



NORTH CAROLINA
Environmental Quality

Water Resources Development Grant Program Shallow Draft Navigation Channel Dredging Application FY 2018 - 2019

North Carolina Department of Environmental Quality
Division of Water Resources
Contact Coley Cordeiro at Coley.Cordeiro@ncdenr or (919) 707-9013

1. Project Title	Town of Sunset Beach Shallow Draft Navigation Project		
2a. Primary Contact or Project Manager			
Name	Hiram Marzinao,		
Title	Director of Planning / Interim Town Administrator		
Organization Name	Town of Sunset Beach		
Organization Tax ID Number	560927576		
E-mail address	hmarziano@sunsetbeachnc.gov		
Mailing Address	700 Sunset Beach Boulevard		
City	State	Zip	
Sunset Beach	NC	28468	
Telephone	Fax Number		
910.579.6297	910.579.1840		
2b. Execution Address (where contract will be mailed for signature) - Write "same as above" if it is the Primary Contact information in 2a.			
Name	Gregg Weiss		
Title	Mayor		
Organization Name	Town of Sunset Beach		
E-mail Address	gweiss@sunsetbeachnc.gov		
Mailing Address	700 Sunset Beach Boulevard		
City	State	Zip	
Sunset Beach	NC	28468	
Telephone	Fax Number		
910.579.6297	910.579.1840		
2c. Payment Address (where invoice payments will be mailed) - Write "same as above" if it is the Primary Contact information in 2a.			
Name	Lisa Anglin		
Title	Town Clerk		
Organization Name	Town of Sunset Beach		
E-mail Address	langlin@sunsetbeachnc.gov		
Mailing Address	700 Sunset Beach Boulevard		
City	State	Zip	
Sunset Beach	NC	28468	
Telephone	Fax Number		
910.579.6297	910.579.1840		



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3. Project Description - Provide a short summary of the project

Navigation dredging for residential canals along east end of Sunset Beach (Brunswick County), NC. The project entails maintenance dredging of Mary's Creek and Turtle Creek adjacent to the AIWW, as well as the Feeder Channel, Finger Canals, Bay Area, and South Jinks Creek adjacent to Tubbs Inlet. The project will remove approximately 105,000 CY of sediment from the navigation channels. Approximately 40,500 CY of compatible material will be placed along the ocean front as beneficial reuse, while 64,500 CY of non-compatible material will be placed in an upland facility. The beneficial reuse of material for beach placement will be a secondary benefit to the project to help control costs and maintain compatible material within the coastal system. Mary's & Turtle Creek are designated as PNA (Primary Nursery Area) and were last dredged in 2002. The Feeder Canal was also dredged in 2002, but the Bay Area and S. Jinks Creek were originally dredged approx. to 1970 as part of the development of Sunset Beach and have not received any documented maintenance work.

4. Project Scope - Brief description of the project scope (what is being proposed) and justification (why is it being proposed)

The Town of Sunset Beach is proposing to dredge several waterways along the east end of Sunset Beach. The project will significantly improve navigation access through the project area and help establish a long-term template for maintaining the navigation depths. The project will also assist in managing future development by helping to establish a pier head alignment.

5. Existing Conditions - Brief description of existing site conditions and land use within project area

The project area is mostly residential housing with park land. Some business, such as restaurants, also reside along the proposed dredge area.

6. Anticipated Contract Start Date	2/28/2018	Anticipated Contract End Date	6/30/2020
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7. Project Location: Important to submit as completely as possible, especially the Lat/Long coordinates

Project Location	Sunset Beach, NC		
County Name	Brunswick		
Inlet/Channel/Waterbody Name	Mary's & Turtle Creek, Bay Area, Feeder Channel, Finger Canals, & South Jinks Creek		
Position coordinates of project location	Latitude	33.876 N	
	Longitude	-78.493 E	
Anticipated Total Dredged Material in Cubic Yards	105,000		



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8. General Statute 143-215.72 states that in reviewing applications the Secretary shall consider Economic, Social, and Environmental Benefits provided by the project; Regional Benefits of the project to an area greater than the area under jurisdiction of the local sponsoring entity; The financial resources of the local sponsoring entity; The environmental Impact of the project; Any direct benefit to State-owned lands and properties. Please provide your answers below for each category:

Economic, Social, and Environmental Benefits

Improve navigation for residents and visitors of Sunset Beach, restore navigation depths to residential canals.

Regional Benefits

Restore navigation for tourism benefits to waterways within Sunset Beach.

Financial Resources

Sunset Beach intends to establish a dredging district for the residents to provide financial resources in addition to the Towns contribution.

Environmental Impacts

The Town has reduced the project scope to limit or avoid potential environmental impacts identified.

