

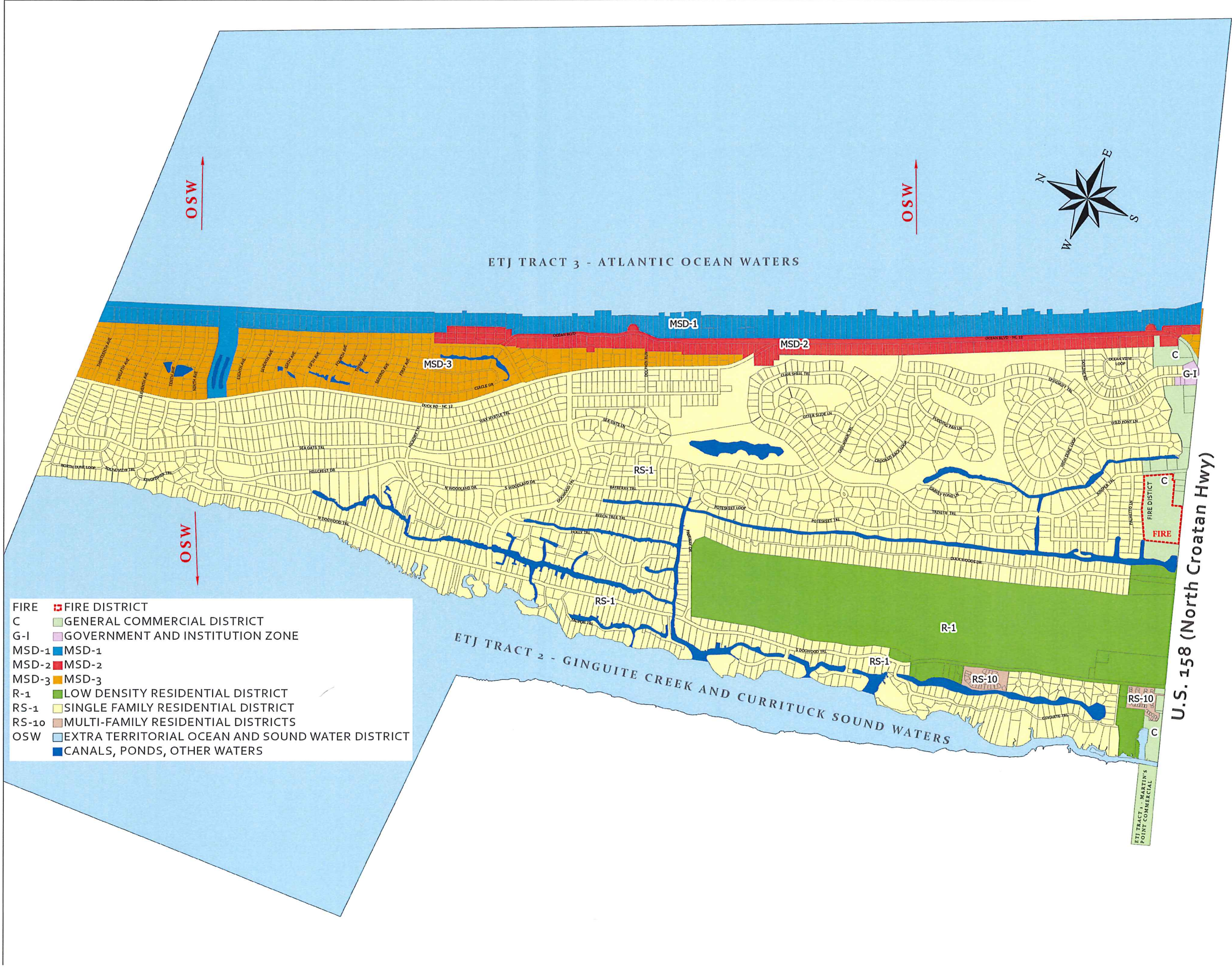
May 13, 2020

MEMORANDUM

From: Wes Haskett, Interim Town Manager/Planning Director
To: Town Council

RE: Beach Nourishment Funding Models

The funding models prepared by DEC Associates, Inc. have been updated based on input received from Council members. One update includes a revision of the applicable tax rate to the currently proposed revenue neutral rate of 19.58 cents. The other update includes a new column on the Town Raised Revenues spreadsheet that shows the average property value of each proposed Municipal Service District (MSD) and the impacts of the proposed MSD tax rates and 19.58 tax rate.. The highlighted percentages shown on that spreadsheet are for discussion purposes only, not recommendations. Should Council decide to move forward with a beach nourishment project, a final decision on the funding of the project will not be required until budget discussions for the fiscal year 2021-2022.



