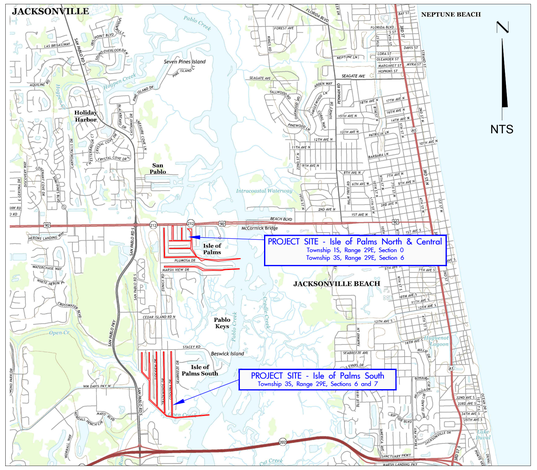
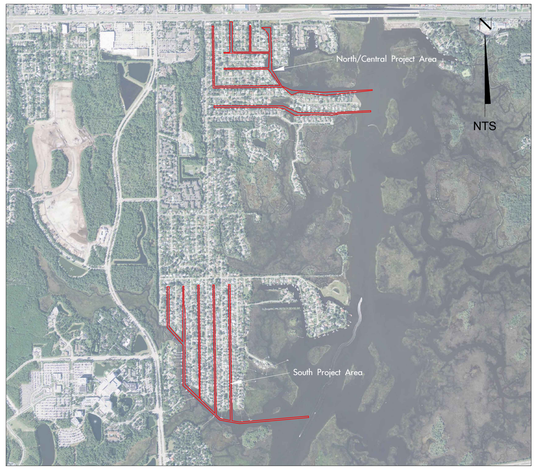
ISLE OF PALMS SPECIAL DISTRICT DREDGING PROJECT

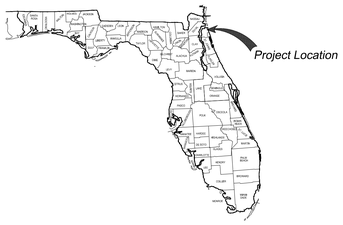
BID DRAWINGS
JACKSONVILLE, DUVAL COUNTY



VICINITY MAP



LOCATION MAP



GENERAL NOTES

1. THE PURPOSE OF THIS PROJECT IS TO MECHANICALLY DREDGE ACCUMULATED SEDIMENTS FROM THE CENTER OF THE ISLE OF PALMS CANALS TO -5.0 FEET MLW WITH 1 FOOT OF OVERDREDGE ALLOWANCE TO A TARGET DEPTH OF -6.0 FEET MLW. THIS IS THE PROJECT DREDGE TEMPLATE AS SHOWN ON THE VOLUME ESTIMATE TABLE. ALTERNATIVE DREDGE SCENARIOS ARE ALSO SHOWN FOR BIDDING PURPOSES ONLY. ALL VOLUMES SHOWN ON THE VOLUME ESTIMATE TABLE ARE ESTIMATES. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ESTIMATED QUANTITIES PRIOR TO BIDDING.
2. DREDGE EQUIPMENT BUFFERS (10') FROM DOCKS, SEAWALLS, AND STRUCTURES WILL VARY. ALL DREDGING ACTIVITY WILL MAINTAIN BUFFERS FROM NATURAL RESOURCES AS SPECIFIED IN PERMIT AUTHORIZATIONS.
3. DREDGING ACTIVITY WILL BE CONDUCTED IN DESIGNATED AREAS ONLY AND IN ACCORDANCE WITH THE PERMIT, PLANS AND SPECIFICATIONS.
4. CONTRACTOR WILL STRICTLY COMPLY WITH STANDARD MANATEE CONSTRUCTION CONDITIONS FOR IN-WATER WORK, SEA TURTLE AND SMALLTOOTH SAWFISH CONSTRUCTION CONDITIONS, BUFFERS FROM NATURAL RESOURCES, AND ALL OTHER PERMIT CONDITIONS.
5. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING ANY DISTURBED AREAS OF THE OFFLOADING AREA, SHORELINE, AND UPLAND (AS APPLICABLE) TO ORIGINAL CONDITIONS WITHIN 48 HOURS OF PROJECT COMPLETION.
6. CONTRACTOR SHALL MAINTAIN EROSION CONTROL AND TURBIDITY CONTROL MEASURES THROUGHOUT THE PROJECT IN CONFORMANCE WITH CONDITIONS FOR TURBIDITY AND WATER QUALITY, AS SPECIFIED BY PERMIT CONDITIONS.
7. CONTRACTOR SHALL CONFORM TO ALL TURBIDITY SAMPLING, CONTINUOUS MONITORING, AND REPORTING CONDITIONS PRESCRIBED BY THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, REFERENCING PERMIT NO. 16-221376-022-EE.
8. CONTRACTOR SHALL COMPLY WITH DEPARTMENT OF THE ARMY PERMIT NO. SAJ-2003-10787(SP-BAL).
9. BATHYMETRIC DATA (MARCH 2018) WAS COLLECTED BY ARC SURVEYING AND MAPPING, INC. BATHYMETRY OF THE DREDGE AREA HAS BEEN INCORPORATED INTO THIS DESIGN. INFORMATION DEPICTED WITHIN THESE PLANS REPRESENT THE EXISTING CONDITIONS AT THE TIME OF DATA COLLECTION.
10. ALL DREDGED MATERIAL SHALL BE TRANSPORTED TO THE HARBOUR WATERWAY DMMA ON REED ISLAND FOR FINAL DISPOSAL. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH THE HARBOUR WATERWAY SPECIAL DISTRICT, AND COMPLYING WITH THEIR STANDARDS FOR MATERIAL WATER CONTENT AND QUALITY.
11. GRID COORDINATES ARE IN FEET AND ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983 (NAD 83).
12. ELEVATIONS SHOWN WITHIN THIS PLAN SET ARE IN FEET AND ARE REFERENCED MLW DATUM.
13. AERIAL PHOTOGRAPH OBTAINED FROM U.S. GEOLOGICAL SURVEY TOPOGRAPHIC MAP, JACKSONVILLE BEACH, DATED: 2015.

