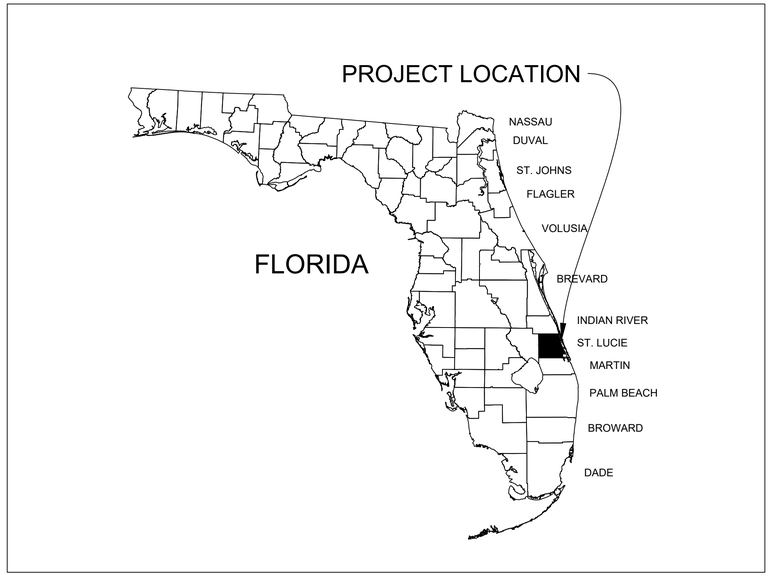
INTRACOASTAL WATERWAY MAINTENANCE DREDGING
ST. LUCIE COUNTY REACH I, FLORIDA

APPENDIX A
11" x 17" Project Drawings

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1 MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA



LOCATION MAP
N.T.S.

DRAWING INDEX

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C-4	DREDGE PLAN - CUT SL-3N STA. 6+50 THRU CUT SL-5 STA. 28+50
C-5	DREDGE PLAN - CUT SL-5 STA. 28+50 THRU CUT SL-5 STA. 72+00
C-6	TYPICAL DREDGE SECTIONS
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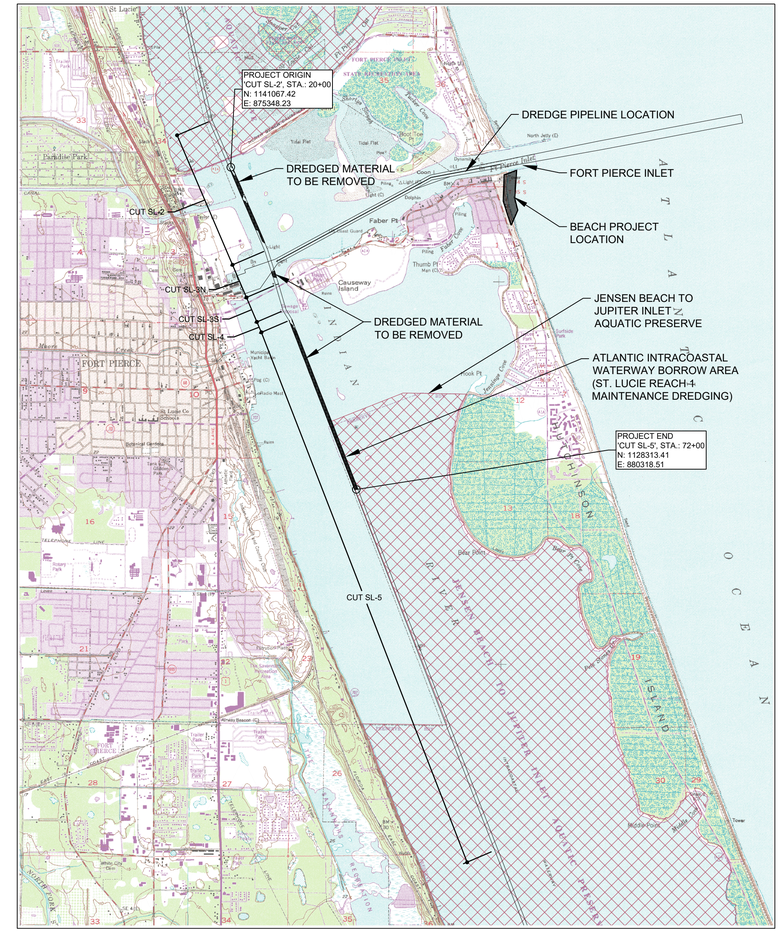
C-15	EROSION AND SEDIMENT CONTROL DETAILS



VICINITY MAP
1"= 3000' (22x34)
1"= 6000' (11x17)

REFERENCE:
USGS 7.5' QUADRANGLE MAP,
ANKONA, FLORIDA 1983
FORT PIERCE, FLORIDA 1983

NOTE:
PROJECT START = CUT SL-2 STA. 20+00
PROJECT END = CUT SL-5 STA. 72+00

ACCEPTANCE SECTION	CUT, STATIONING	VOLUME (CY) DESIGN DEPTH	VOLUME (CY) 2 FT ALLOWABLE OVERDREDGE	VOLUME (CY) DESIGN DEPTH +2 FT ALLOWABLE OVERDREDGE
1	CUT SL-2, STA 20+00 THRU CUT SL-5, STA 13+00	6,700	23,450	30,150
2	CUT SL-5, STA 13+00 THRU 45+00	4,700	25,700	30,400
3	CUT SL-5, STA 45+00 THRU 72+00	3,650	26,200	29,850
	SUBTOTAL	15,050	75,350	90,400
	VOLUME (CY) SIDE SLOPE ASSUMPTION 10%			9,040
	PROJECT TOTAL			99,440