ETJ TRACT 3 - ATLANTIC OCEAN WATERS

MSD-3

MSD-1

MSD-2

RS-1

R-1

RS-1

RS-1

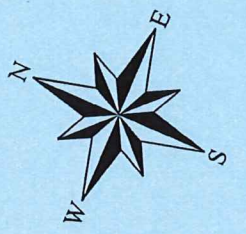
RS-10

RS-10

U.S. 158 (North Croatan Hwy)

- FIRE FIRE DISTRICT
- C GENERAL COMMERCIAL DISTRICT
- G-1 GOVERNMENT AND INSTITUTION ZONE
- MSD-1 MSD-1
- MSD-2 MSD-2
- MSD-3 MSD-3
- R-1 LOW DENSITY RESIDENTIAL DISTRICT
- RS-1 SINGLE FAMILY RESIDENTIAL DISTRICT
- RS-10 MULTI-FAMILY RESIDENTIAL DISTRICTS
- OSW EXTRA TERRITORIAL OCEAN AND SOUND WATER DISTRICT
- CANALS, PONDS, OTHER WATERS

ETJ TRACT 2 - GINGUITE CREEK AND CURRITUCK SOUND WATERS



OSW

OSW

OSW

ETJ TRACT - MARTIN'S POINT COMMERCIAL

Town of Southern Shores, NC

May 13, 2020

\$13,974,200 Project

Beach Nourishment Financial Model

Version 6a

Option 1

Uses:

Project	\$ 13,974,200
Cost of Issuance	\$ 100,000
Total:	\$ 14,074,200

Sources:

Borrowed Funds	\$ 7,037,100
County Contributed	\$ 7,037,100
Other	\$ -
Total:	\$ 14,074,200

Cost of Issuance:

Bond Counsel	
Bank Counsel	
LGC	
FA	
	<u>\$ 100,000</u>

PLEDGED FUNDS

	Sales Tax	Occupancy Tax	County Interlocal	Total
2019	\$ 918,986	\$ 968,641		\$ 1,887,627
2020	\$ 918,986	\$ 968,641		\$ 1,887,627
2021	\$ 918,986	\$ 968,641		\$ 1,887,627
2022	\$ 918,986	\$ 968,641		\$ 1,887,627
2023	\$ 918,986	\$ 968,641	\$ 428,944	\$ 2,316,571
2024	\$ 918,986	\$ 968,641	\$ 379,684	\$ 2,267,312
2025	\$ 918,986	\$ 968,641	\$ 330,425	\$ 2,218,052
2026	\$ 918,986	\$ 968,641	\$ 281,165	\$ 2,168,792
2027	\$ 918,986	\$ 968,641	\$ 231,905	\$ 2,119,533
2028	\$ 918,986	\$ 968,641	\$ -	\$ 1,887,627

REPAYMENT FUNDS

	County Interlocal	Town Raised	Total
2019			\$ -
2020			\$ -
2021			\$ -
2022		\$ 1,224,775	\$ 1,224,775
2023	\$ 428,944	\$ 1,224,775	\$ 1,653,719
2024	\$ 379,684	\$ 1,224,775	\$ 1,604,459
2025	\$ 330,425	\$ 1,224,775	\$ 1,555,199
2026	\$ 281,165	\$ 1,224,775	\$ 1,505,939
2027	\$ 231,905	\$ 1,224,775	\$ 1,456,680
2028		\$ 1,224,775	\$ 1,224,775

Coverage Calculations

Fiscal Year	Principal	(3%) Interest	Total Debt Service	Total Revenue	Surplus/Deficit	FY Ending Total Beach Fund Balance*	Repayment Coverage	Pledged Coverage	Repayment Coverage (w/FB)
2019			\$ -	\$ -	\$ -	\$ -			
2020			\$ -	\$ -	\$ -	\$ -			
2021			\$ -	\$ -	\$ -	\$ -			
2022			\$ -	\$ 1,224,775	\$ 1,224,775	\$ 1,224,775	0.00	0.00	0.00
2023	\$ 1,407,420	\$ 246,299	\$ 1,653,719	\$ 1,653,719	\$ -	\$ 1,224,775	1.00	1.40	1.74
2024	\$ 1,407,420	\$ 197,039	\$ 1,604,459	\$ 1,604,459	\$ -	\$ 1,224,775	1.00	1.41	1.76
2025	\$ 1,407,420	\$ 147,779	\$ 1,555,199	\$ 1,555,199	\$ -	\$ 1,224,775	1.00	1.43	1.79
2026	\$ 1,407,420	\$ 98,519	\$ 1,505,939	\$ 1,505,939	\$ -	\$ 1,224,775	1.00	1.44	1.81
2027	\$ 1,407,420	\$ 49,260	\$ 1,456,680	\$ 1,456,680	\$ -	\$ 1,224,775			
2028	\$ -	\$ -	\$ -	\$ 1,224,775	\$ 1,224,775	\$ 2,449,549			
	\$ 7,037,100	\$ 738,896	\$ 7,775,996						

Town of Southern Shores

Beach Nourishment Projects - Issuance April 2022

Term: 5 years

Interest Rate: 3.50%

Estimated Numbers (1-14-20 from Engineers)

Town Project - 2022

\$ 7,037,100

	Principal	Interest	Debt Service	County Contributed	Town Contributed
2022					
2023	\$ 1,407,420	\$ 246,299	\$ 1,653,719	\$ 428,944	\$ 1,224,775
2024	\$ 1,407,420	\$ 197,039	\$ 1,604,459	\$ 379,684	\$ 1,224,775
2025	\$ 1,407,420	\$ 147,779	\$ 1,555,199	\$ 330,425	\$ 1,224,775
2026	\$ 1,407,420	\$ 98,519	\$ 1,505,939	\$ 281,165	\$ 1,224,775
2027	\$ 1,407,420	\$ 49,260	\$ 1,456,680	\$ 231,905	\$ 1,224,775
2028					
Totals:	\$ 7,037,100	\$ 738,896	\$ 7,775,996	\$ 1,652,123	\$ 6,123,873