INDEX OF DRAWINGS

SHEET TITLE	SHEET NUMBERS
COVER	C-0
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NORTH/CENTRAL PROJECT AREA EXISTING CONDITIONS	C-2
SOUTH PROJECT AREA EXISTING CONDITIONS	C-3
OVERALL DREDGE PLAN	C-4
NORTH/CENTRAL PROJECT AREA DREDGE TEMPLATE WITH CROSS SECTIONS	C-5
NORTH/CENTRAL PROJECT AREA CENTER CHANNEL DREDGE CROSS SECTIONS	C-5A
SOUTH PROJECT AREA DREDGE TEMPLATE WITH CROSS SECTIONS	C-6
SOUTH PROJECT AREA CENTER CHANNEL DREDGE CROSS SECTIONS	C-6A
TYPICAL CROSS SECTIONS	C-7
DREDGED MATERIAL MANAGEMENT AREA PLAN	C-8
EROSION AND TURBIDITY CONTROL TYPICAL DETAILS	C-9

CLIENT

ISLE OF PALMS SPECIAL DISTRICT
14286 BEACH BLVD. # 19-272
JACKSONVILLE, FL 32250
EMAIL: MAIL@ISLEOFPALMSJAX.COM

ENGINEER OF RECORD

WOOD ENVIRONMENT AND INFRASTRUCTURE SOLUTIONS, INC.
ROBERT JOSEPH WAGNER, P.E., D.NE
6256 GREENLAND ROAD
JACKSONVILLE, FL 32258, USA
TEL. (904) 391-3741

SURVEYOR

ARC SURVEYING AND MAPPING, INC.
RICHARD SAWYER
FLORIDA P.L.S. NO. 6131
5202 SAN JUAN AVENUE
JACKSONVILLE, FL 32210
TEL. (904) 384-8377

FEBRUARY 2020

Sunshine811

Call 811 or www.sunshine811.com two full business days before digging to have utilities located and marked.
Check positive response codes before you dig!

PROJECT LOCATION

THE PROJECT AREA IS LOCATED ALONG THE WESTERN SHORE OF THE INTRACOASTAL WATERWAY IN JACKSONVILLE, FLORIDA WITHIN DUVAL COUNTY. THE ISLE OF PALMS SPECIAL DISTRICT WATERWAYS ARE BETWEEN BEACH BOULEVARD (TO THE NORTH) AND J.T. BUTLER BOULEVARD (TO THE SOUTH).

NOTICE

THE INFORMATION IN THIS DOCUMENT WAS PREPARED BY WOOD. WHILE WOOD HAS TAKEN ALL REASONABLE STEPS TO ASSURE THE ACCURACY OF THE INFORMATION CONTAINED IN THIS DOCUMENT, IT CANNOT GUARANTEE THAT CHANGES OR ALTERATIONS TO THIS DOCUMENT WILL NOT BE MADE BY PERSONS OTHER THAN WOOD PERSONNEL AFTER THE DOCUMENT LEAVES THE POSSESSION OF WOOD. CHANGES OR ALTERATIONS MAY BE SAFETY RELATED AND RESULT IN DAMAGE TO PROPERTY, PERSONAL INJURY OR DEATH. IF VERIFICATION OF THE INFORMATION CONTAINED IN THIS DOCUMENT IS NEEDED, CONTACT SHOULD BE MADE DIRECTLY WITH WOOD.

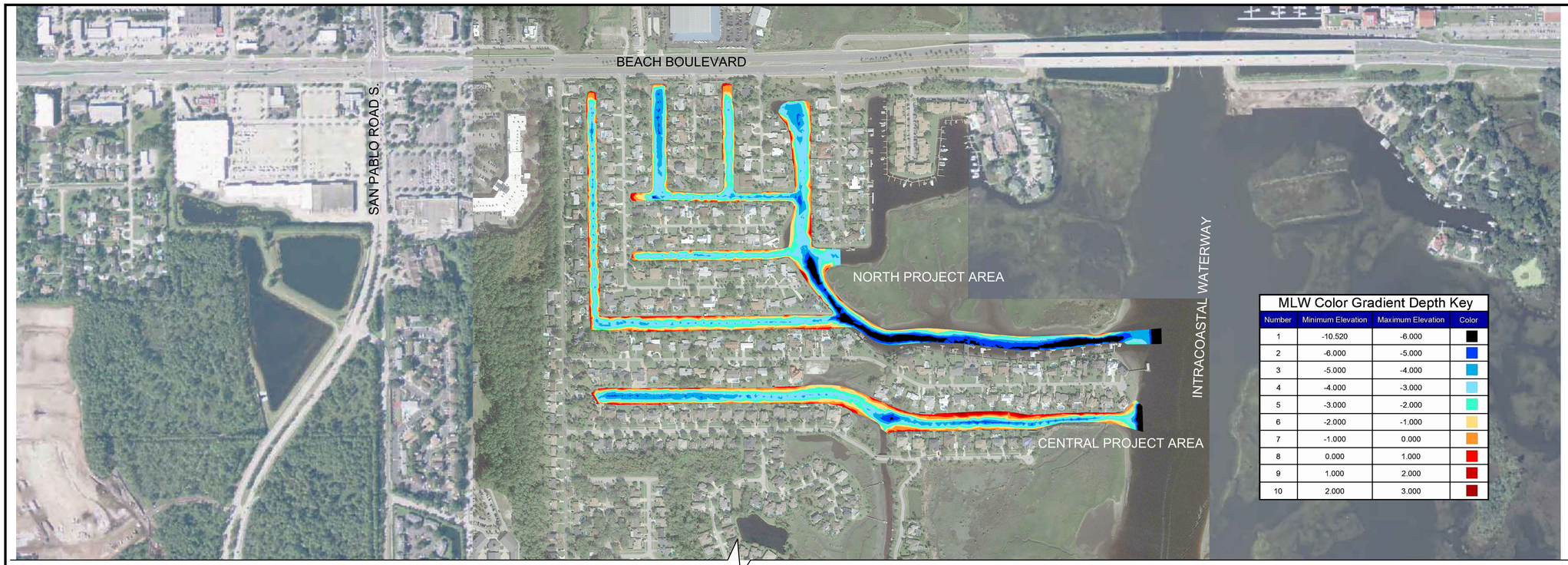
PREPARED BY

wood.
6256 Greenland Road
Jacksonville, Florida 32258
(904) 396-5173
CA No. 5392

WOOD PROJECT NUMBER: 6735199456

DATE:

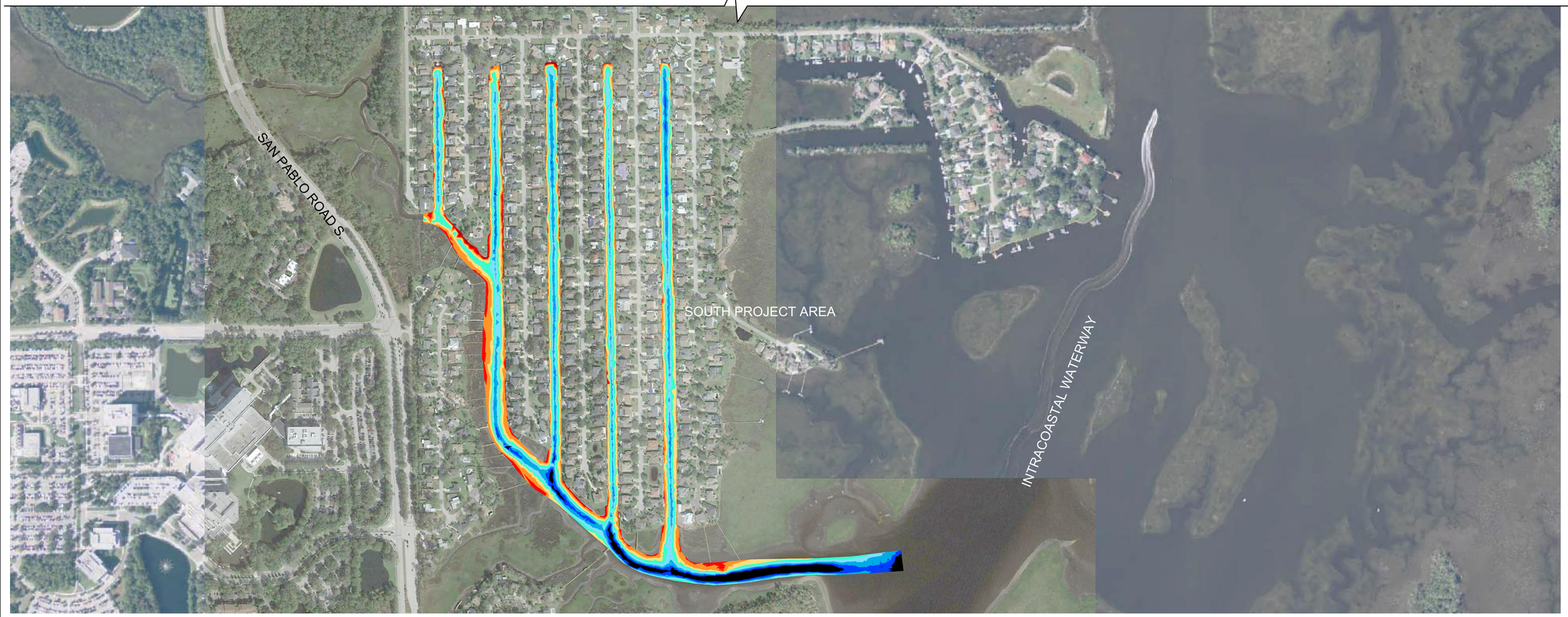
ENGINEER OF RECORD: ROBERT JOSEPH WAGNER
FLORIDA PE LICENSE NO. 63208
VALID FOR PERMITTING ONLY



MLW Color Gradient Depth Key

Number	Minimum Elevation	Maximum Elevation	Color
1	-10.520	-6.000	
2	-6.000	-5.000	
3	-5.000	-4.000	
4	-4.000	-3.000	
5	-3.000	-2.000	
6	-2.000	-1.000	
7	-1.000	0.000	
8	0.000	1.000	
9	1.000	2.000	
10	2.000	3.000	

NORTH



GRAPHIC SCALE
0 150 300 600
(IN FEET)
1 inch = 300 ft.

DRAFT

REV.	DATE	DESCRIPTION	BY:	APVD

REV.	DATE	DESCRIPTION	BY:	APVD

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APPROVED BY:	RW	FEB 2020

SIGNATURE:

Wood Environment & Infrastructure Solutions, Inc.
6256 Greenland Road
Jacksonville, Florida 32258

wood.

FL. COA NO.: 8379 | WOOD PROJECT NO. 6735199456

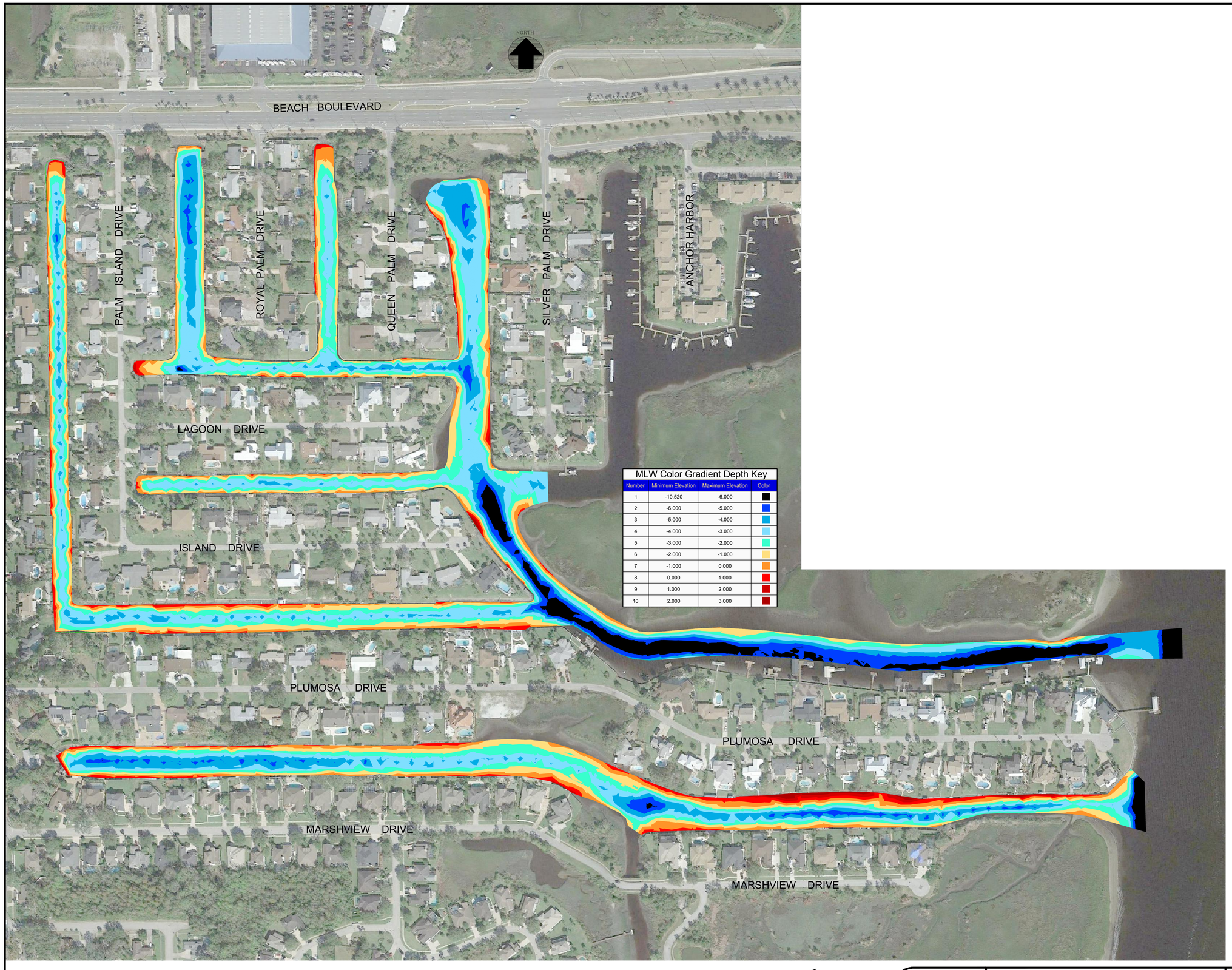
Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

DRAWING TITLE

EXISTING OVERALL SITE PLAN

DWG. NO. C-1

REV.



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6	-2.000	-1.000	
7	-1.000	0.000	
8	0.000	1.000	
9	1.000	2.000	
10	2.000	3.000	

GRAPHIC SCALE
0 60 120 240
(IN FEET)
1 inch = 120 ft.