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WEST PALM BEACH, FLORIDA 33401
(561)-640-7310
CERTIFICATE OF AUTHORIZATION # 4815

PROJECT TITLE
INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

SEAL
MICHAEL E. TRUDNAK P.E.# 58200

PROJECT NO	C2014-027-04
DATE	FEB 2017

C-1
SHEET 1 OF 15

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PROJECT NOTES

1. COORDINATES SHOWN ARE IN U.S. SURVEY FEET, AND ARE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, EAST ZONE, NORTH AMERICAN DATUM OF 1983, 1990 ADJUSTMENT.
2. ELEVATIONS ARE SHOWN IN FEET REFERENCED TO MEAN LOWER LOW WATER. CAUTION: THE DIFFERENCE BETWEEN NAVD 88 AND MEAN LOWER LOW WATER VARIES AND MAY NOT BE THE SAME AS THE DIFFERENCE USED FOR PREVIOUS USACE SURVEYS. TO MAKE A DIRECT COMPARISON BETWEEN SURVEYS, THE USER NEEDS TO BE CAREFUL TO VERIFY THE VERTICAL DATUM TRANSFORMATION PARAMETERS FOR EACH PROJECT AREA (SEE VERTICAL DATUM DIAGRAM).
3. BASE DATA REFERENCES AS SHOWN IN THE CONSTRUCTION DRAWINGS ARE AS FOLLOWS: AERIAL REFERENCE -- MICROSOFT BING OPENSTREETMAP, 2011; GEOTECHNICAL INFORMATION - JULY 2015; JANUARY 2017, AMERICAN VIBRACORE SERVICES, ST LUCIE REACH 1, FT. PIERCE, FLORIDA, GEOTECHNICAL INVESTIGATION (APPENDIX D); BATHYMETRIC SURVEY - MARCH 2014, MORGAN & EKLUND, INC., HYDROGRAPHIC SURVEY, INTRACOASTAL WATERWAY ST. LUCIE COUNTY, COMMISSION NUMBER: 5303.10 (APPENDIX E); UTILITY LOCATION SURVEY - DECEMBER 2015, MORGAN & EKLUND, INC. AND SONOGRAPHICS, INC., BATHYMETRIC, MAGNETOMETER, SEISMIC AND SIDE-SCAN SONAR SURVEY; INTRACOASTAL WATERWAY CUT SL-2 THROUGH CUT SL-5 ST. LUCIE COUNTY, FLORIDA, COMMISSION NUMBER: 5624.00 (APPENDIX F); SUBMERGED AQUATIC RESOURCES SURVEYS - OCTOBER 30, 2014, SCHEDA ECOLOGICAL ASSOCIATES, BENTHIC HABITAT ASSESSMENT REPORT; ST. LUCIE DREDGING REACH 1, SEAGRASS AND HARDBOTTOM HABITAT ASSESSMENT, ST. LUCIE COUNTY, WORK ORDER NO. 14-08 - OCTOBER 2015, SCHEDA ECOLOGICAL ASSOCIATES, BENTHIC HABITAT ASSESSMENT REPORT
4. THE CONTRACTOR SHALL PROVIDE ACCESS TO THE WORK FOR INSPECTION BY THE ENGINEER OF RECORD (EOR), ENGINEER, AND OWNER.
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THE EOR AND THE ENGINEER AS NECESSARY FOR CONSTRUCTION INSPECTION AND AS-BUILT CERTIFICATION. THE CONTRACTOR SHALL NOTIFY THE EOR AND THE OWNER AT APPROPRIATE AND APPROVED TIMES DURING THE COURSE OF THE WORK THAT THE CONTRACTOR IS READY FOR INSPECTION. WORK THAT IS ASSEMBLED OR COVERED SO THAT THE ENGINEER CANNOT INSPECT THE WORK PROPERLY SHALL BE DISASSEMBLED, UNCOVERED, OR DESTROYED AS NECESSARY FOR INSPECTION. THE COSTS OF REPAIR OR RESTORATION OF THIS WORK SHALL BE BORNE SOLELY BY THE CONTRACTOR.
6. ALL REQUIRED SUBMITTALS OR MANUFACTURER'S INFORMATION SHALL BE IN U.S. CUSTOMARY UNITS. ALL SUBMITTALS USING METRIC UNITS WILL BE REJECTED AND RETURNED WITHOUT COMMENT.
7. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
8. IN THE EVENT OF A CONFLICT BETWEEN THE SPECIFICATIONS AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ADJACENT FACILITIES, INCLUDING ALL ACCESS ROUTES TO AND FROM THE PERMANENT DISPOSAL LOCATION, CAUSED BY HIS ACTIVITIES DURING PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL RESTORE ALL SUCH DAMAGES TO THEIR PRE-CONSTRUCTION CONDITION AT NO ADDITIONAL COST TO THE OWNER.