Project Costs

Permitting/Design	\$ 435,000
Construction	\$ 11,758,000
Soft/Monitoring	\$ 510,800
Contingency	\$ 1,270,400
Total:	\$ 13,974,200

Par Amount: \$ 14,074,200

Dare Issue: \$ 7,037,100

SS Issue: \$ 7,037,100

Southern Shores - FY20 Valuation	
Penny	7.82¢ Generates
\$ 156,621	\$ 1,224,775

Town of Southern Shores, NC

May 13, 2020

\$13,974,200 Project

Beach Nourishment Financial Model

Version 6a

Town Raised Revenues 7.82¢ = \$ 1,224,775

	MSD-1	MSD-2	MSD-3	Commerical District	Town Wide	Total
2022	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2023	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2024	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2025	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2026	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2027	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2028	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2029	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2030	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2031	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2032	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2033	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2034	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775

	Total Value	1¢	% of Raised Revenue	# of ¢ Needed
MSD-1	\$ 292,514,359	\$ 29,251	55%	23.03
MSD-2	\$ 97,658,980	\$ 9,766	9%	11.29
MSD-3	\$ 198,932,775	\$ 19,893	11%	6.77
Commercial District	\$ 36,122,183	\$ 3,612	0%	0.00
Town Wide	\$ 1,566,207,926	\$ 156,621	25%	1.96
			100%	

Value Discounts
 Collection Rate: 99.65%
 Reval Appeals: 5.00%

New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase
\$ 1,151	\$ 98	\$ 1,249	\$ 979	\$ 2,228
\$ 564	\$ 98	\$ 662	\$ 979	\$ 1,641
\$ 339	\$ 98	\$ 436	\$ 979	\$ 1,415
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077

Avg Value	New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase	% Increase
\$ 1,240,959	\$ 2,858	\$ 243	\$ 3,100	\$ 2,430	\$ 5,530	128%
\$ 637,603	\$ 720	\$ 125	\$ 844	\$ 1,248	\$ 2,093	68%
\$ 486,657	\$ 330	\$ 95	\$ 425	\$ 953	\$ 1,378	45%
\$ 2,119,828	\$ -	\$ 414	\$ 414	\$ 4,151	\$ 4,565	10%
\$ 483,345	\$ -	\$ 94	\$ 94	\$ 946	\$ 1,041	10%

Town of Southern Shores, NC

Beach Nourishment Financial Model

May 13, 2020

\$13,974,200 Project

Version 6a

5 Year Averages of Revenues

	Sales Tax	Occupancy Tax	Land Transfer Tax	Utility Franchise
2015	\$ 862,727	\$ 953,313	\$ 241,077	
2016	\$ 894,212	\$ 948,488	\$ 236,759	
2017	\$ 923,481	\$ 926,873	\$ 222,408	
2018	\$ 964,512	\$ 1,014,531	\$ 248,575	
2019	\$ 950,000	\$ 1,000,000	\$ 225,000	
5yr Avg:	\$ 918,986	\$ 968,641	\$ 234,764	\$ -

\$ 2,122,391 All Revenues

\$ 1,203,405 All Revenues Except Sales Tax

Town of Southern Shores, NC

May 13, 2020

\$16,685,800 Project

Special Obligation Bond for Beach Nourishment

Version 6b

Option 3

Uses:

Project	\$ 16,685,800
Cost of Issuance	\$ 100,000
Total:	\$ 16,785,800

Sources:

Borrowed Funds	\$ 8,392,900
County Contributed	\$ 8,392,900
Other	\$ -
Total:	\$ 16,785,800

Cost of Issuance:

Bond Counsel	
Bank Counsel	
LGC	
FA	
	<u>\$ 100,000</u>

PLEDGED FUNDS

	Sales Tax	Occupancy Tax	County Interlocal	Total
2019	\$ 918,986	\$ 968,641		\$ 1,887,627
2020	\$ 918,986	\$ 968,641		\$ 1,887,627
2021	\$ 918,986	\$ 968,641		\$ 1,887,627
2022	\$ 918,986	\$ 968,641		\$ 1,887,627
2023	\$ 918,986	\$ 968,641	\$ 747,557	\$ 2,635,184
2024	\$ 918,986	\$ 968,641	\$ 688,807	\$ 2,576,434
2025	\$ 918,986	\$ 968,641	\$ 630,056	\$ 2,517,684
2026	\$ 918,986	\$ 968,641	\$ 571,306	\$ 2,458,933
2027	\$ 918,986	\$ 968,641	\$ 512,556	\$ 2,400,183
2028	\$ 918,986	\$ 968,641	\$ -	\$ 1,887,627