Direct Benefit to State-Owned Lands and Properties



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Project Name: <u>Town of Sunset Beach Shallow Draft Navigation Project</u>		Date: <u>8-Nov-18</u>				
	State Contribution (DWR)	Local / Municipal Match	Other Non-Federal Match	Federal Contribution	Local + Other Non-Federal Match Total	Category Total
Administration						
Cash					\$0.00	\$0.00
In-kind					\$0.00	\$0.00
Design						
Cash	\$223,112.00	\$111,539.00			\$111,539.00	\$334,651.00
In-kind					\$0.00	\$0.00
Permitting						
Cash	\$169,991.00	\$84,983.00			\$84,983.00	\$254,974.00
In-kind					\$0.00	\$0.00
Survey						
Cash	\$80,000.00	\$40,000.00			\$40,000.00	\$120,000.00
In-kind					\$0.00	\$0.00
Construction Oversight						
Cash	\$116,666.67	\$58,333.33			\$58,333.33	\$175,000.00
In-kind					\$0.00	\$0.00
Construction						
Cash	\$3,166,666.67	\$1,583,333.33			\$1,583,333.33	\$4,750,000.00
In-kind					\$0.00	\$0.00
Construction Materials						
Cash					\$0.00	\$0.00
In-kind					\$0.00	\$0.00
Land						
Cash					\$0.00	\$0.00
In-kind					\$0.00	\$0.00
Cash Sub-total	\$3,756,436.34	\$1,878,188.66	\$0.00	\$0.00	\$1,878,188.66	\$5,634,625.00
In-kind Sub-total		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$3,756,436.34	\$1,878,188.66	\$0.00	\$0.00	\$1,878,188.66	\$5,634,625.00

DWR Total =	\$3,756,436.34	Local + Non-Fed Total =	\$1,878,188.66	Non-Federal % =	100.00%
DWR Match % =	66.67%	Local + Non-Fed Match % =	33.33%	Federal % =	0.00%



LEGEND

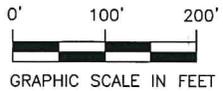
- PROPOSED CHANNEL CENTERLINE
- PROPOSED CHANNEL BASE (WIDTH)
- PROPOSED CHANNEL TOP @ MLW

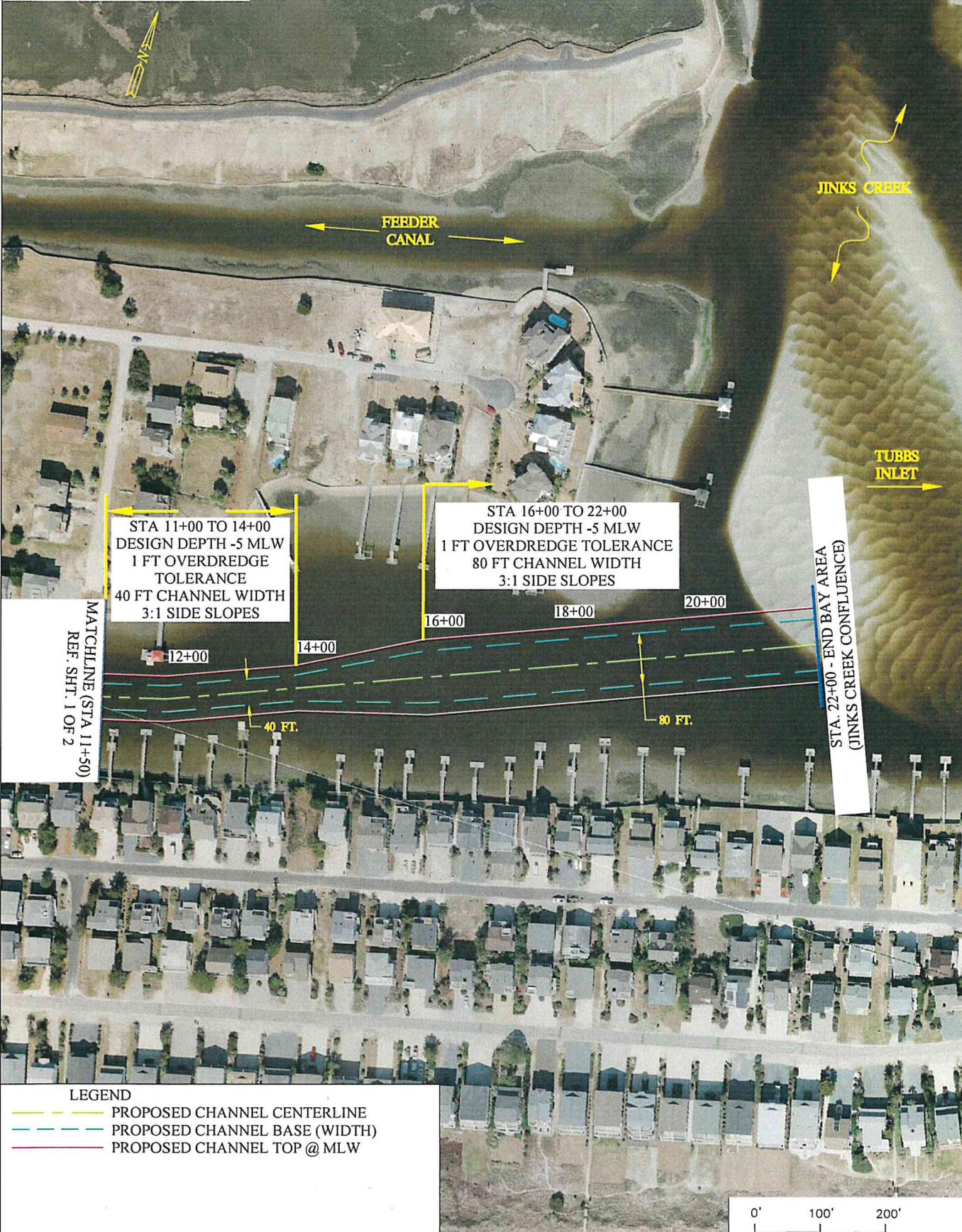
STA -0+50 TO 10+00
DESIGN DEPTH -5 MLW
1 FT OVERDREDGE TOLERANCE
20 FT CHANNEL WIDTH
3:1 SIDE SLOPES

