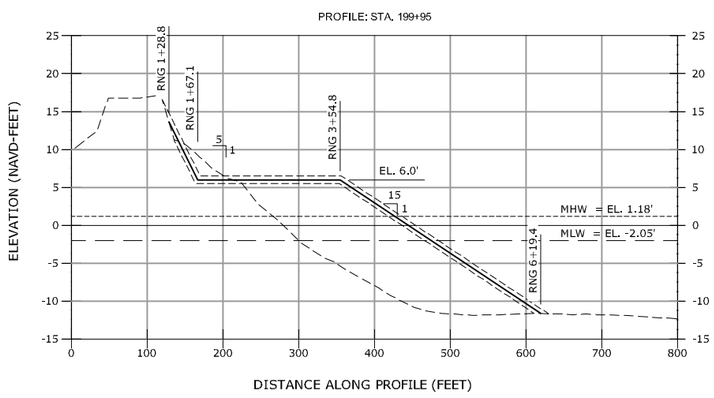


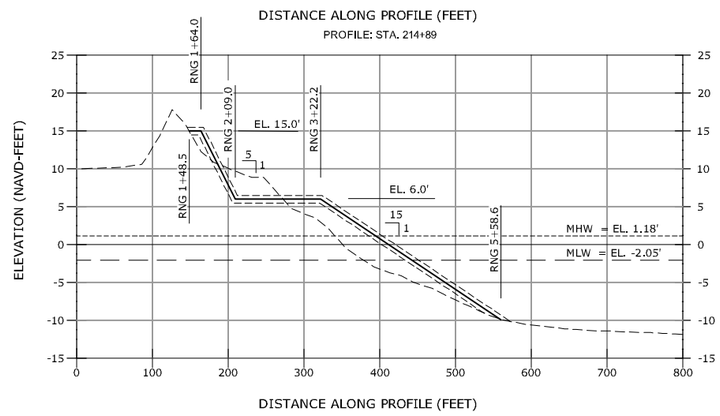


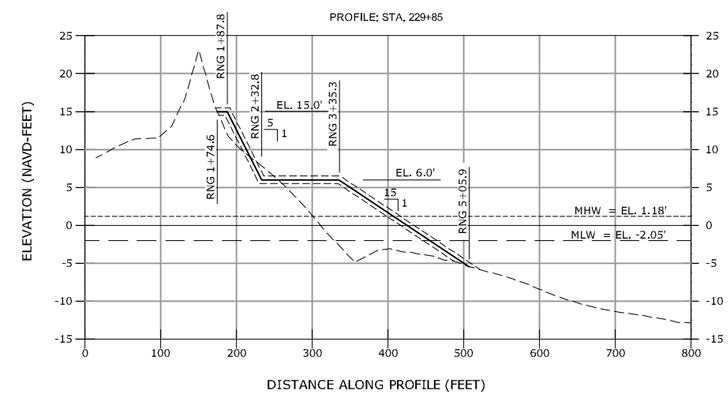












LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

NOTES:

1. ELEVATIONS SHOWN ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. PRE-CONSTRUCTION SURVEY PERFORMED JUNE 3-11, 2017 BY GREAT LAKES DREDGE AND DOCK COMPANY.
3. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED WITHIN THE LIMITS OF THE TEMPORARY DUNE STOCKPILE LOCATION AS SHOWN IN THE PLANS OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION IS OPTIONAL. IF THE DUNE MATERIAL IS PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).