REPAYMENT FUNDS

	County Interlocal	Town Raised	Total
2019			\$ -
2020			\$ -
2021			\$ -
2022		\$ 1,224,775	\$ 1,224,775
2023	\$ 747,557	\$ 1,224,775	\$ 1,972,332
2024	\$ 688,807	\$ 1,224,775	\$ 1,913,581
2025	\$ 630,056	\$ 1,224,775	\$ 1,854,831
2026	\$ 571,306	\$ 1,224,775	\$ 1,796,081
2027	\$ 512,556	\$ 1,224,775	\$ 1,737,330
2028		\$ 1,224,775	\$ 1,224,775

Coverage Calculations

Fiscal Year	Principal	(3%) Interest	Total Debt Service	Total Revenue	Surplus/Deficit	FY Ending Total Beach Fund Balance*	Repayment Coverage	Pledged Coverage	Repayment Coverage (w/FB)
2019			\$ -	\$ -	\$ -	\$ -			
2020			\$ -	\$ -	\$ -	\$ -			
2021			\$ -	\$ -	\$ -	\$ -			
2022			\$ -	\$ 1,224,775	\$ 1,224,775	\$ 1,224,775	0.00	0.00	0.00
2023	\$ 1,678,580	\$ 293,752	\$ 1,972,332	\$ 1,972,332	\$ -	\$ 1,224,775	1.00	1.34	1.62
2024	\$ 1,678,580	\$ 235,001	\$ 1,913,581	\$ 1,913,581	\$ -	\$ 1,224,775	1.00	1.35	1.64
2025	\$ 1,678,580	\$ 176,251	\$ 1,854,831	\$ 1,854,831	\$ -	\$ 1,224,775	1.00	1.36	1.66
2026	\$ 1,678,580	\$ 117,501	\$ 1,796,081	\$ 1,796,081	\$ -	\$ 1,224,775	1.00	1.37	1.68
2027	\$ 1,678,580	\$ 58,750	\$ 1,737,330	\$ 1,737,330	\$ -	\$ 1,224,775			
2028	\$ -	\$ -	\$ -	\$ 1,224,775	\$ 1,224,775	\$ 2,449,549			
	\$ 8,392,900	\$ 881,255	\$ 9,274,155						

Town of Southern Shores

Beach Nourishment Projects - Issuance April 2022

Term: 5 years

Interest Rate: 3.50%

Estimated Numbers (1-14-20 from Engineers)

Town Project - 2022

\$ 8,392,900

	Principal	Interest	Debt Service	County Contributed	Town Contributed
2022					
2023	\$ 1,678,580	\$ 293,752	\$ 1,972,332	\$ 747,557	\$ 1,224,775
2024	\$ 1,678,580	\$ 235,001	\$ 1,913,581	\$ 688,807	\$ 1,224,775
2025	\$ 1,678,580	\$ 176,251	\$ 1,854,831	\$ 630,056	\$ 1,224,775
2026	\$ 1,678,580	\$ 117,501	\$ 1,796,081	\$ 571,306	\$ 1,224,775
2027	\$ 1,678,580	\$ 58,750	\$ 1,737,330	\$ 512,556	\$ 1,224,775
2028					
Totals:	\$ 8,392,900	\$ 881,255	\$ 9,274,155	\$ 3,150,282	\$ 6,123,873

Project Costs

Permitting/Design	\$ 435,000
Construction	\$ 14,146,000
Soft/Monitoring	\$ 587,900
Contingency	\$ 1,516,900
Total:	\$ 16,685,800

Par Amount: \$ 16,785,800

Dare Issue: \$ 8,392,900

SS Issue: \$ 8,392,900

Southern Shores - FY20 Valuation	
Penny	7.82¢ Generates
\$ 156,621	\$ 1,224,775

Town of Southern Shores, NC
Special Obligation Bond for Beach Nourishment

May 13, 2020

\$16,685,800 Project

Version 6b

Town Raised Revenues 7.82¢= \$ 1,224,775

	MSD-1	MSD-2	MSD-3	Commerical District	Town Wide	Total
2022	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2023	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2024	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2025	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
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2027	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
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2034	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775

	Total Value	1¢	% of Raised Revenue	# of ¢ Needed
MSD-1	\$ 292,514,359	\$ 29,251	55%	23.03
MSD-2	\$ 97,658,980	\$ 9,766	9%	11.29
MSD-3	\$ 198,932,775	\$ 19,893	11%	6.77
Commercial District	\$ 36,122,183	\$ 3,612	0%	0.00
Town Wide	\$ 1,566,207,926	\$ 156,621	25%	1.96
			100%	

Value Discounts
Collection Rate: 99.65%
Reval Appeals: 5.00%

New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase
\$ 1,151	\$ 98	\$ 1,249	\$ 979	\$ 2,228
\$ 564	\$ 98	\$ 662	\$ 979	\$ 1,641
\$ 339	\$ 98	\$ 436	\$ 979	\$ 1,415
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077

Avg Value	New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase	% Increase
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\$ 2,119,828	\$ -	\$ 414	\$ 414	\$ 4,151	\$ 4,565	10%
\$ 483,345	\$ -	\$ 94	\$ 94	\$ 946	\$ 1,041	10%