STA -0+50
BEGIN BAY AREA

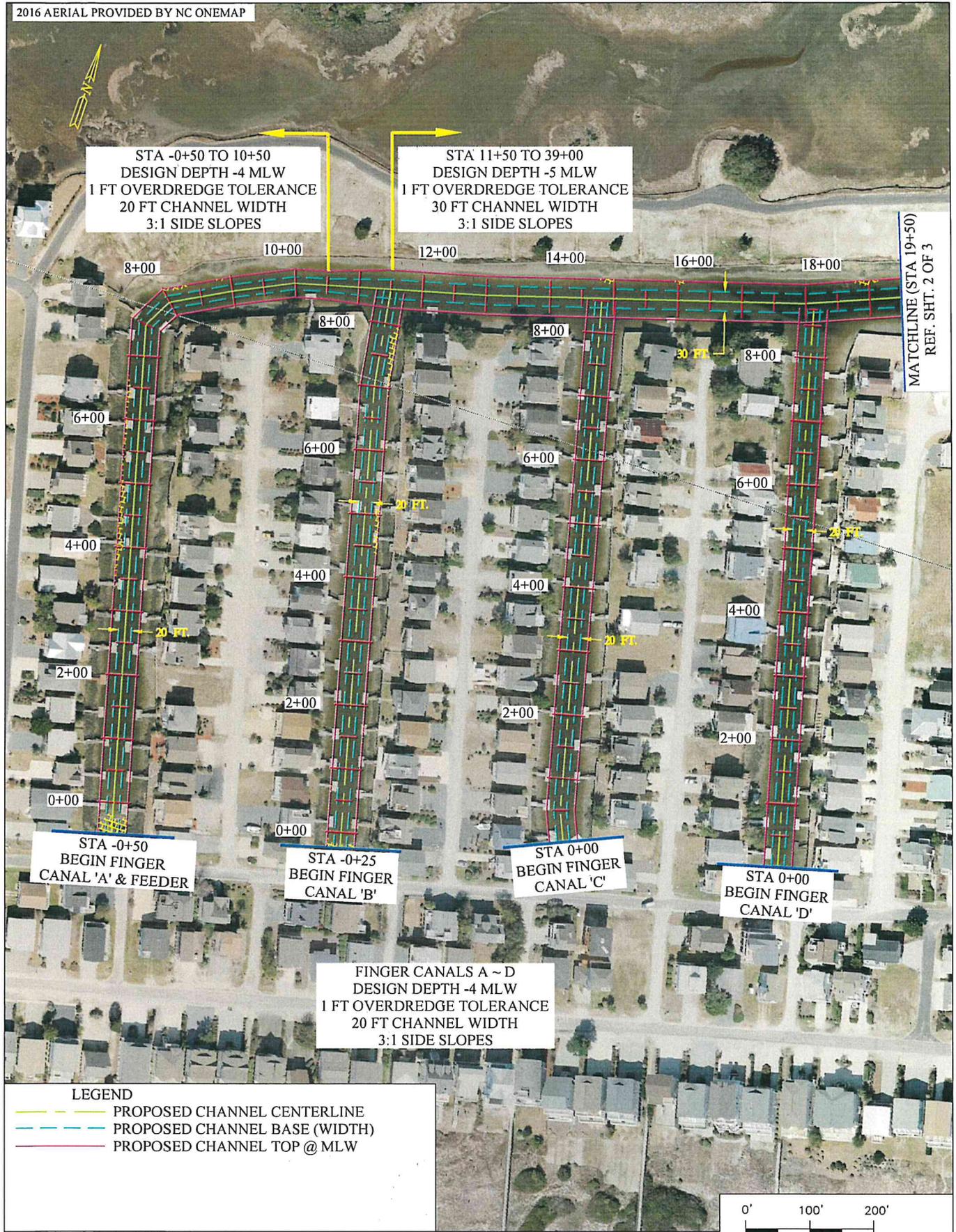
MATCHLINE (STA 11+00)
REF. SHT. 2 OF 2

TOWN OF SUNSET BEACH
NAVIGATION PROJECT
BAY AREA DREDGE ALIGNMENT
PLAN VIEW





TOWN OF SUNSET BEACH
NAVIGATION PROJECT
BAY AREA DREDGE ALIGNMENT
PLAN VIEW



STA -0+50 TO 10+50
 DESIGN DEPTH -4 MLW
 1 FT OVERDREDGE TOLERANCE
 20 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