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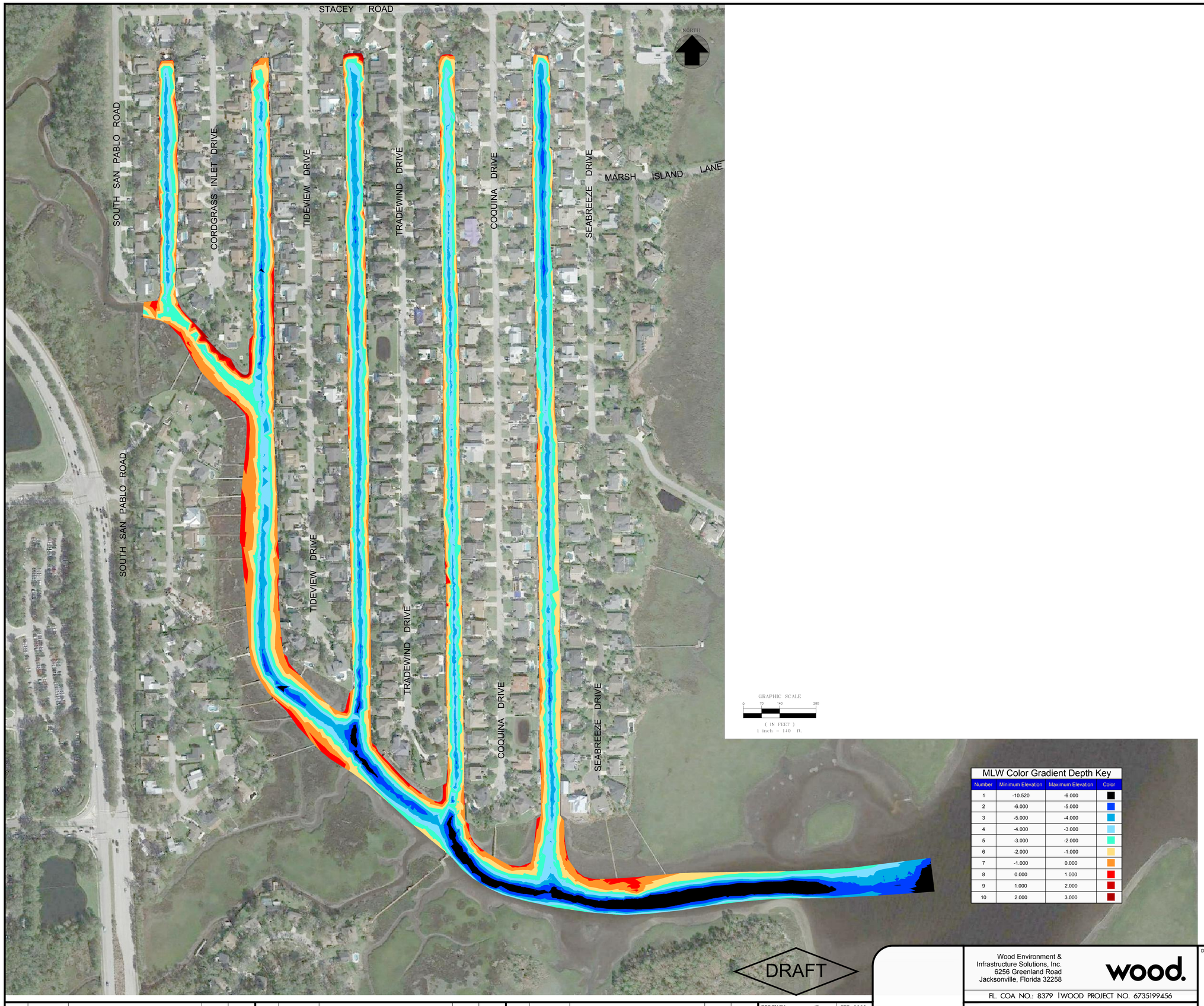
Jacksonville, Duval County, Florida

DRAWING TITLE

NORTH/CENTRAL PROJECT AREA
EXISTING CONDITIONS

DWG. NO. C-2

REV.



MLW Color Gradient Depth Key

Number	Minimum Elevation	Maximum Elevation	Color
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2	-6.000	-5.000	
3	-5.000	-4.000	
4	-4.000	-3.000	
5	-3.000	-2.000	
6	-2.000	-1.000	
7	-1.000	0.000	
8	0.000	1.000	
9	1.000	2.000	
10	2.000	3.000	

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Isle of Palms Special District Dredging Project
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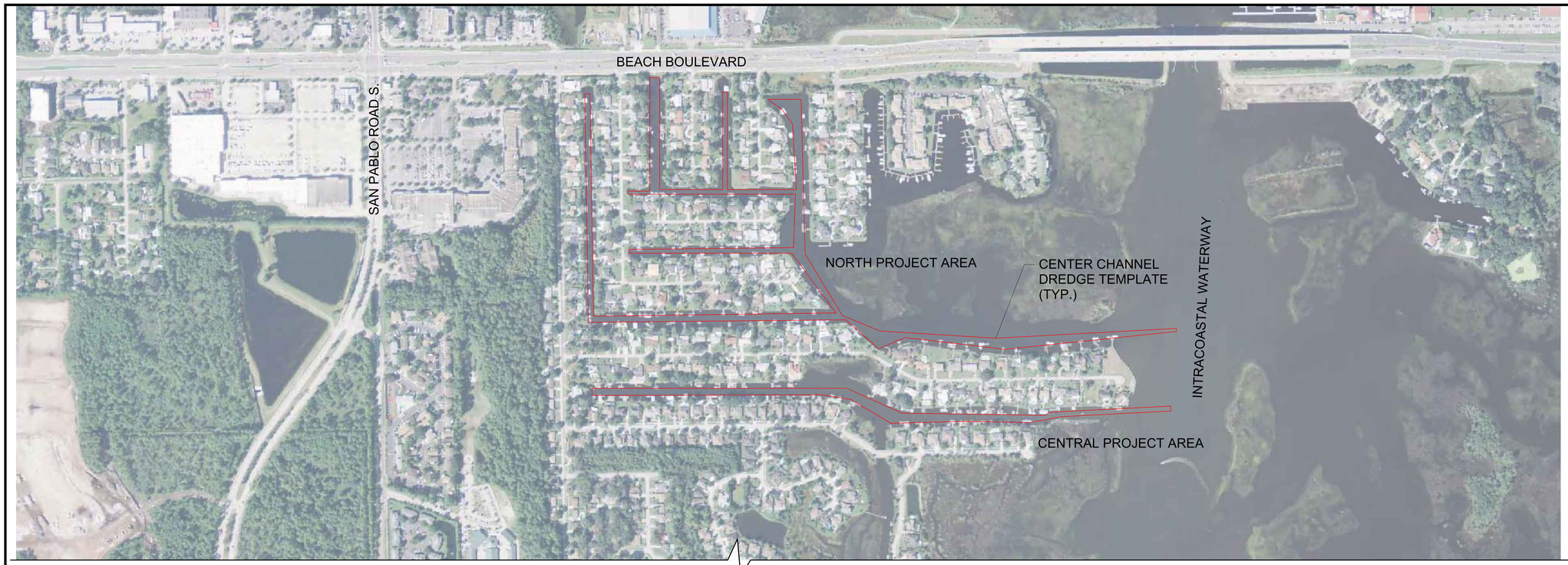
Jacksonville, Duval County, Florida

DRAWING TITLE

SOUTH PROJECT AREA
EXISTING CONDITIONS

DWG. NO. C-3

REV.