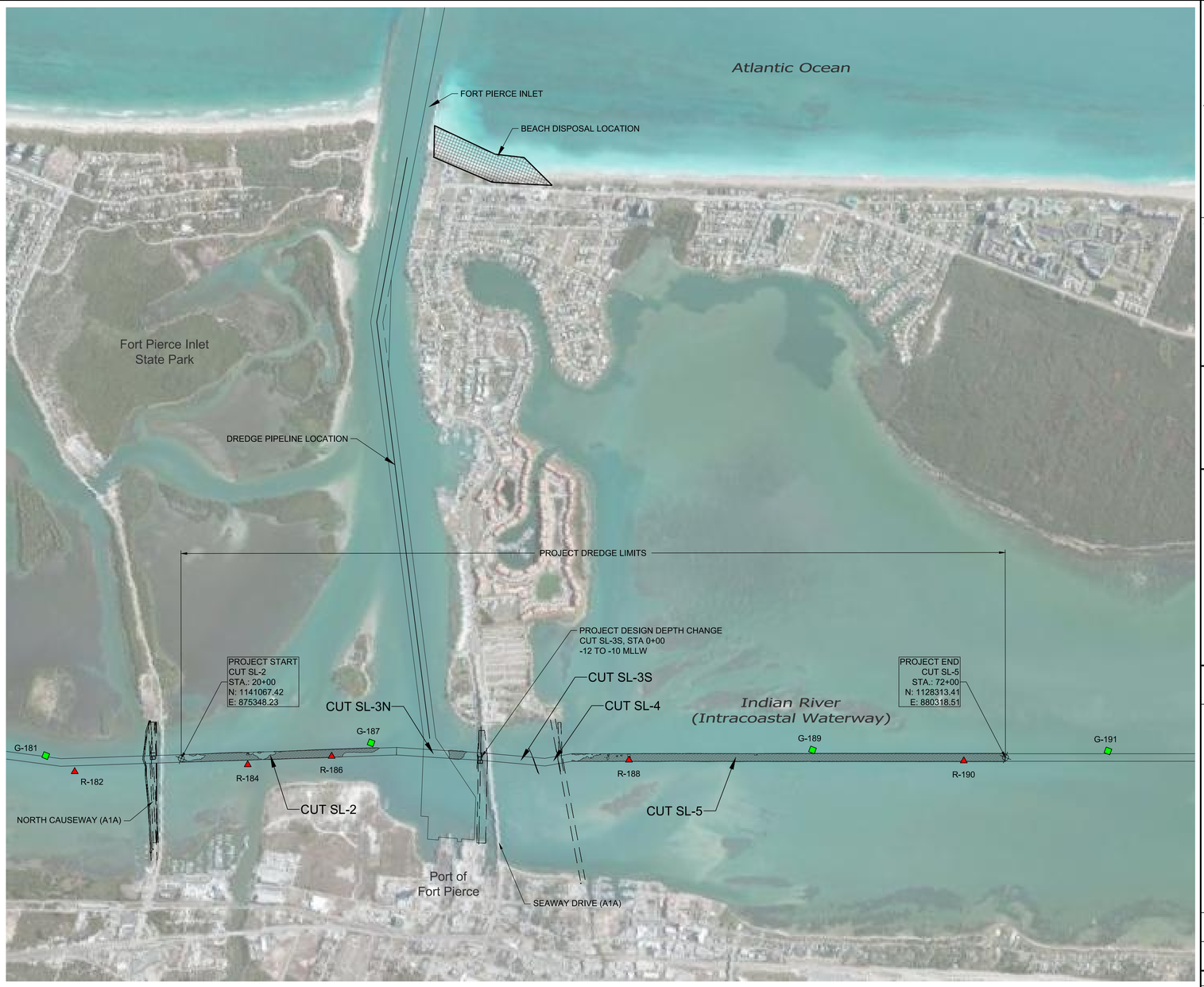
PERMITS AND PERMIT CONDITIONS

1. THE OWNER HAS SUPPLIED COPIES OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION PERMIT NO. (TBA) (APPENDIX B), THE U.S. ARMY CORPS OF ENGINEERS REGIONAL GENERAL PERMIT VERIFICSATION (TBA) (APPENDIX C) AS PART OF THE SPECIFICATIONS. THE CONTRACTOR SHALL COMPLY WILL ALL PERMIT CONDITIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS NOT SUPPLIED BY THE OWNER. COSTS OF OBTAINING PERMITS NOT SUPPLIED BY THE OWNER SHALL BE BORNE BY THE CONTRACTOR. THIS SHALL INCLUDE BUT NOT BE LIMITED TO: NPDES PERMIT (OR NOI), CLEARING OR LAND DISTURBANCE PERMITS, TREE IMPACT PERMITS, CITY OR COUNTY BUILDING PERMITS, DRIVEWAY OR ENTRANCE PERMITS, TEMPORARY UTILITIES PERMITS, ETC.
3. THE CONTRACTOR SHALL NOT EXTEND DREDGING ACTIVITIES OUTSIDE THE PERMITTED DREDGED TEMPLATE. DREDGED MATERIAL SHALL BE DEPOSITED AT BEACH DISPOSAL AREA SOUTH OF FORT PIERCE INLET.
4. ALL WATERCRAFT ASSOCIATED WITH THE EXECUTION OF THE PERMITTED PROJECT SHALL ONLY OPERATE WITHIN WATERS OF SUFFICIENT DEPTH SO AS TO PRECLUDE BOTTOM SCOURING, PROP DREDGING, GROUNDING, AND DAMAGE TO THE SUBMERGED BOTTOM OR SUBMERGED RESOURCES (A MINIMUM 18-INCH CLEARANCE MUST BE MAINTAINED AT ALL TIMES).
5. AT LEAST ONE PERSON SHALL BE DESIGNATED AS A MANATEE OBSERVER WHEN IN-WATER WORK IS BEING PERFORMED. THAT PERSON SHALL HAVE EXPERIENCE IN MANATEE OBSERVATION, AND BE EQUIPPED WITH POLARIZED SUNGLASSES TO AIDE IN OBSERVATION. THE MANATEE OBSERVER MUST BE ON SITE DURING ALL IN-WATER DREDGING ACTIVITIES AND WILL ADVISE PERSONNEL TO CEASE OPERATION UPON SIGHTING A MANATEE WITHIN 50 FEET OF ANY IN-WATER CONSTRUCTION ACTIVITIES.