STA 11+50 TO 39+00
 DESIGN DEPTH -5 MLW
 1 FT OVERDREDGE TOLERANCE
 30 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

MATCHLINE (STA 19+50)
 REF. SHT. 2 OF 3

STA -0+50
 BEGIN FINGER
 CANAL 'A' & FEEDER

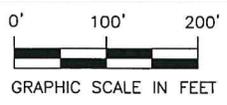
STA -0+25
 BEGIN FINGER
 CANAL 'B'

STA 0+00
 BEGIN FINGER
 CANAL 'C'

STA 0+00
 BEGIN FINGER
 CANAL 'D'

FINGER CANALS A ~ D
 DESIGN DEPTH -4 MLW
 1 FT OVERDREDGE TOLERANCE
 20 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

LEGEND
 --- PROPOSED CHANNEL CENTERLINE
 --- PROPOSED CHANNEL BASE (WIDTH)
 --- PROPOSED CHANNEL TOP @ MLW



TOWN OF SUNSET BEACH
 NAVIGATION PROJECT
 FEEDER CHANNEL DREDGE ALIGNMENT
 PLAN VIEW



STA 31+25 TO 43+00
 DESIGN DEPTH -5 MLW
 1 FT OVERDREDGE TOLERANCE
 40 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

STA 11+50 TO 30+75
 DESIGN DEPTH -5 MLW
 1 FT OVERDREDGE TOLERANCE
 30 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