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FAX (910) 791-4129

REVISIONS

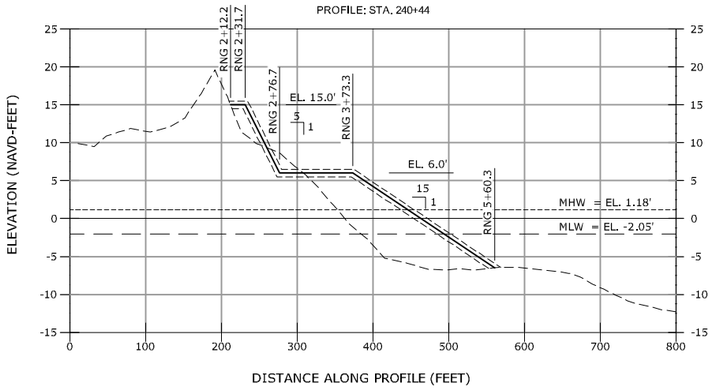
No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATER DUNE

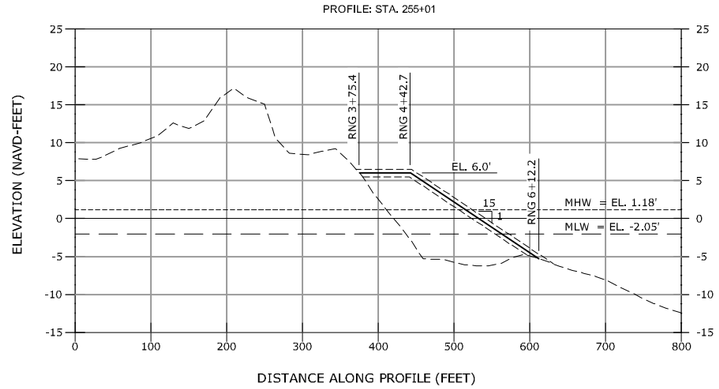
Designed by: JD
Drawn by: GK
Date: 7/31/17
Checked by: JD
Reviewed by: KW
Submitted by: KW
Plot Scale: AS NOTED
Contrs. No.: 6362/09241
Reference Files:

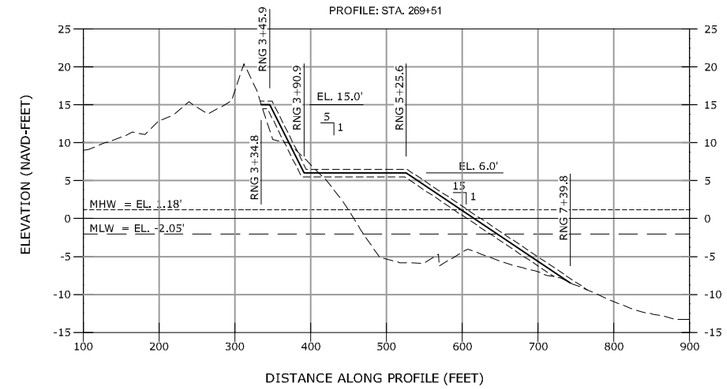
NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