DATUM: MEAN LOWER LOW WATER

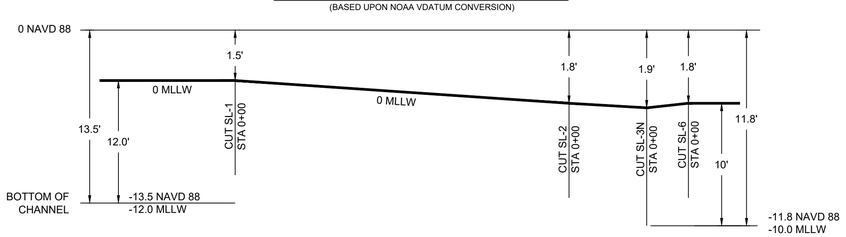
CORRECTIONS: CAUTION: THE DIFFERENCE BETWEEN NAVD 88 AND MEAN LOWER LOW WATER VARIES AND MAY NOT BE THE SAME AS THE DIFFERENCE USED FOR PREVIOUS USACE SURVEYS. TO MAKE A DIRECT COMPARISON BETWEEN SURVEYS, THE USER NEEDS TO BE CAREFUL TO VERIFY THE VERTICAL DATUM TRANSFORMATION PARAMETERS FOR EACH PROJECT AREA (SEE VERTICAL DATUM DIAGRAM).

SOURCE OF SURVEY DATA = MORGAN & EKLUND,INC., MARCH 2014, ATTACHMENT F



RELATIONSHIP BETWEEN NAVD88 AND MLLW

(BASED UPON NOAA VDATUM CONVERSION)



CAUTION:

THE APPROXIMATE LOCATION OF THE UTILITIES SHOWN HEREIN WERE PROVIDED BY MORGAN & EKLUND, INC., SEPTEMBER 2015, (APPENDIX F). THERE MAY BE OTHER UTILITY CROSSINGS THAT WERE NOT DETECTED DURING THE SURVEY. CONTRACTOR IS ADVISED TO REFER TO SPECIFICATION 35 20 23, SECTION 1.6.A. FOR FURTHER DETAILS.

0 1,000' 2,000' 4,000'

GRAPHIC SCALE
22X34: 1" = 1,000'
11X17: 1" = 2,000'

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CERTIFICATE OF AUTHORIZATION # 4815

SEAL

MICHAEL E. TRUDNAK P.E.# 58200

PROJECT TITLE

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

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NO	REVISIONS / SUBMISSIONS	DATE

PROJECT NO	C2014-027-04
DATE	FEB 2017
DESIGNED	LSB
DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

PROJECT OVERVIEW AND GENERAL NOTES

C-2

SHEET 2 OF 15

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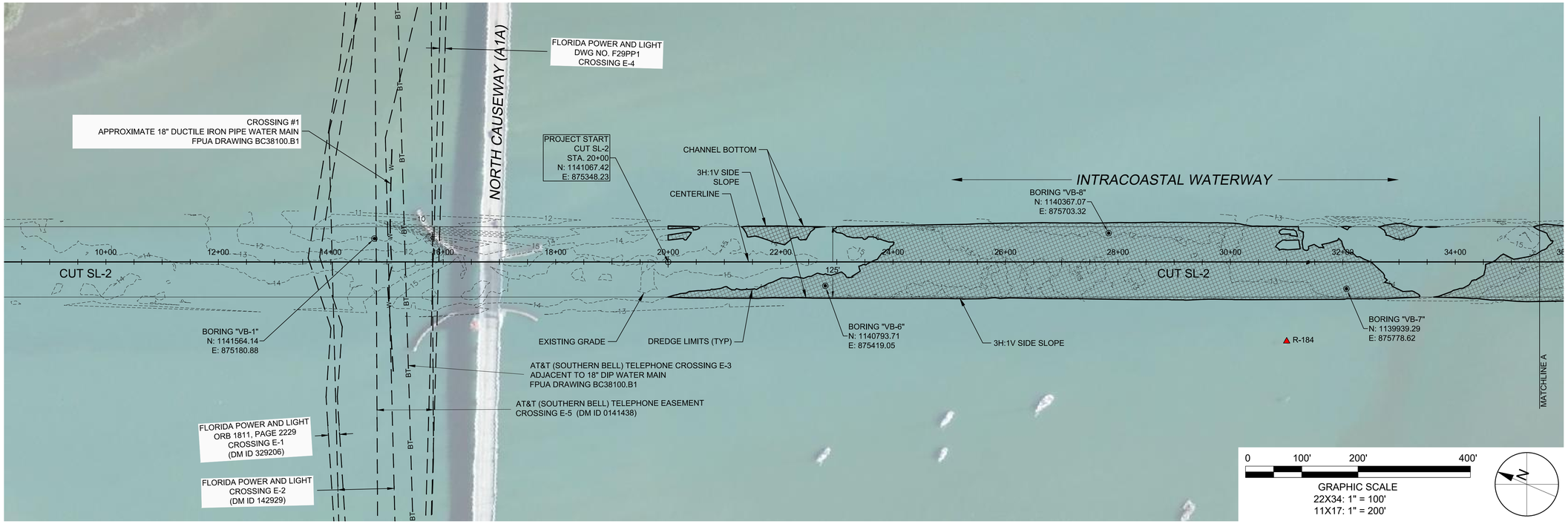