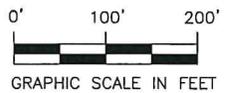
MATCHLINE (STA 19+50)
 REF. SHT. 1 OF 3

MATCHLINE (STA 31+50)
 REF. SHT. 3 OF 3

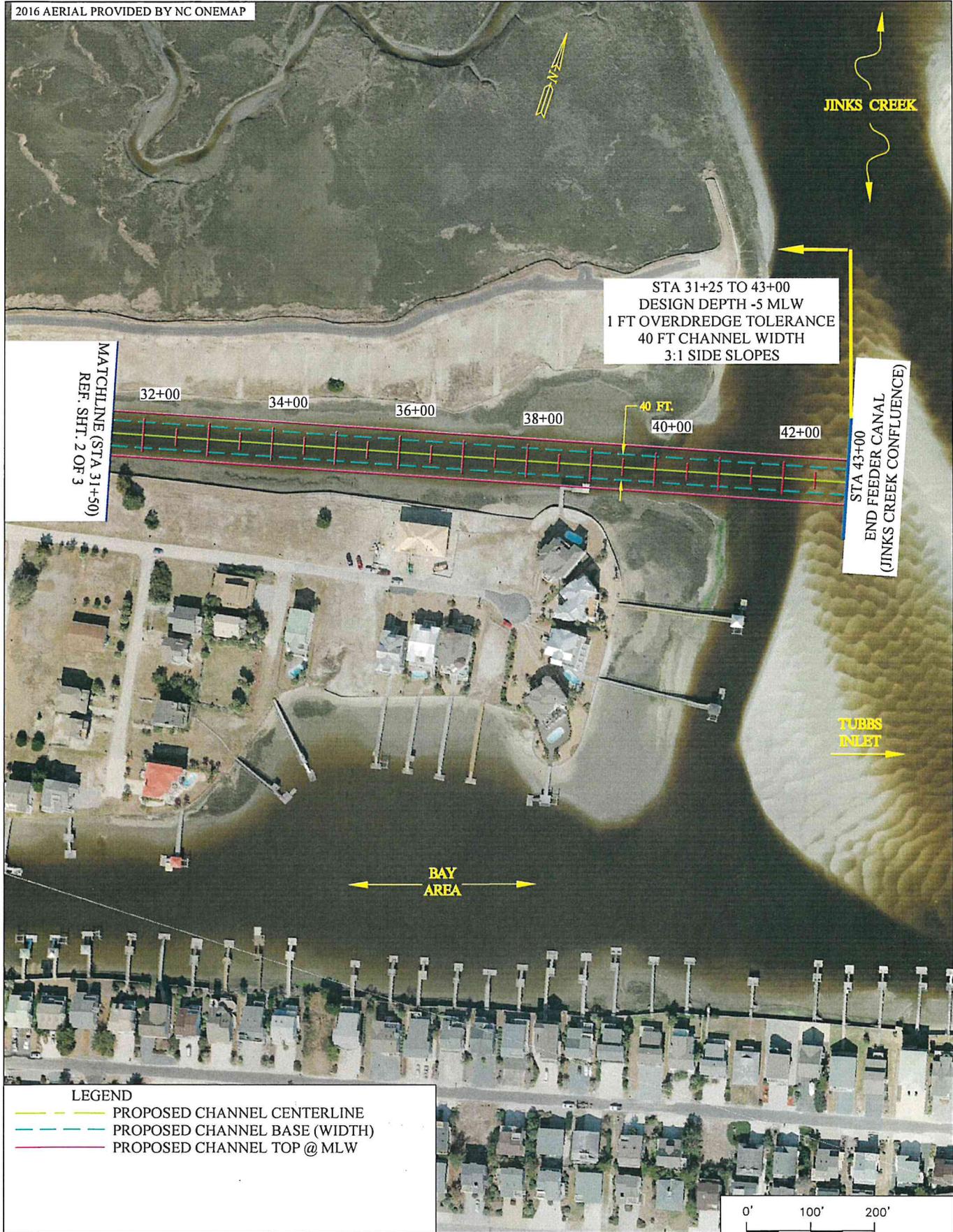
BAY AREA

LEGEND

- PROPOSED CHANNEL CENTERLINE
- PROPOSED CHANNEL BASE (WIDTH)
- PROPOSED CHANNEL TOP @ MLW



TOWN OF SUNSET BEACH
 NAVIGATION PROJECT
 FEEDER CHANNEL DREDGE ALIGNMENT
 PLAN VIEW



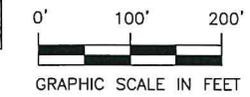
STA 31+25 TO 43+00
 DESIGN DEPTH -5 MLW
 1 FT OVERDREDGE TOLERANCE
 40 FT CHANNEL WIDTH
 3:1 SIDE SLOPES

MATCHLINE (STA 31+50)
 REF. SHT. 2 OF 3

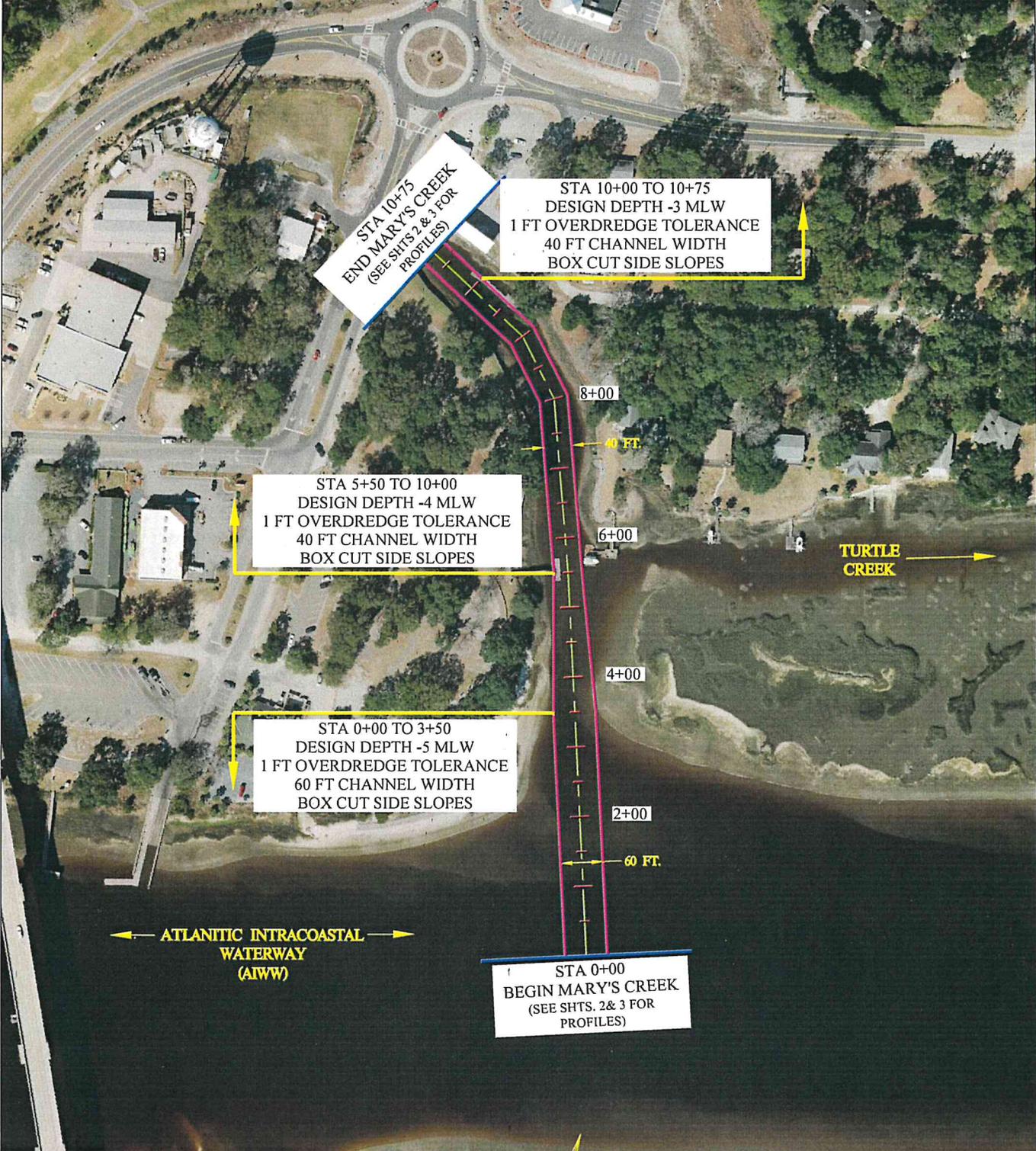
STA 43+00
 END FEEDER CANAL
 (JINKS CREEK CONFLUENCE)