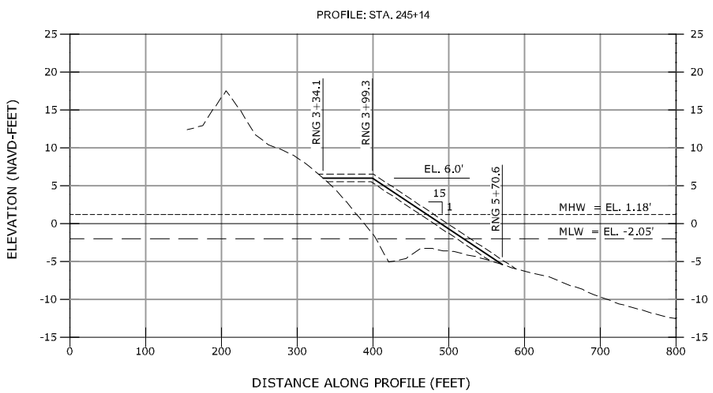
DRAWING NO.
XS-6

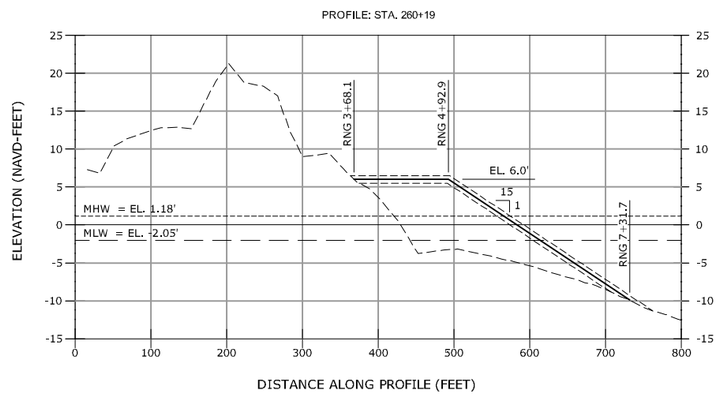
P:\North Carolina\DARE COUNTY PROJECTS\63\09241_Dare County Construction Services\Cad\Construction\63\09241C_XS.dwg - Aug 01, 2017 @ 2:03pm - gary.kirkwhak