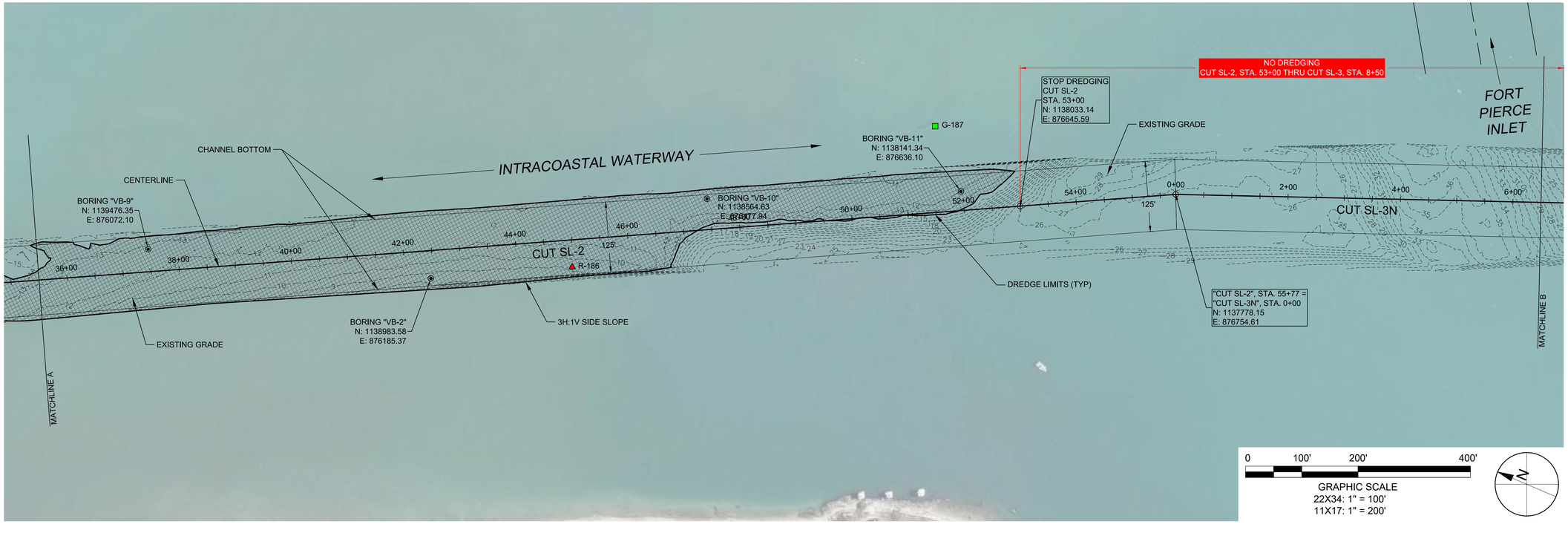

DREDGED MATERIAL TO BE REMOVED (PROJECT DEPTH +2 FT MLLW)

HARD BOTTOM (SCHEDA, 2014)

SEAGRASSES (SCHEDA, 2016)

VIBRACORE BORING (AVS, 2015)

EXISTING CONTOURS (MAY 2014)

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REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

DREDGE PLAN - CUT SL-2
STA. 20+00 THRU CUT SL-3N
STA. 6+50

C-3

SHEET 3 OF 15

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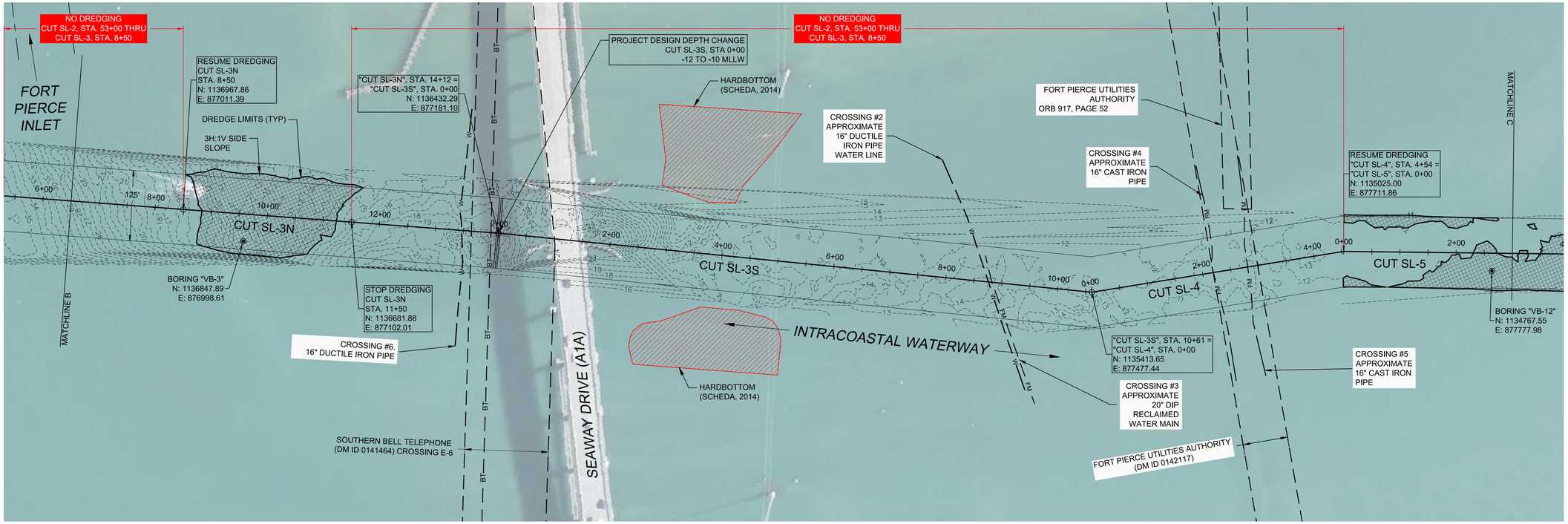