LEGEND

- — — PROPOSED CHANNEL CENTERLINE
- — — PROPOSED CHANNEL BASE (WIDTH)
- — — PROPOSED CHANNEL TOP @ MLW



TOWN OF SUNSET BEACH
 NAVIGATION PROJECT
 FEEDER CHANNEL SEDIMENT ANALYSIS
 PLAN VIEW



STA 10+75
END MARY'S CREEK
(SEE SHTS. 2 & 3 FOR
PROFILES)

STA 10+00 TO 10+75
DESIGN DEPTH -3 MLW
1 FT OVERDREDGE TOLERANCE
40 FT CHANNEL WIDTH
BOX CUT SIDE SLOPES

STA 5+50 TO 10+00
DESIGN DEPTH -4 MLW
1 FT OVERDREDGE TOLERANCE
40 FT CHANNEL WIDTH
BOX CUT SIDE SLOPES

STA 0+00 TO 3+50
DESIGN DEPTH -5 MLW
1 FT OVERDREDGE TOLERANCE
60 FT CHANNEL WIDTH
BOX CUT SIDE SLOPES

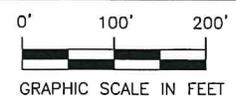
STA 0+00
BEGIN MARY'S CREEK
(SEE SHTS. 2 & 3 FOR
PROFILES)

ATLANTIC INTRACOASTAL
WATERWAY
(AIWW)