Town of Southern Shores, NC

May 13, 2020

\$16,685,800 Project

Special Obligation Bond for Beach Nourishment

Version 6b

5 Year Averages of Revenues

	Sales Tax	Occupancy Tax	Land Transfer Tax	Utility Franchise
2015	\$ 862,727	\$ 953,313	\$ 241,077	
2016	\$ 894,212	\$ 948,488	\$ 236,759	
2017	\$ 923,481	\$ 926,873	\$ 222,408	
2018	\$ 964,512	\$ 1,014,531	\$ 248,575	
2019	\$ 950,000	\$ 1,000,000	\$ 225,000	
5yr Avg:	\$ 918,986	\$ 968,641	\$ 234,764	\$ -

\$ 2,122,391 All Revenues

\$ 1,203,405 All Revenues Except Sales Tax

Town of Southern Shores, NC

May 13, 2020

\$14,755,600 Project

Special Obligation Bond for Beach Nourishment

Version 6c

Option 4

Uses:

Project	\$ 14,755,600
Cost of Issuance	\$ 100,000
Total:	\$ 14,855,600

Sources:

Borrowed Funds	\$ 7,427,800
County Contributed	\$ 7,427,800
Other	\$ -
Total:	\$ 14,855,600

Cost of Issuance:

Bond Counsel	
Bank Counsel	
LGC	
FA	
	<u>\$ 100,000</u>

PLEDGED FUNDS

	Sales Tax	Occupancy Tax	County Interlocal	Total
2019	\$ 918,986	\$ 968,641		\$ 1,887,627
2020	\$ 918,986	\$ 968,641		\$ 1,887,627
2021	\$ 918,986	\$ 968,641		\$ 1,887,627
2022	\$ 918,986	\$ 968,641		\$ 1,887,627
2023	\$ 918,986	\$ 968,641	\$ 520,758	\$ 2,408,386
2024	\$ 918,986	\$ 968,641	\$ 468,764	\$ 2,356,391
2025	\$ 918,986	\$ 968,641	\$ 416,769	\$ 2,304,397
2026	\$ 918,986	\$ 968,641	\$ 364,775	\$ 2,252,402
2027	\$ 918,986	\$ 968,641	\$ 312,780	\$ 2,200,407
2028	\$ 918,986	\$ 968,641	\$ -	\$ 1,887,627

REPAYMENT FUNDS

	County Interlocal	Town Raised	Total
2019			\$ -
2020			\$ -
2021			\$ -
2022		\$ 1,224,775	\$ 1,224,775
2023	\$ 520,758	\$ 1,224,775	\$ 1,745,533
2024	\$ 468,764	\$ 1,224,775	\$ 1,693,538
2025	\$ 416,769	\$ 1,224,775	\$ 1,641,544
2026	\$ 364,775	\$ 1,224,775	\$ 1,589,549
2027	\$ 312,780	\$ 1,224,775	\$ 1,537,555
2028		\$ 1,224,775	\$ 1,224,775

Coverage Calculations

Fiscal Year	Principal	(3%) Interest	Total Debt Service	Total Revenue	Surplus/Deficit	FY Ending Total Beach Fund Balance*	Repayment Coverage	Pledged Coverage	Repayment Coverage (w/FB)
2019			\$ -	\$ -	\$ -	\$ -			
2020			\$ -	\$ -	\$ -	\$ -			
2021			\$ -	\$ -	\$ -	\$ -			
2022			\$ -	\$ 1,224,775	\$ 1,224,775	\$ 1,224,775	0.00	0.00	0.00
2023	\$ 1,485,560	\$ 259,973	\$ 1,745,533	\$ 1,745,533	\$ -	\$ 1,224,775	1.00	1.38	1.70
2024	\$ 1,485,560	\$ 207,978	\$ 1,693,538	\$ 1,693,538	\$ -	\$ 1,224,775	1.00	1.39	1.72
2025	\$ 1,485,560	\$ 155,984	\$ 1,641,544	\$ 1,641,544	\$ -	\$ 1,224,775	1.00	1.40	1.75
2026	\$ 1,485,560	\$ 103,989	\$ 1,589,549	\$ 1,589,549	\$ -	\$ 1,224,775	1.00	1.42	1.77
2027	\$ 1,485,560	\$ 51,995	\$ 1,537,555	\$ 1,537,555	\$ -	\$ 1,224,775			
2028	\$ -	\$ -	\$ -	\$ 1,224,775	\$ 1,224,775	\$ 2,449,549			
	\$ 7,427,800	\$ 779,919	\$ 8,207,719						

Town of Southern Shores

Beach Nourishment Projects - Issuance April 2022

Term: 5 years

Interest Rate: 3.50%

Estimated Numbers (1-14-20 from Engineers)

Town Project - 2022

\$ 7,427,800

	Principal	Interest	Debt Service	County Contributed	Town Contributed
2022					
2023	\$ 1,485,560	\$ 259,973	\$ 1,745,533	\$ 520,758	\$ 1,224,775
2024	\$ 1,485,560	\$ 207,978	\$ 1,693,538	\$ 468,764	\$ 1,224,775
2025	\$ 1,485,560	\$ 155,984	\$ 1,641,544	\$ 416,769	\$ 1,224,775
2026	\$ 1,485,560	\$ 103,989	\$ 1,589,549	\$ 364,775	\$ 1,224,775
2027	\$ 1,485,560	\$ 51,995	\$ 1,537,555	\$ 312,780	\$ 1,224,775
2028					
Totals:	\$ 7,427,800	\$ 779,919	\$ 8,207,719	\$ 2,083,846	\$ 6,123,873