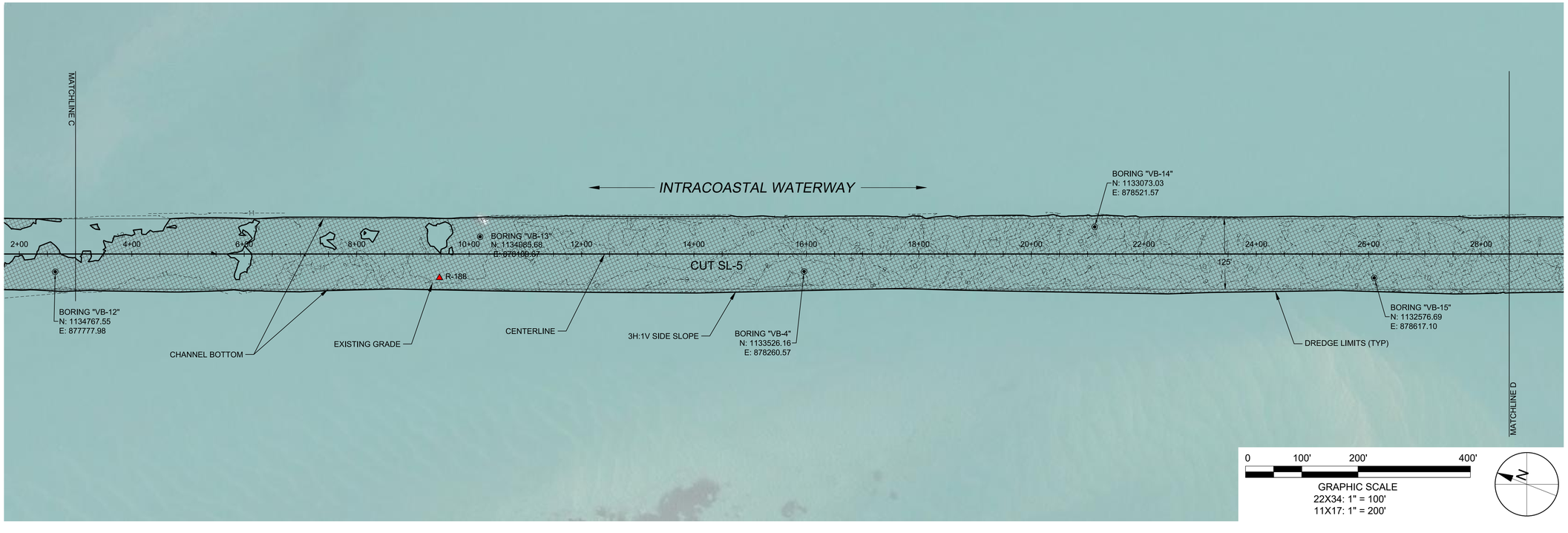

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CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

DREDGE PLAN - CUT SL-3N
STA. 6+50 THRU CUT SL-5
STA. 28+50

C-4

SHEET 4 OF 15

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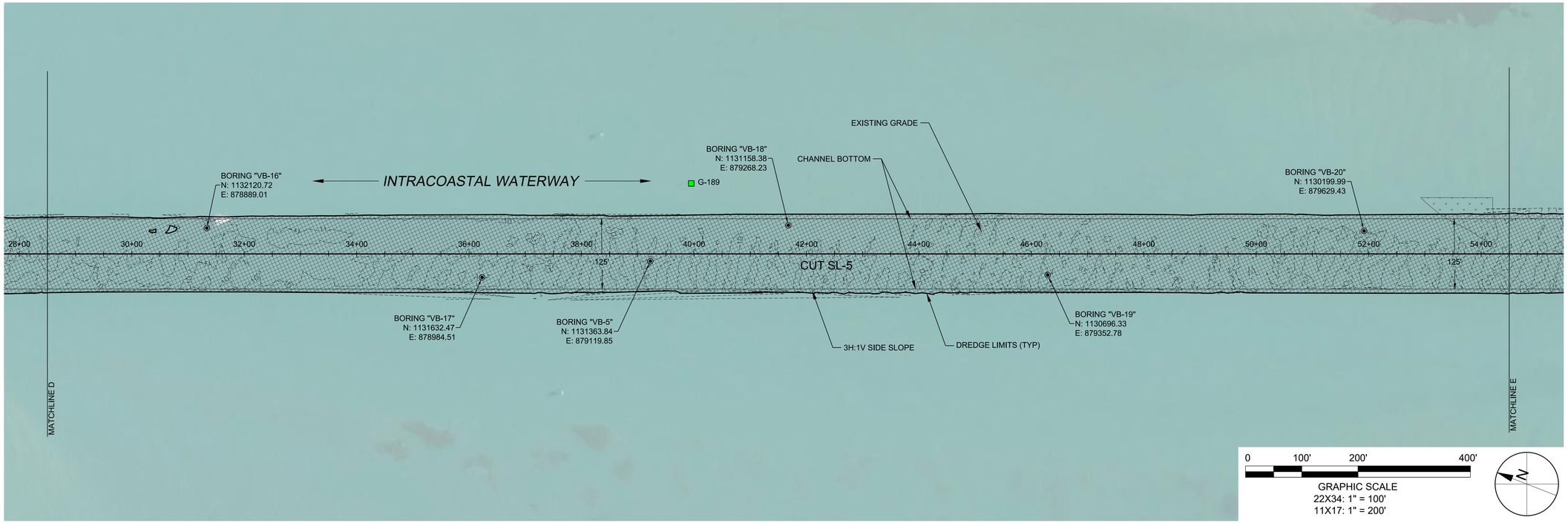