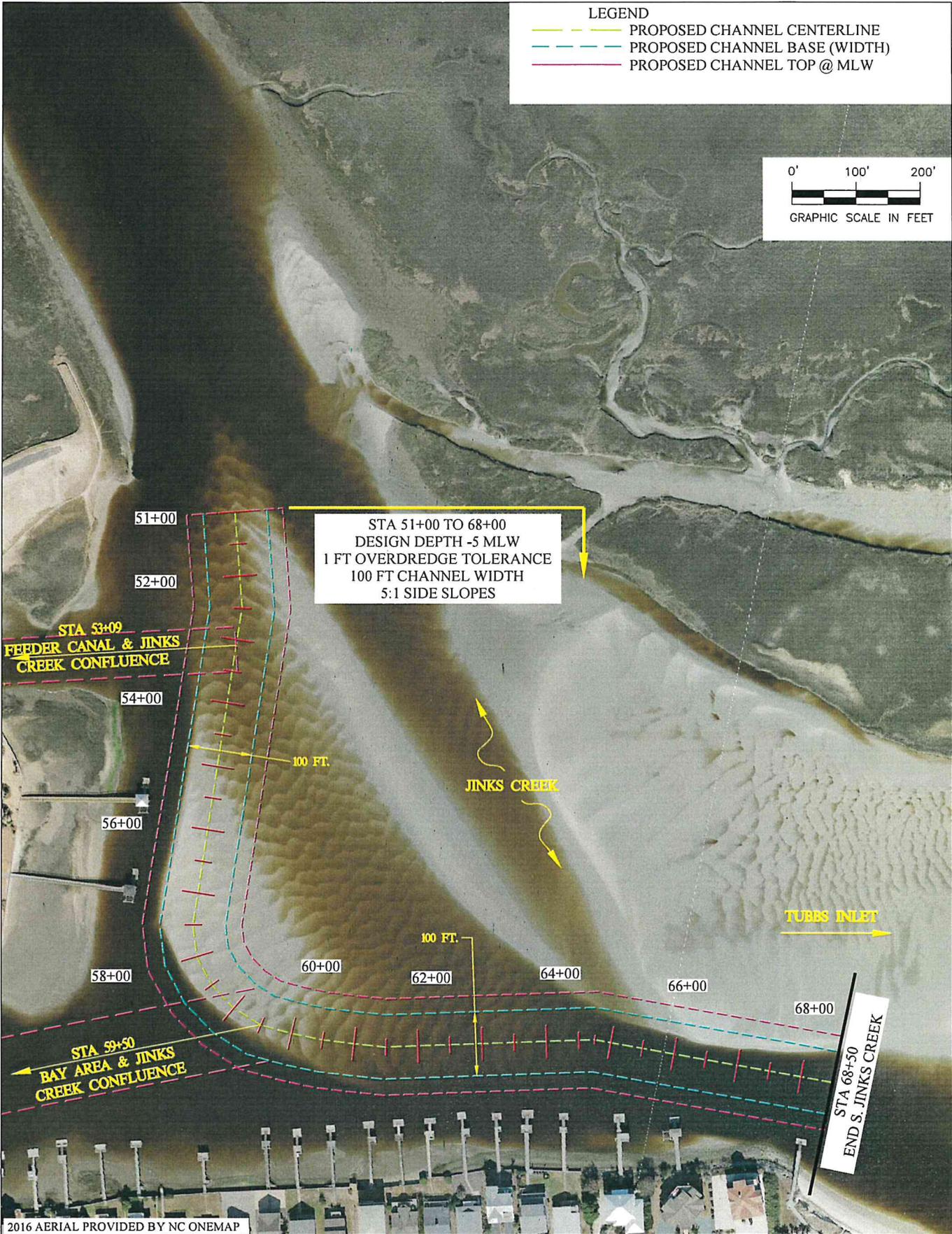
TURTLE
CREEK

LEGEND
 - - - PROPOSED CHANNEL CENTERLINE
 ——— PROPOSED CHANNEL SIDE WALL

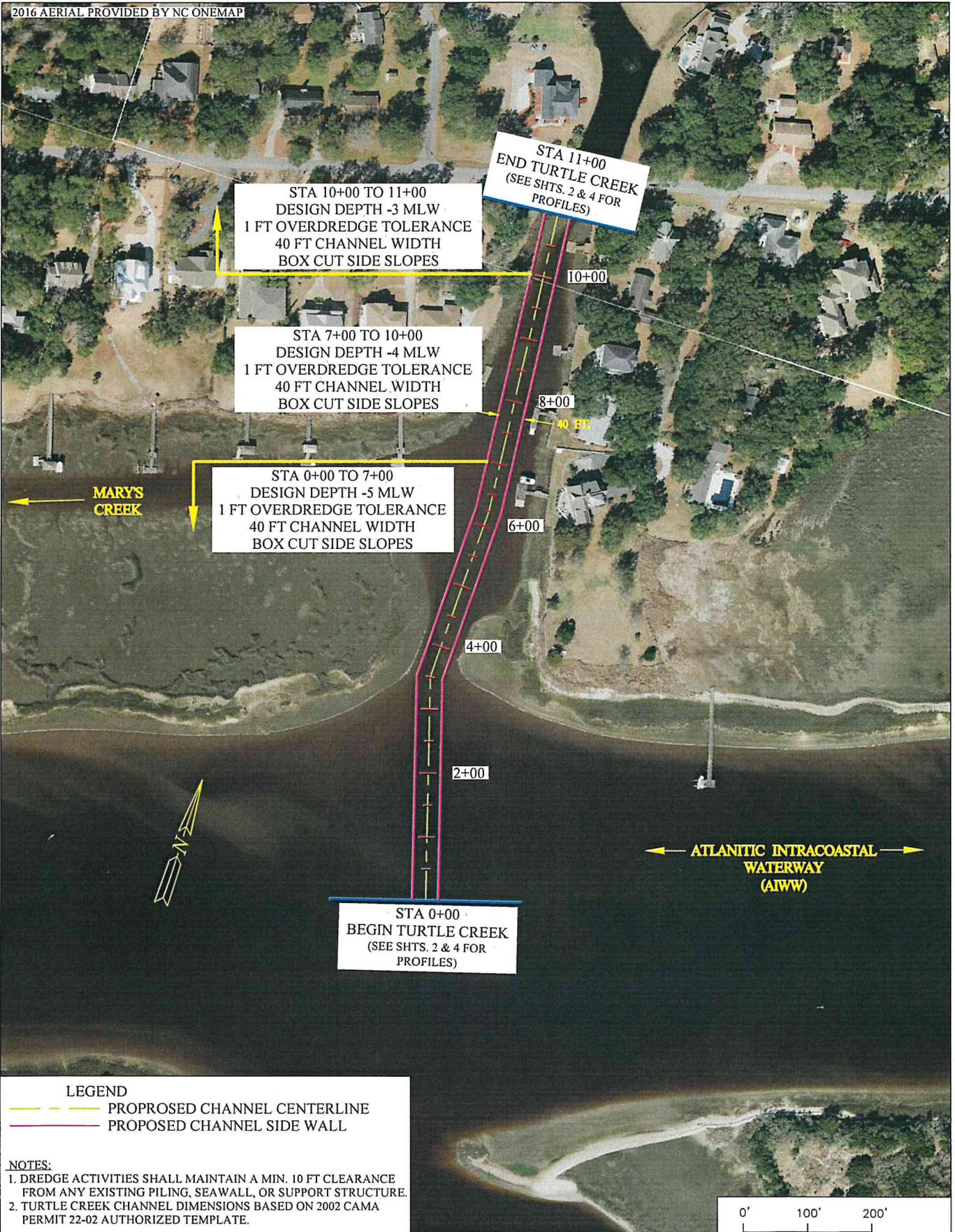
NOTES:
 1. DREDGE ACTIVITIES SHALL MAINTAIN A MIN. 10 FT CLEARANCE FROM ANY EXISTING PILING, SEAWALL, OR SUPPORT STRUCTURE.
 2. MARY'S CREEK CHANNEL DIMENSIONS BASED ON 2002 CAMA PERMIT 22-02 AUTHORIZED TEMPLATE.