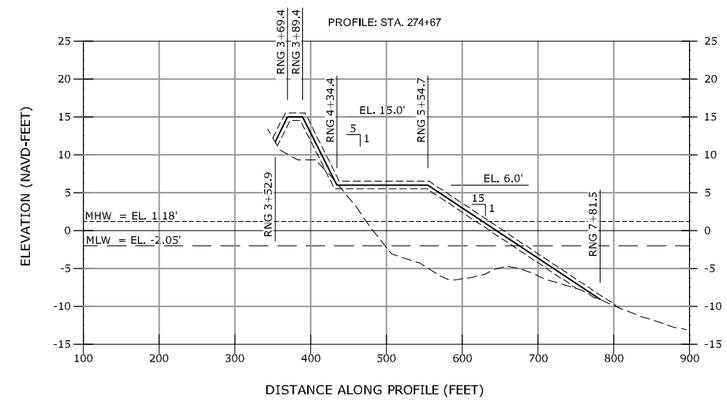


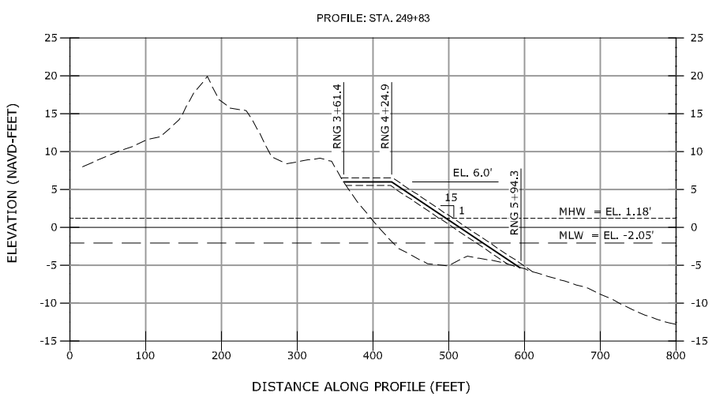


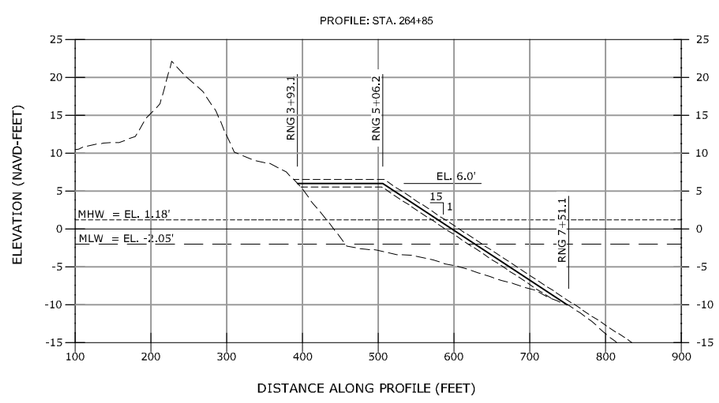


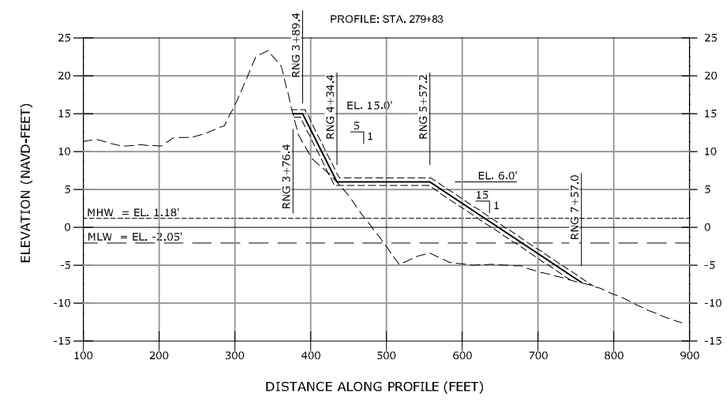












LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

NOTES:

1. ELEVATIONS SHOWN ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. PRE-CONSTRUCTION SURVEY PERFORMED JUNE 3-11, 2017 BY GREAT LAKES DREDGE AND DOCK COMPANY.
3. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED WITHIN THE LIMITS OF THE TEMPORARY DUNE STOCKPILE LOCATION AS SHOWN IN THE PLANS OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION IS OPTIONAL. IF THE DUNE MATERIAL IS PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).

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FAX (910) 791-4129

REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATION DUNE

Designed by: JD
Checked by: JD
Drawn by: SK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Contrs. No.: 6362092241
Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

DRAWING NO.
XS-7

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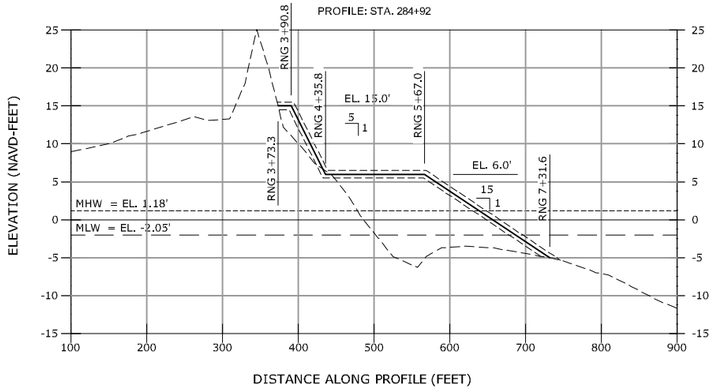