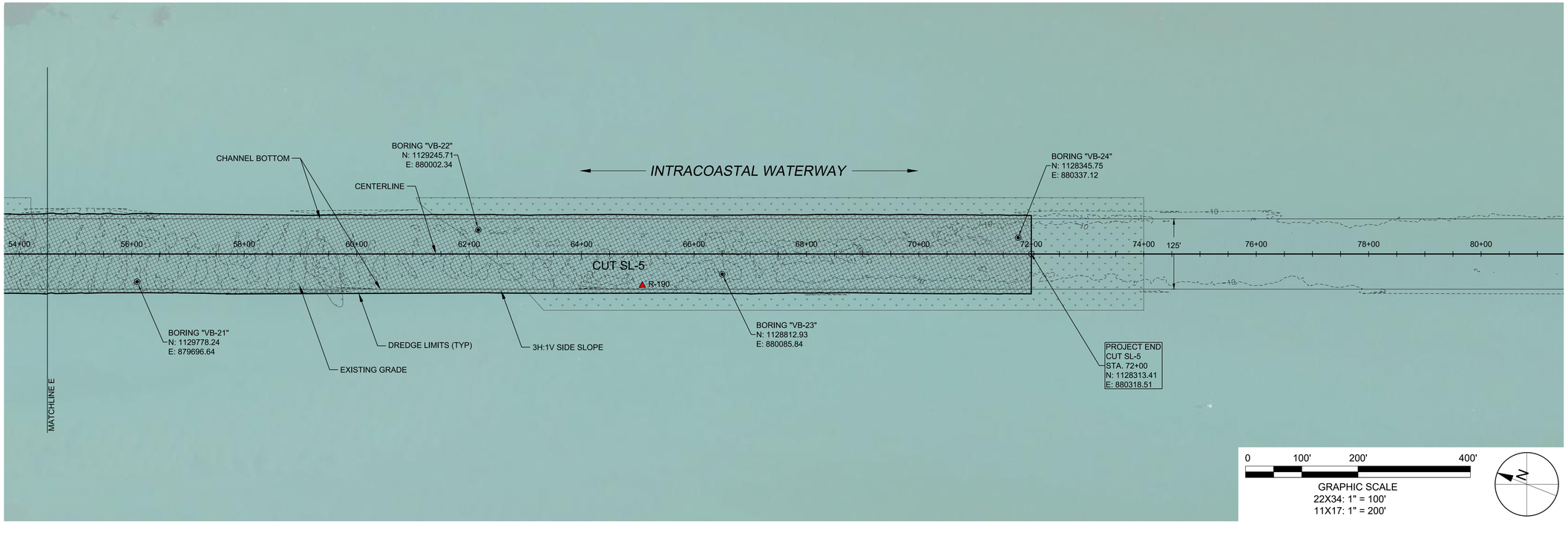

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DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

DREDGE PLAN - CUT SL-5
STA. 28+50 THRU CUT SL-5
STA. 72+00

C-5

SHEET 5 OF 15

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LEGEND

- EXISTING GRADE
- DESIGN CHANNEL TEMPLATE (-12 / -10 FT MLLW)
- ALLOWABLE 2 FT OVERDREDGE
- DREDGED MATERIAL TO BE REMOVED

0 100' 200' 400'

GRAPHIC SCALE
22X34: 1" = 100'
11X17: 1" = 200'
VERT. SCALE: 1" = 10' (22x34)
VERT. SCALE: 1" = 20' (11X17)

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CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

TYPICAL DREDGE SECTIONS

C-6

SHEET 6 OF 15

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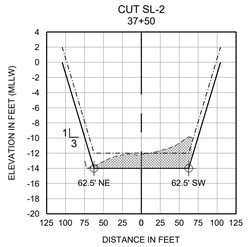