Project Costs

Permitting/Design	\$ 435,000
Construction	\$ 12,505,000
Soft/Monitoring	\$ 474,200
Contingency	\$ 1,341,400
Total:	\$ 14,755,600

Par Amount: \$ 14,855,600

Dare Issue: \$ 7,427,800

SS Issue: \$ 7,427,800

Southern Shores - FY20 Valuation	
Penny	7.82¢ Generates
\$ 156,621	\$ 1,224,775

Town Raised Revenues 7.82¢= \$ 1,224,775

	MSD-1	MSD-2	MSD-3	Commerical District	Town Wide	Total
2022	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2023	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2024	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2025	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2026	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2027	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2028	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2029	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2030	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2031	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2032	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2033	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
2034	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775

	Total Value	1¢	% of Raised Revenue	# of ¢ Needed
MSD-1	\$ 292,514,359	\$ 29,251	55%	23.03
MSD-2	\$ 97,658,980	\$ 9,766	9%	11.29
MSD-3	\$ 198,932,775	\$ 19,893	11%	6.77
Commercial District	\$ 36,122,183	\$ 3,612	0%	0.00
Town Wide	\$ 1,566,207,926	\$ 156,621	25%	1.96
			100%	

Value Discounts
Collection Rate: 99.65%
Reval Appeals: 5.00%

New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase
\$ 1,151	\$ 98	\$ 1,249	\$ 979	\$ 2,228
\$ 564	\$ 98	\$ 662	\$ 979	\$ 1,641
\$ 339	\$ 98	\$ 436	\$ 979	\$ 1,415
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077
\$ -	\$ 98	\$ 98	\$ 979	\$ 1,077

Avg Value	New Tax for MSDs	New Tax Town Wide	Total New Tax	Current 19.58¢ Tax Rate	Current + Proposed Increase	% Increase
\$ 1,240,959	\$ 2,858	\$ 243	\$ 3,100	\$ 2,430	\$ 5,530	128%
\$ 637,603	\$ 720	\$ 125	\$ 844	\$ 1,248	\$ 2,093	68%
\$ 486,657	\$ 330	\$ 95	\$ 425	\$ 953	\$ 1,378	45%
\$ 2,119,828	\$ -	\$ 414	\$ 414	\$ 4,151	\$ 4,565	10%
\$ 483,345	\$ -	\$ 94	\$ 94	\$ 946	\$ 1,041	10%

Town of Southern Shores, NC

May 13, 2020

\$14,755,600 Project

Special Obligation Bond for Beach Nourishment

Version 6c

5 Year Averages of Revenues

	Sales Tax	Occupancy Tax	Land Transfer Tax	Utility Franchise
2015	\$ 862,727	\$ 953,313	\$ 241,077	
2016	\$ 894,212	\$ 948,488	\$ 236,759	
2017	\$ 923,481	\$ 926,873	\$ 222,408	
2018	\$ 964,512	\$ 1,014,531	\$ 248,575	
2019	\$ 950,000	\$ 1,000,000	\$ 225,000	
5yr Avg:	\$ 918,986	\$ 968,641	\$ 234,764	\$ -

\$ 2,122,391 All Revenues

\$ 1,203,405 All Revenues Except Sales Tax

Town of Southern Shores, NC

May 13, 2020

\$16,196,500 Project

Special Obligation Bond for Beach Nourishment

Version 6d

Option 5

Uses:

Project	\$ 16,196,500
Cost of Issuance	\$ 100,000
Total:	\$ 16,296,500

Sources:

Borrowed Funds	\$ 8,148,250
County Contributed	\$ 8,148,250
Other	\$ -
Total:	\$ 16,296,500

Cost of Issuance:

Bond Counsel	
Bank Counsel	
LGC	
FA	
Total:	\$ 100,000

PLEDGED FUNDS

	Sales Tax	Occupancy Tax	County Interlocal	Total
2019	\$ 918,986	\$ 968,641		\$ 1,887,627
2020	\$ 918,986	\$ 968,641		\$ 1,887,627
2021	\$ 918,986	\$ 968,641		\$ 1,887,627
2022	\$ 918,986	\$ 968,641		\$ 1,887,627
2023	\$ 918,986	\$ 968,641	\$ 690,064	\$ 2,577,692
2024	\$ 918,986	\$ 968,641	\$ 633,026	\$ 2,520,654
2025	\$ 918,986	\$ 968,641	\$ 575,989	\$ 2,463,616
2026	\$ 918,986	\$ 968,641	\$ 518,951	\$ 2,406,578
2027	\$ 918,986	\$ 968,641	\$ 461,913	\$ 2,349,541
2028	\$ 918,986	\$ 968,641	\$ -	\$ 1,887,627