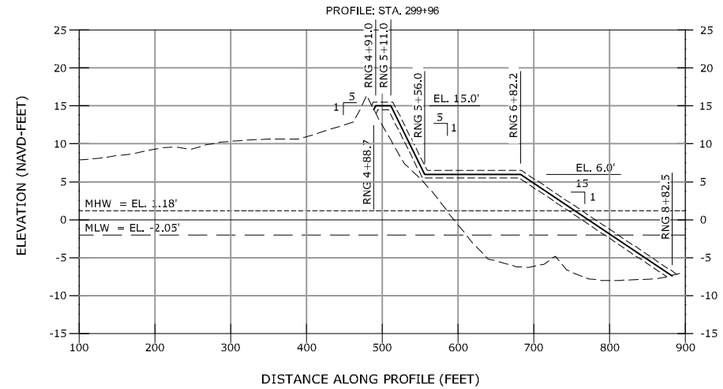

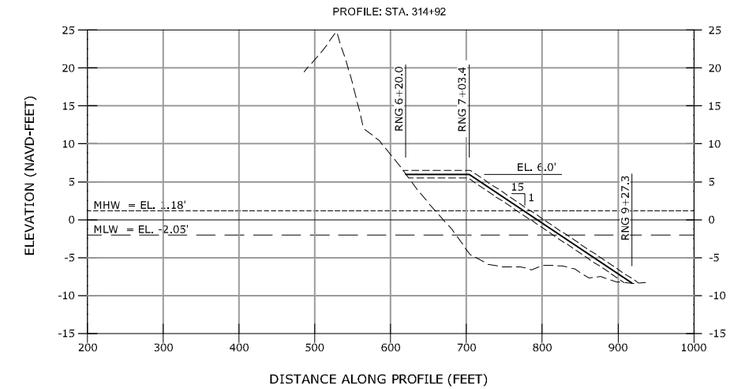

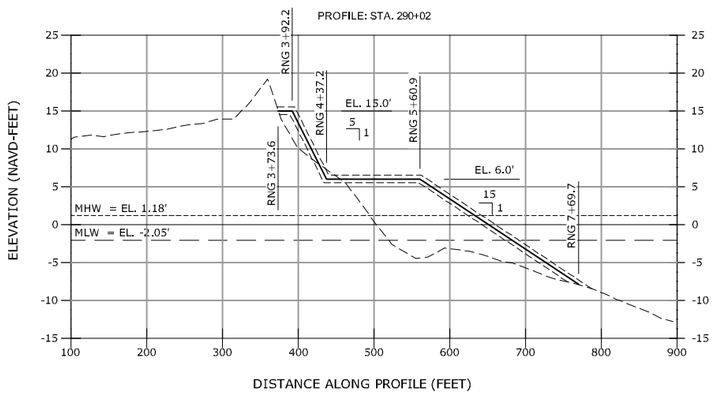

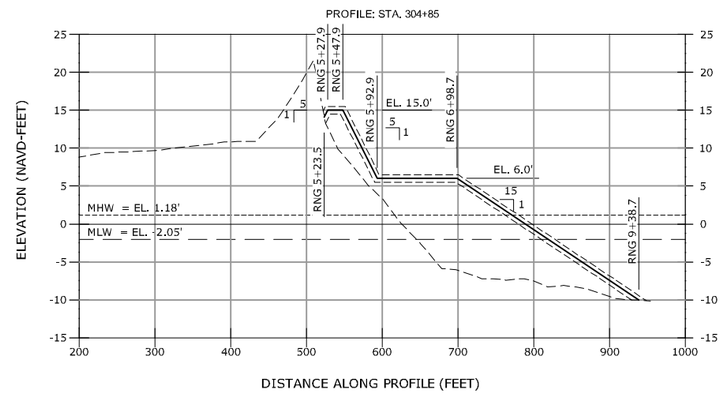

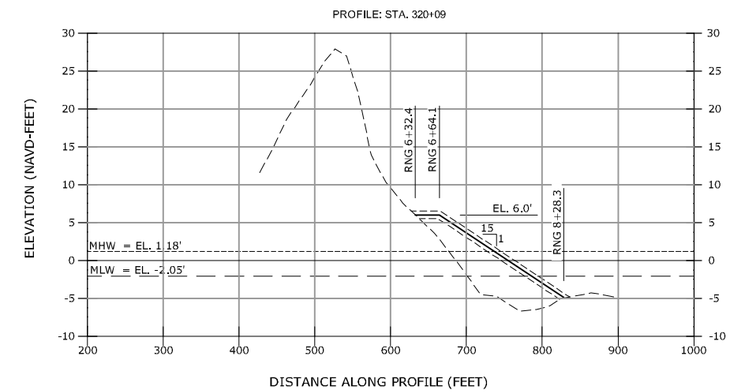

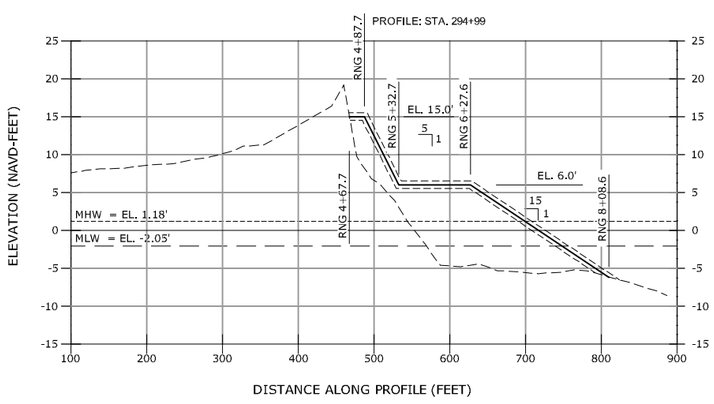

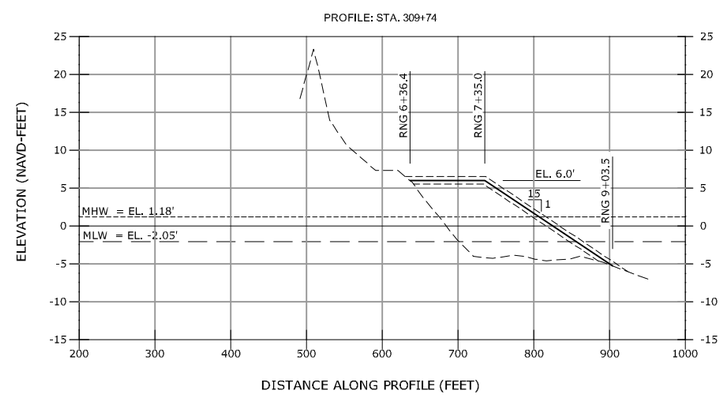

LEGEND:

- EXISTING GRADE JUNE 3-11, 2017
- DESIGN TEMPLATE
- MEAN HIGH WATER LINE (MHW)
- MEAN LOW WATER LINE (MLW)
- TOLERANCE

0 10 20
VERTICAL GRAPHIC SCALE IN FT

0 100 200
HORIZONTAL GRAPHIC SCALE IN FT

NOTES:

1. ELEVATIONS SHOWN ARE IN FEET REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
2. PRE-CONSTRUCTION SURVEY PERFORMED JUNE 3-11, 2017 BY GREAT LAKES DREDGE AND DOCK COMPANY.
3. THE MATERIAL FOR THE KITTY HAWK DUNE MAY EITHER BE INITIALLY PLACED WITHIN THE LIMITS OF THE TEMPORARY DUNE STOCKPILE LOCATION AS SHOWN IN THE PLANS OR PLACED DIRECTLY ON THE BEACH PROFILE TO CONSTRUCT THE DUNE. PLACEMENT OF THE DUNE MATERIAL WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION IS OPTIONAL. IF THE DUNE MATERIAL IS PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, UPON