Isle of Palms Dredge Volume Estimate (CY)	
Dredging to -5' MLW	
PROJECT DREDGE TEMPLATE - Center Channel Only Dredge Volumes	
North & Central Channel (to -5' MLW)	39,699
South Channels (to -5' MLW)	48,646
Total Center Channel Only Dredge Volume	**88,300**
~~**ALTERNATIVE 1 - Bank to Bank Dredge Volumes**~~	
~~North & Central Channel (to -5' MLW)~~	~~90,091~~
~~South Channels (to -5' MLW)~~	~~99,197~~
~~Total Bank to Bank Volume Estimate~~	~~**189,300**~~
Isle of Palms Dredge Volume Estimate (CY)	
Dredging to -6' MLW	
~~**ALTERNATIVE 2 - Bank to Bank Dredge Volumes**~~	
~~North & Central Channel (to -6' MLW)~~	~~128,763~~
~~South Channels (to -6' MLW)~~	~~141,135~~
~~Total Bank to Bank Volume Estimate~~	~~**269,900**~~
ALTERNATIVE 3 - Center Channel Only Dredge Volumes	
North & Central Channel (to -6' MLW)	64,784
South Channels (to -6' MLW)	76,941
Total Center Channel Only Dredge Volume	**141,700**

NORTH

GRAPHIC SCALE
0 150 300 600
(IN FEET)
1 inch = 300 ft.

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Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

DRAWING TITLE

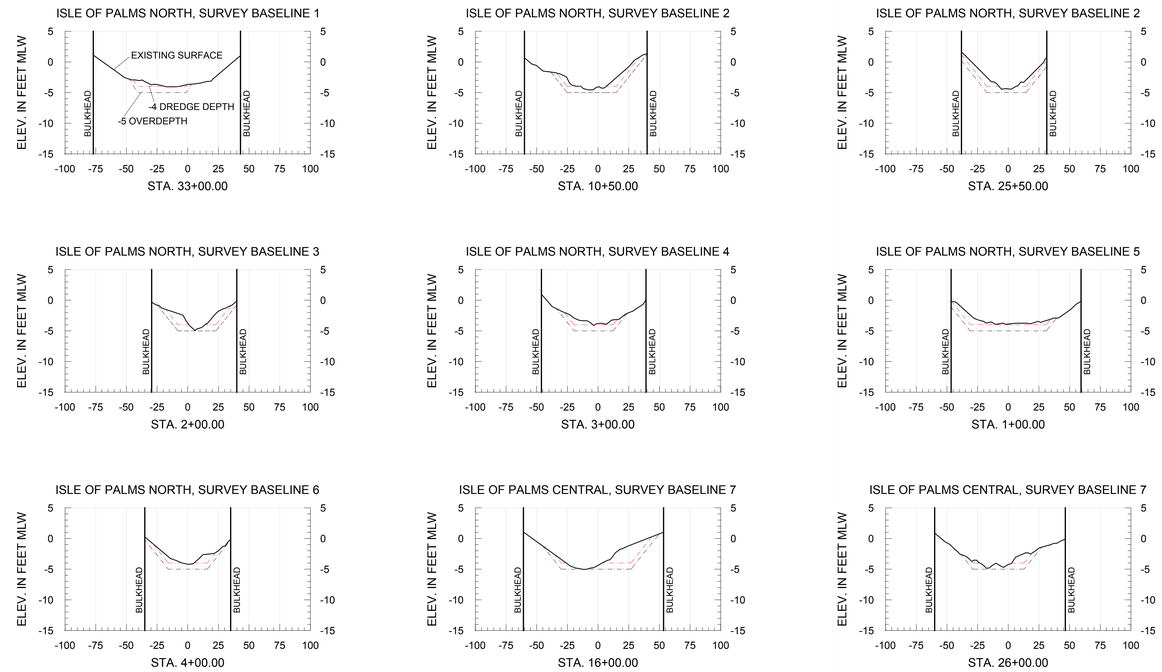
OVERALL DREDGE PLAN

DWG. NO. C-4

REV.

REPRESENTATIVE CENTER CHANNEL DREDGE CROSS SECTIONS

(SEE SHEET C-5A FOR ADDITIONAL NORTH/CENTRAL CROSS SECTIONS)



GRAPHIC SCALE
0 60 120 240
(IN FEET)
1 inch = 120 ft.

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Isle of Palms Special District Dredging Project
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Jacksonville, Duval County, Florida

DRAWING TITLE

NORTH/CENTRAL PROJECT AREA DREDGE TEMPLATE WITH CROSS SECTIONS

DWG. NO. C-5

REV.

CENTER CHANNEL DREDGE CROSS SECTIONS - NORTH AND CENTRAL PROJECT AREAS

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DRAWING TITLE

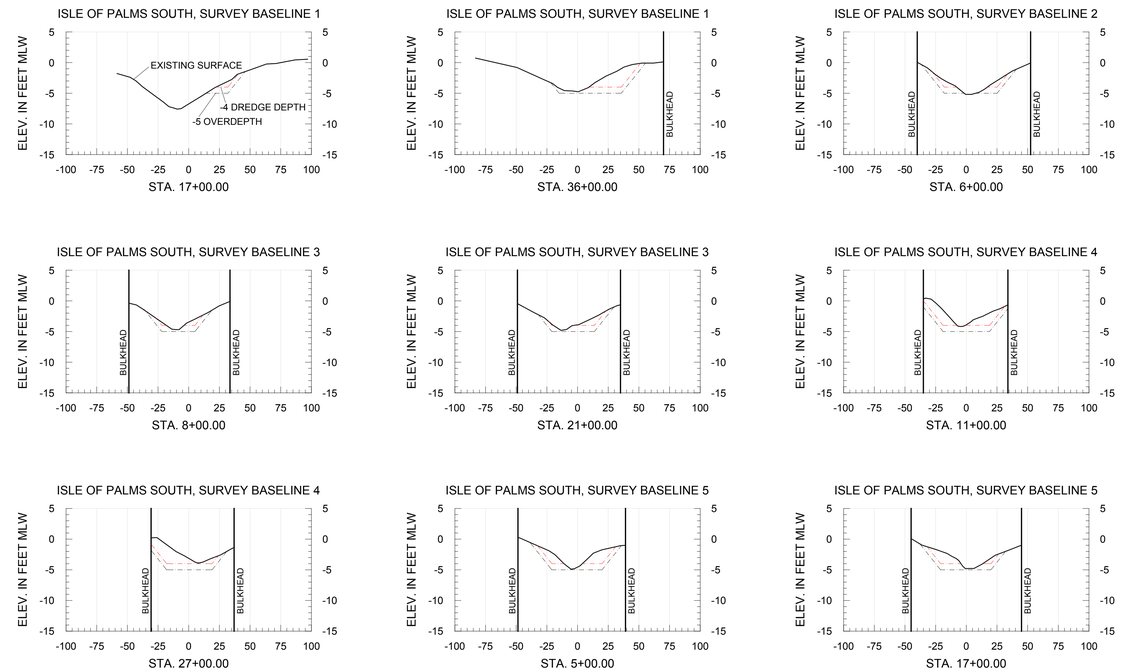
NORTH/CENTRAL PROJECT AREA
CENTER CHANNEL DREDGE CROSS SECTIONS

DWG. NO. C-5A

REV.