REPAYMENT FUNDS

	County Interlocal	Town Raised	Total
2019			\$ -
2020			\$ -
2021			\$ -
2022		\$ 1,224,775	\$ 1,224,775
2023	\$ 690,064	\$ 1,224,775	\$ 1,914,839
2024	\$ 633,026	\$ 1,224,775	\$ 1,857,801
2025	\$ 575,989	\$ 1,224,775	\$ 1,800,763
2026	\$ 518,951	\$ 1,224,775	\$ 1,743,726
2027	\$ 461,913	\$ 1,224,775	\$ 1,686,688
2028		\$ 1,224,775	\$ 1,224,775

Coverage Calculations

Fiscal Year	Principal	(3%) Interest	Total Debt Service	Total Revenue	Surplus/Deficit	FY Ending Total Beach Fund Balance*	Repayment Coverage	Pledged Coverage	Repayment Coverage (w/FB)
2019			\$ -	\$ -	\$ -	\$ -			
2020			\$ -	\$ -	\$ -	\$ -			
2021			\$ -	\$ -	\$ -	\$ -			
2022			\$ -	\$ 1,224,775	\$ 1,224,775	\$ 1,224,775	0.00	0.00	0.00
2023	\$ 1,629,650	\$ 285,189	\$ 1,914,839	\$ 1,914,839	\$ -	\$ 1,224,775	1.00	1.35	1.64
2024	\$ 1,629,650	\$ 228,151	\$ 1,857,801	\$ 1,857,801	\$ -	\$ 1,224,775	1.00	1.36	1.66
2025	\$ 1,629,650	\$ 171,113	\$ 1,800,763	\$ 1,800,763	\$ -	\$ 1,224,775	1.00	1.37	1.68
2026	\$ 1,629,650	\$ 114,076	\$ 1,743,726	\$ 1,743,726	\$ -	\$ 1,224,775	1.00	1.38	1.70
2027	\$ 1,629,650	\$ 57,038	\$ 1,686,688	\$ 1,686,688	\$ -	\$ 1,224,775			
2028	\$ -	\$ -	\$ -	\$ 1,224,775	\$ 1,224,775	\$ 2,449,549			
	\$ 8,148,250	\$ 855,566	\$ 9,003,816						

Town of Southern Shores

Beach Nourishment Projects - Issuance April 2022

Term: 5 years

Interest Rate: 3.50%

Estimated Numbers (1-14-20 from Engineers)

Town Project - 2022

\$ 8,148,250

	Principal	Interest	Debt Service	County Contributed	Town Contributed
2022					
2023	\$ 1,629,650	\$ 285,189	\$ 1,914,839	\$ 690,064	\$ 1,224,775
2024	\$ 1,629,650	\$ 228,151	\$ 1,857,801	\$ 633,026	\$ 1,224,775
2025	\$ 1,629,650	\$ 171,113	\$ 1,800,763	\$ 575,989	\$ 1,224,775
2026	\$ 1,629,650	\$ 114,076	\$ 1,743,726	\$ 518,951	\$ 1,224,775
2027	\$ 1,629,650	\$ 57,038	\$ 1,686,688	\$ 461,913	\$ 1,224,775
2028					
Totals:	\$ 8,148,250	\$ 855,566	\$ 9,003,816	\$ 2,879,943	\$ 6,123,873

Project Costs

Permitting/Design	\$ 435,000
Construction	\$ 13,783,000
Soft/Monitoring	\$ 506,100
Contingency	\$ 1,472,400
Total:	\$ 16,196,500

Par Amount: \$ 16,296,500

Dare Issue: \$ 8,148,250

SS Issue: \$ 8,148,250

Southern Shores - FY20 Valuation	
Penny	7.82¢ Generates
\$ 156,621	\$ 1,224,775

Town Raised Revenues 7.82¢= \$ 1,224,775

	MSD-1	MSD-2	MSD-3	Commerical District	Town Wide	Total
2022	\$ 673,626	\$ 110,230	\$ 134,725	\$ -	\$ 306,194	\$ 1,224,775
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Town of Southern Shores, NC

May 13, 2020

\$16,196,500 Project

Special Obligation Bond for Beach Nourishment

Version 6d

5 Year Averages of Revenues

	Sales Tax	Occupancy Tax	Land Transfer Tax	Utility Franchise
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5yr Avg:	\$ 918,986	\$ 968,641	\$ 234,764	\$ -

\$ 2,122,391 All Revenues

\$ 1,203,405 All Revenues Except Sales Tax

<u>Town</u>	<u>Town-Wide Increase</u>	<u>GF Revenues Appropriated</u>	<u>MSD</u>	<u>% of General Fund Revenue</u>	<u>% of MSD</u>	<u>Notes</u>
Kill Devil Hills	0.3		0.33	8%	92%	*only 1 MSD was established
Nags Head	0		17.5	25%	75%	2 MSD's established
Duck	0	about 200,000	MSD A-0.148 MSD B 0.315	20%	51% Paid by MSD A 29% Paid by MSD B	MSD A- all project area MSD B- oceanfront only
Kitty Hawk	0.2	0.4 of tax rate dedicated to beach nourishment	0.12			