TOWN OF SUNSET BEACH
 NAVIGATION PROJECT
 MARY'S CREEK DREDGE ALIGNMENT
 PLAN VIEW



TOWN OF SUNSET BEACH NAVIGATION PROJECT
SOUTH JINKS CREEK
PROPOSED DREDGE ALIGNMENT
PLAN VIEW



STA 10+00 TO 11+00
 DESIGN DEPTH -3 MLW
 1 FT OVERDREDGE TOLERANCE
 40 FT CHANNEL WIDTH
 BOX CUT SIDE SLOPES

STA 7+00 TO 10+00
 DESIGN DEPTH -4 MLW
 1 FT OVERDREDGE TOLERANCE
 40 FT CHANNEL WIDTH
 BOX CUT SIDE SLOPES

STA 0+00 TO 7+00
 DESIGN DEPTH -5 MLW
 1 FT OVERDREDGE TOLERANCE
 40 FT CHANNEL WIDTH
 BOX CUT SIDE SLOPES

STA 11+00
 END TURTLE CREEK
 (SEE SHTS. 2 & 4 FOR
 PROFILES)

STA 0+00
 BEGIN TURTLE CREEK
 (SEE SHTS. 2 & 4 FOR
 PROFILES)

MARY'S
 CREEK

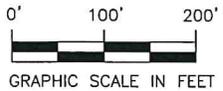
ATLANTIC INTRACOASTAL
 WATERWAY
 (AIWW)

LEGEND

- PROPOSED CHANNEL CENTERLINE
- PROPOSED CHANNEL SIDE WALL

NOTES:

1. DREDGE ACTIVITIES SHALL MAINTAIN A MIN. 10 FT CLEARANCE FROM ANY EXISTING PILING, SEAWALL, OR SUPPORT STRUCTURE.
2. TURTLE CREEK CHANNEL DIMENSIONS BASED ON 2002 CAMA PERMIT 22-02 AUTHORIZED TEMPLATE.



TOWN OF SUNSET BEACH
 NAVIGATION PROJECT
 TURTLE CREEK DREDGE ALIGNMENT
 PLAN VIEW

No Conflict of Interest Certification

The Town of Sunset Beach hereby certifies that, to the best of its knowledge and belief, there are no present or currently planned interests (financial, contractual, organizational, or otherwise) relating to the work to be performed as part of the Sunset Beach Shallow Draft Navigation project that would create any actual or potential conflicts of interest (or apparent conflicts of interest) for any of its employees, contractors, subcontractors, designees or other entities or individuals involved in the Sunset Beach Shallow Draft Navigation project (including conflicts of interest for immediate family members: spouses, parents, or children) that would impinge on its ability to render impartial, technically sound, and objective assistance or advice or result in it being given an unfair competitive advantage.

In this certification, the term "potential conflict" means reasonably foreseeable conflicts of interest. Town of Sunset Beach further certifies that it has and will continue to exercise due diligence in identifying and removing or mitigating, to the NC Department of Environmental Quality's satisfaction, any such conflict of interest (or apparent conflict of interest).

Print Name: Hiram J. Marziano, II

Signature:  _____

Title: Director of Planning / Interim Town Administrator

Date: November 8, 2018

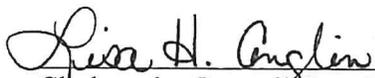
**Resolution Requesting State Assistance through the Shallow Draft Navigation
Fund for the Sunset Beach Shallow Draft Navigation Project**

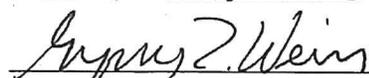
WHEREAS, the Sunset Beach Town Council desires to sponsor the Sunset Beach Shallow Draft Navigation project to provide improved navigation access to the residents and guests of Sunset Beach;

NOW, THEREFORE, BE IT RESOLVED THAT:

- 1) The **Council** requests the State of North Carolina to provide financial assistance to The Town of Sunset Beach for the Sunset Beach Shallow Draft Navigation project in the amount of \$3,756,436.34 or 66.67% percent of the feasibility, design, permitting, construction, and monitoring cost, whichever is the lesser amount;
- 2) The **Council** assumes full obligation for payment of the balance of project costs;
- 3) The **Council** will obtain all necessary State and Federal permits;
- 4) The **Council** will comply with all applicable laws governing the award of contracts and the expenditure of public funds by local governments;
- 5) The **Council** will supervise construction of the project to assure compliance with permit conditions and to assure safe and proper construction according to approved plans and specifications;
- 6) The **Council** will obtain suitable spoil disposal areas as needed and all other easements or rights-of-way that may be necessary for the construction and operation of the project without cost or obligation to the State;
- 7) The **Council** will assure that the project is open for use by the public on an equal basis with no restrictions;
- 8) The **Council** will hold the State harmless from any damages that may result from the construction, operation and maintenance of the project;
- 9) The **Council** accepts responsibility for the operation and maintenance of the completed project.

Adopted by the Sunset Beach Town Council this 13th day of November, 2018.


Clerk to the Council/Board


Mayor
Town of Sunset Beach, NC