REPRESENTATIVE CENTER CHANNEL DREDGE CROSS SECTIONS

(SEE SHEET C-6A FOR ADDITIONAL SOUTH CROSS SECTIONS)



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Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

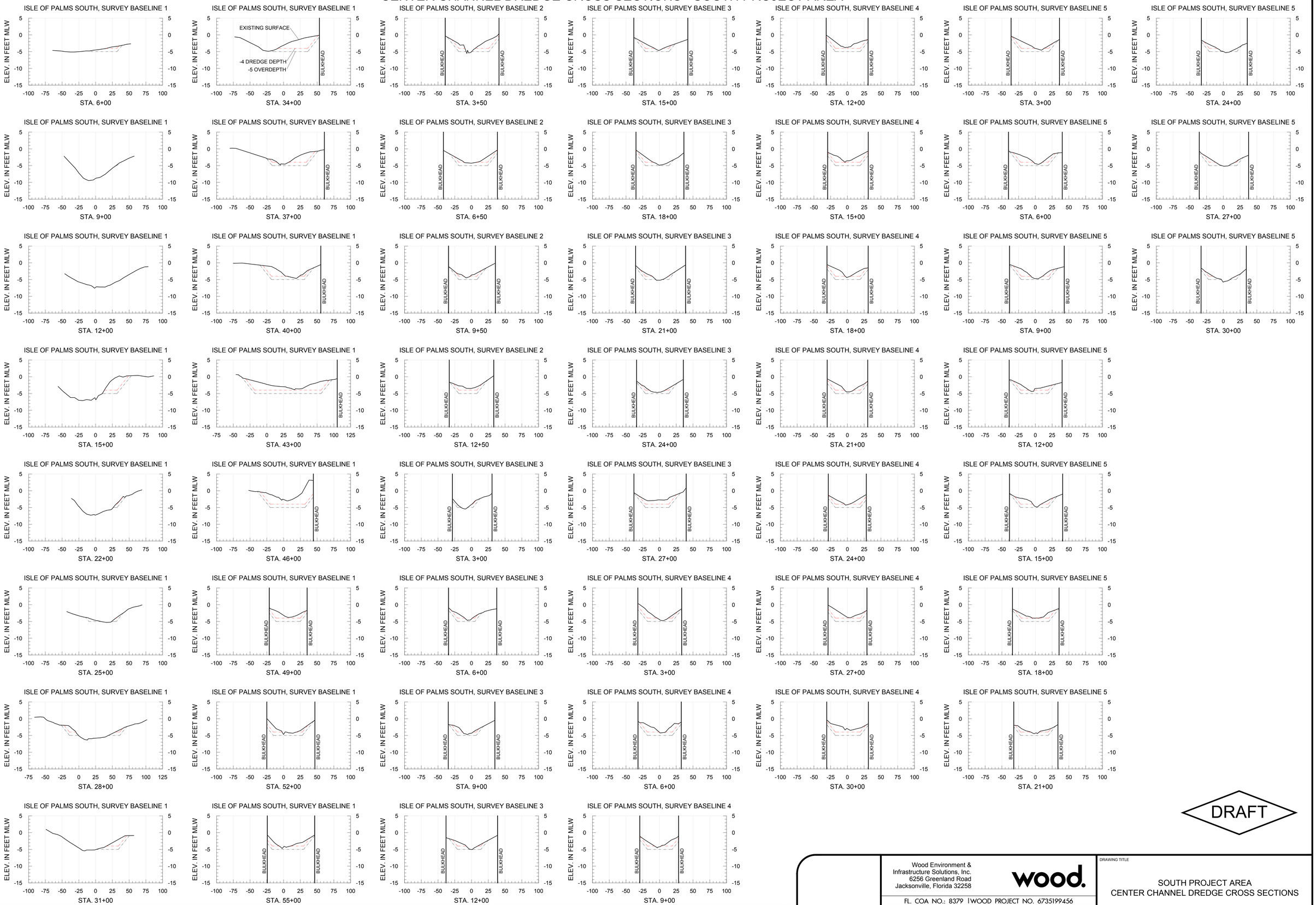
DRAWING TITLE

SOUTH PROJECT AREA DREDGE TEMPLATE WITH CROSS SECTIONS

DWG. NO. C-6

REV.

CENTER CHANNEL DREDGE CROSS SECTIONS - SOUTH PROJECT AREA



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Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