COASTAL PROTECTION ENGINEERING OF NORTH CAROLINA, INC

4038 MASONBORO LOOP ROAD

WILMINGTON, NC 28409

910-399-1905

May 14, 2020

Wes Haskett

Interim Town Manager/Planning Director

Town of Southern Shores

5375 N. Virginia Dare Trail

Southern Shores, NC 27949

Re: **Tentative Schedule for Beach Nourishment Project Proposed for 2022**

Dear Mr. Haskett:

For your convenience, I have provided this tentative schedule of milestones for the proposed 2022 beach nourishment project for the Town of Southern Shores. A description of each of the items included in the schedule is provided below:

- **Project Initiation / Inter-agency Meeting** – This meeting, sometimes referred to as a project kickoff meeting, is to provide general project details to both the federal and state regulatory and resource agencies that will review the environmental documents and render a decision on whether to issue permits for the project. This meeting was held on April 29, 2020 and was attended by representatives of the four Dare County Towns of Duck, Southern Shores, Kitty Hawk, Kill Devil Hills.
- **Borrow Area Development** – This task includes offshore geophysical and geotechnical investigations aimed at identifying suitable sand to use for beach nourishment. These efforts should result in a borrow area design, which includes sediment compatibility analysis to support a permit being issued for use of the site for beach nourishment.
- **Engineering Design** – At present, a general concept has been developed through the studies conducted to date. However, the work included in the Engineering Design item in the schedule will include finalizing background erosion rates, determining the specific beach fill configuration (berm height/berm width/dune height/dune width), optimizing the beach fill design and designing transitions on the north and south ends of the projects. This information along with the borrow area design will be incorporated into the permit applications.
- **Federal Permitting** – In order to construct the project, the Town will need to secure a Dept. of the Army Permit from the US Army Corps of Engineers, which will also require the US Fish and Wildlife Service and National Marine Fisheries Service to consult on the action. If the borrow area is located in federal waters, which is likely, the Bureau of Ocean Energy Management (BOEM) will also be involved in the regulatory review process. Furthermore, BOEM will need to issue a lease for the use of sediment dredged from federal waters. Efforts included in this task are the development of environmental documents, the submittal of a Dept. of Army Permit application, and the coordination of the lease agreement with BOEM. This item is expected to conclude with issuance of the Dept. of Army Permit and BOEM Lease.
- **State Permitting** – In order to construct the project, the Town will need to secure a CAMA Major Permit from the NC Division of Coastal Management. Efforts included in this task are the preparation



of the permit application and regulatory review of the application. This item is expected to conclude with issuance of the State Permit.

- Obtaining Easements for Construction – This is a process that the Town and its legal council are expected to complete, which will entail securing construction easements from oceanfront property owners to allow for the construction of the project.
- Development of Construction Plans & Specifications – This work entails developing bid documents to solicit bids from dredge contractors for the combined Multi-Town project. The work includes finalizing engineering plans and the development of contract and specification documents that will be considered by dredge contractors in their development of bids.
- Establishment of MSDs – This item represents the timeframe in which the Town would establish Municipal Service Districts (MSDs) if such an approach is chosen to fund a portion of the project. The process whereby the MSDs are established requires public noticing and a public hearing.
- Solicitation of Bids – Once the Construction Plans & Specifications have been drafted, reviewed by Town and County staff, finalized, and incorporated into a bid package, the package will be advertised to dredge contractors. The documents are typically advertised for 30 days; however, that period may be extended if addenda are needed or if after the initial advertising period, three bids are not received.
- Award of Construction Contract – This includes evaluation of bids and negotiations between the dredge contractor, County, and Towns on the final terms of the dredge contract. This item is expected to conclude with the execution of a construction contract.
- Construction – The time included in the schedule is an estimate for the construction of the entire project. We do not recommend dictating to the dredge contractor the order in which the projects are to be completed, and therefore it is not possible to estimate when in the construction timetable, the Southern Shores section would be built.

Tentative Schedule for Beach Nourishment Project Proposed for 2022.

Milestone	Start Date	Completion Date	Number of Months
Project Initiation / Interagency Meeting	April 2020	April 2020	1
Borrow Area Development	May 2020	January 2021	9
Engineering Design	June 2020	January 2020	8
Federal Permitting	April 2020	June 2021	15
State Permitting	January 2020	June 2021	6
Obtaining Easements for Construction	January 2021	January 2022	12
Development of Construction Plans & Specifications	January 2021	June 2021	6
Establishment of MSDs*	March 2021	June 2021	4
Solicitation of Bids	June 2021	July 2021	1.5
Award Construction Contract	July 2021	August 2021	1.5
Construction	May 2022	October 2022	5

* Dates provided for the Establishment of MSDs were provided by DEC Associates.



Please understand that all project schedules are subject to change. There are numerous aspects of this schedule that are out of the control of CPE-NC. That said, we have used our professional experience and judgement to develop this schedule and commit to the Town to provide them timely updates to the schedule, should revisions be required.

Please let me know if you have any questions about the schedule or project in general.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Willson".

Ken Willson

Senior Program Manager

Coastal Protection Engineering of North Carolina, Inc

Office: 910-399-1905

Mobile: 910-443-4471

kwillson@coastalprotectioneng.com