COMPLETION OF THE POST-PLACEMENT SURVEY, AND PRIOR TO FINAL COMPLETION, THE MATERIAL SHALL BE RELOCATED TO CONSTRUCT THE DUNE. IF THE DUNE MATERIAL IS PLACED DIRECTLY ON THE BEACH PROFILE WITHOUT BEING FIRST PLACED WITHIN THE TEMPORARY DUNE STOCKPILE LOCATION, THE CONTRACTOR SHALL INCLUDE THE DUNE MATERIAL IN THE POST-PLACEMENT SURVEY (AD).

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FAX (910) 791-4129

REVISIONS

No.	Date	Description
1	6/22/17	PRE-CONSTRUCTION SURVEY UPDATE
2	7/31/17	MODIFICATIONS OF TEMPLATE FOR ADDED FILL AND EXTENDED STATEN DUNE

Designed by: JD
Checked by: JD
Drawn by: SK
Reviewed by: KW
Date: 7/31/17
Submitted by: KW
Plot Scale: AS NOTED
Contrn. No.: 6362009241

Reference Files:

NORTH DARE COUNTY BEACHES
TOWNS OF KILL DEVIL HILLS AND KITTY HAWK
WITH SOUTHERN SHORES EXTENSION
BEACH NOURISHMENT PROJECTS
DARE COUNTY, NORTH CAROLINA
BEACH FILL PROFILES

DRAWING NO.
XS-8

P:\North Carolina\DARE COUNTY PROJECTS\6362009241_Dare County Construction Services\Cad\Construction\6362009241C_XS-dwg - Aug 01, 2017 @ 2:20pm - gary.knight