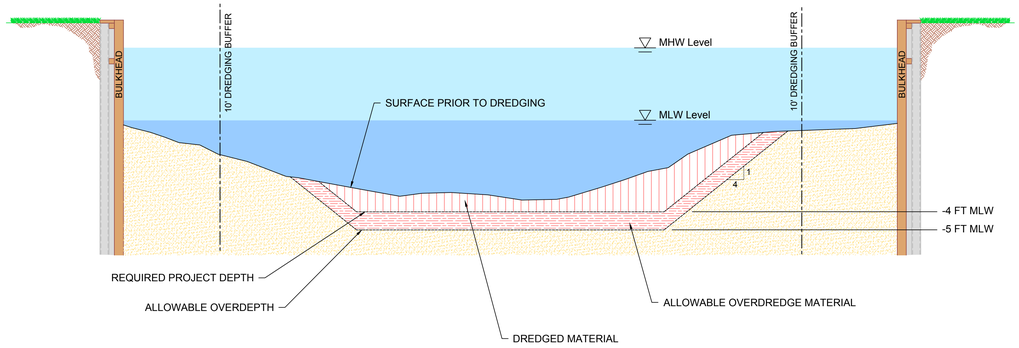
DRAWING TITLE

SOUTH PROJECT AREA
CENTER CHANNEL DREDGE CROSS SECTIONS

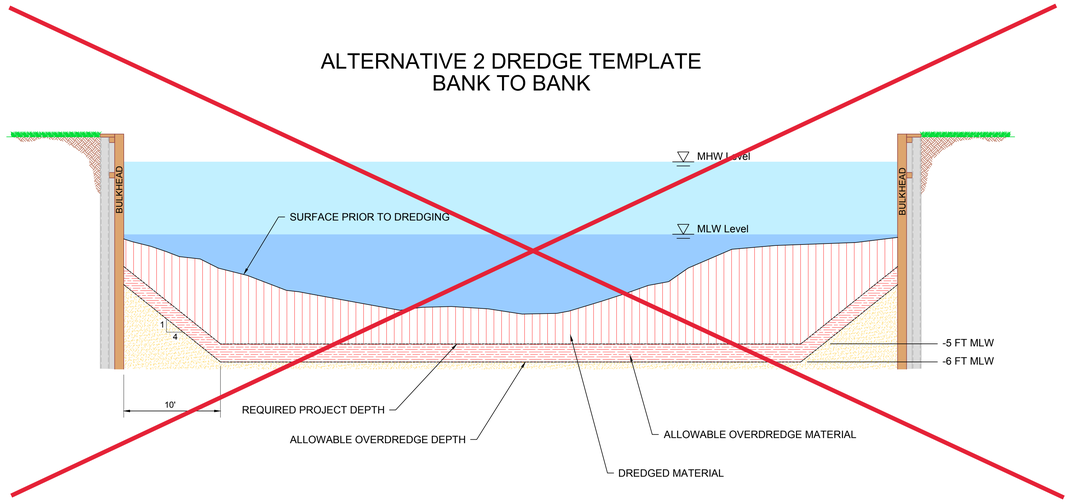
DWG. NO. C-6A

REV.

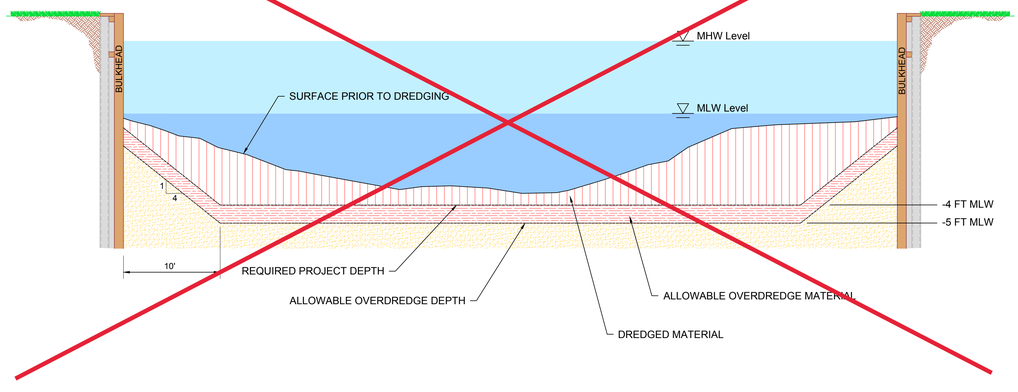
PROJECT DREDGE TEMPLATE
CENTER CHANNEL ONLY



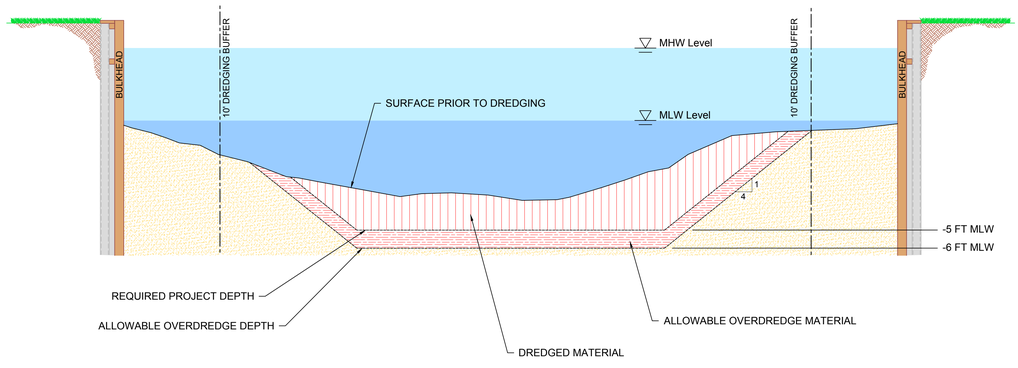
ALTERNATIVE 2 DREDGE TEMPLATE
BANK TO BANK



ALTERNATIVE 1 DREDGE TEMPLATE
BANK TO BANK



ALTERNATIVE 3 DREDGE TEMPLATE
CENTER CHANNEL ONLY



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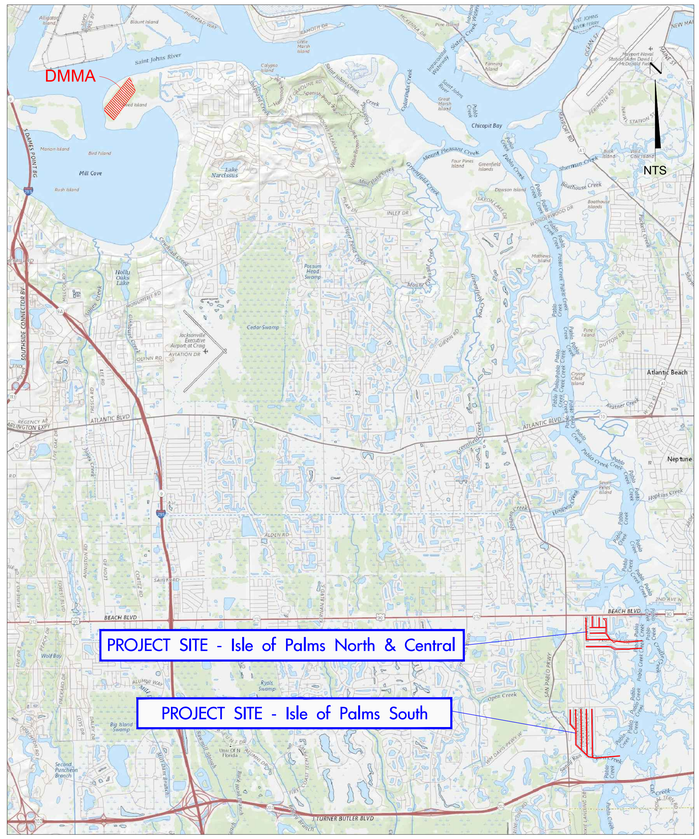
Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

DRAWING TITLE

TYPICAL CROSS SECTIONS

DWG. NO. C-7

REV.



DMMA VICINITY LOCATION MAP

NOTES:

1. CONTRACTOR SHALL COMPLY WITH HARBOUR WATERWAY SPECIAL DISTRICT DISPOSAL AREA OPERATING RULES AND REGULATIONS.
2. CONTRACTOR SHALL COORDINATE DISPOSAL WITH THE HARBOUR WATERWAY SPECIAL DISTRICT CONTACT: STANLEY PIPES, PHONE: (904)642-0097, EMAIL: S.PIPES.HWSD@ATT.NET

DRAFT

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Jacksonville, Florida 32258

wood.

FL. COA NO.: 8379 | WOOD PROJECT NO. 6735199456

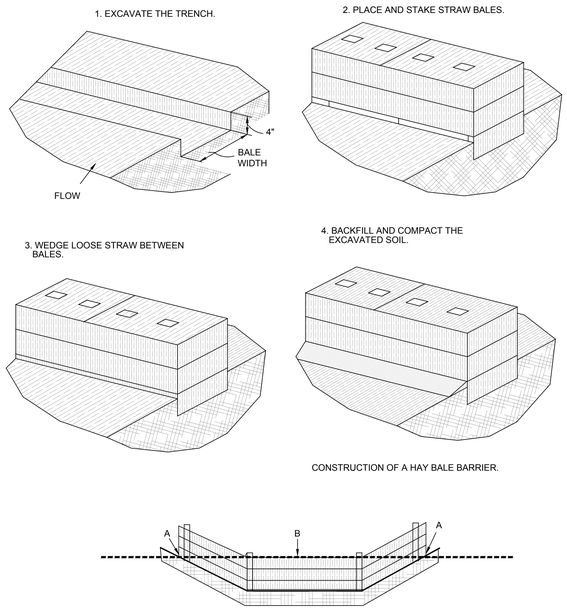
Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

DRAWING TITLE

DREDGED MATERIAL MANAGEMENT AREA PLAN

DWG. NO. C-8

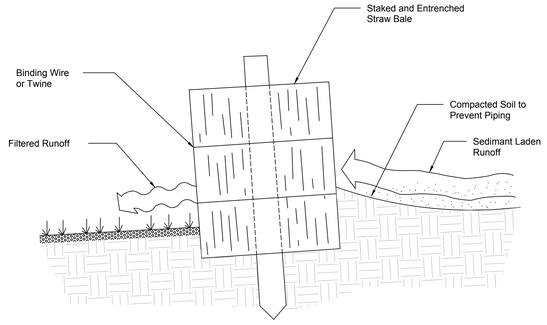
REV.



CONSTRUCTION OF A HAY BALE BARRIER.

POINTS A SHOULD BE HIGHER THAN POINT B

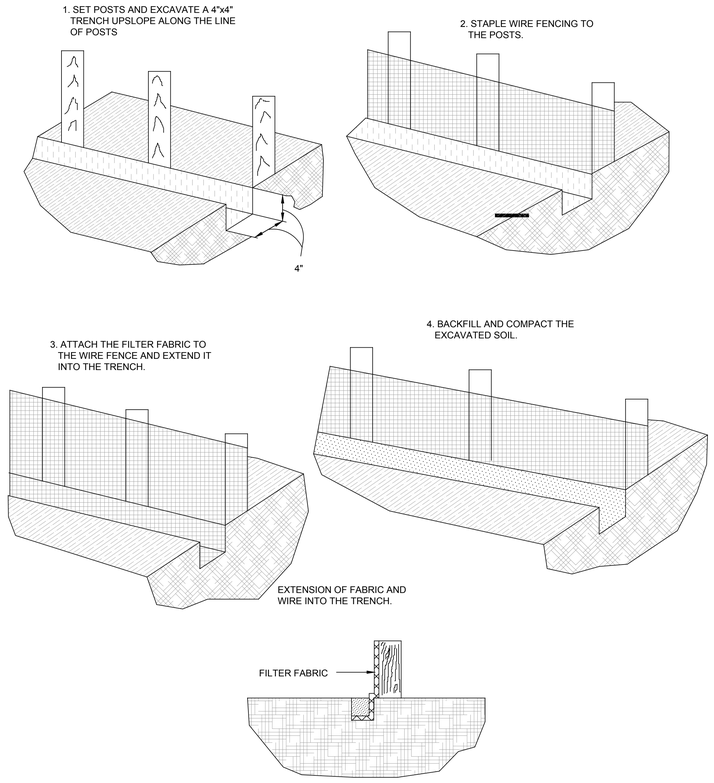
PROPER PLACEMENT OF HAY BALE BARRIER IN DRAINAGE WAY



CROSS-SECTION OF A PROPERLY INSTALLED STRAW BALE

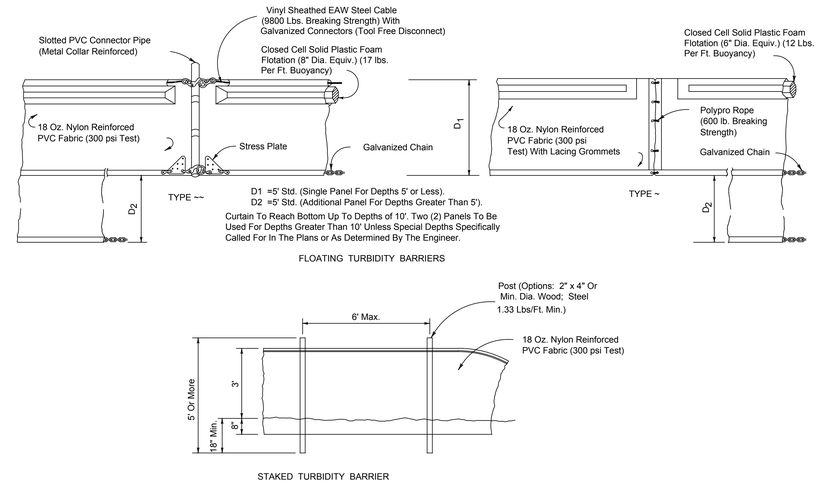
TYPICAL HAY BALE BARRIER CONSTRUCTION DETAILS

N.T.S.



TYPICAL SILT FENCE CONSTRUCTION DETAILS

N.T.S.



FLOATING TURBIDITY BARRIERS

STAKED TURBIDITY BARRIER

TYPICAL TURBIDITY CURTAIN DETAILS

N.T.S.

NOTES:

1. DETAILS OBTAINED FROM COJ.NET, DEVELOPMENT SERVICES DIVISION (https://www.coj.net/departments/planning-and-development/development-services-division/city-standard-details-(dwg-pdf-formats)#all).
2. EROSION/SEDIMENTATION CONTROL AND TURBIDITY BARRIERS SHALL BE INSTALLED, MAINTAINED, AND REMOVED FROM THE SITE AS DESCRIBED IN PERMIT AUTHORIZATIONS AND TECHNICAL SPECIFICATIONS.

DRAFT

REV.	DATE	DESCRIPTION	BY:	APVD

REV.	DATE	DESCRIPTION	BY:	APVD

REV.	DATE	DESCRIPTION	BY:	APVD

DESIGN BY:	JP	FEB 2020
DRAWN BY:	JP	FEB 2020
CHECKED BY:	RW	FEB 2020
APPROVED BY:	RW	FEB 2020

SIGNATURE:

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Jacksonville, Florida 32258

wood.

FL. COA NO.: 8379 | WOOD PROJECT NO. 6735199456

Isle of Palms Special District Dredging Project
Bid Drawings
Jacksonville, Duval County, Florida

DRAWING TITLE

EROSION AND TURBIDITY CONTROL
TYPICAL DETAILS

DWG. NO. C-9

REV.