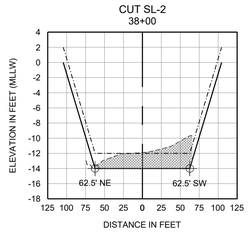

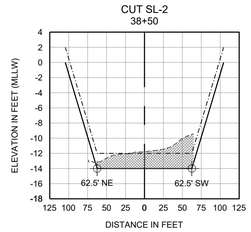

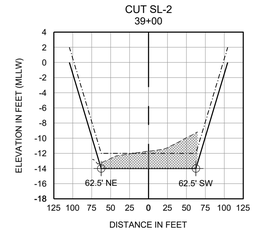

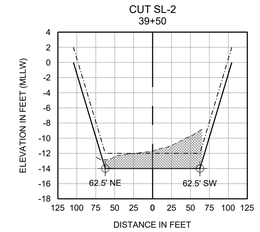

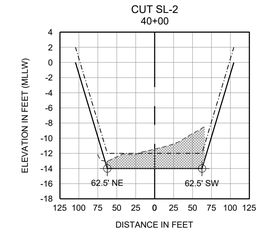

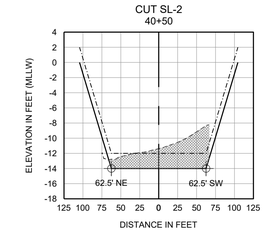

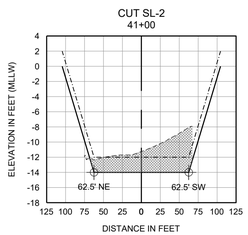

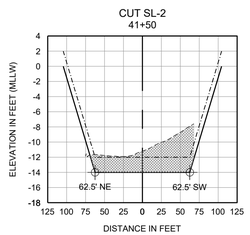

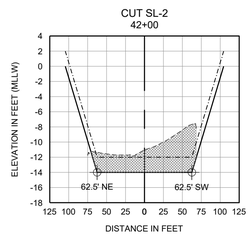

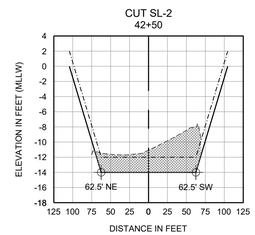

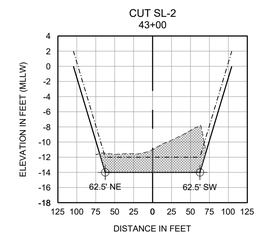

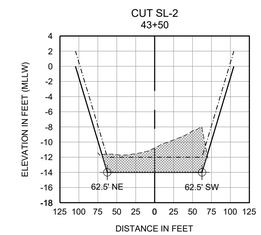

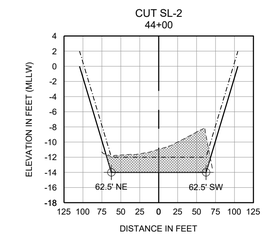

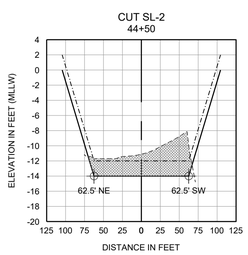

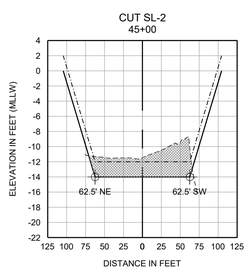

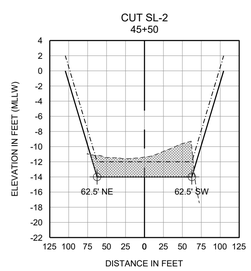

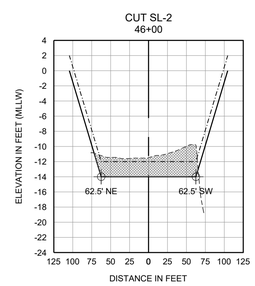

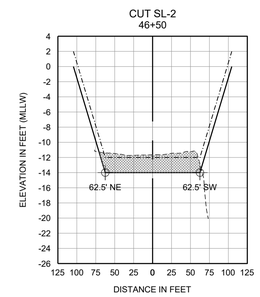

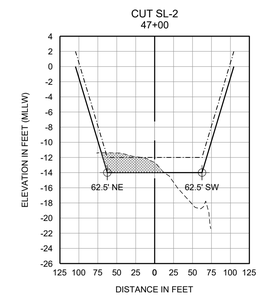

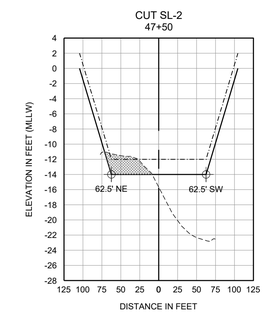

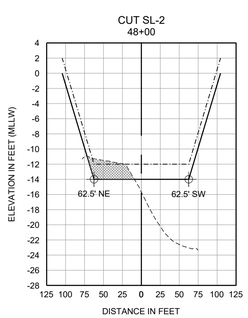

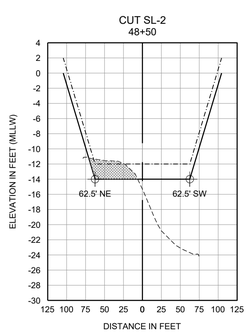

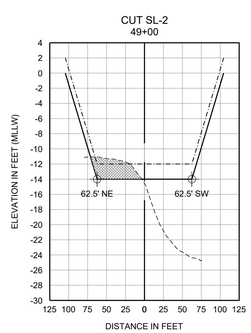

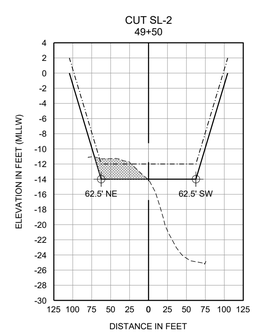

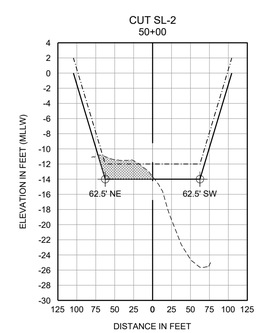

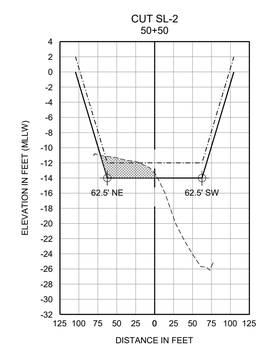

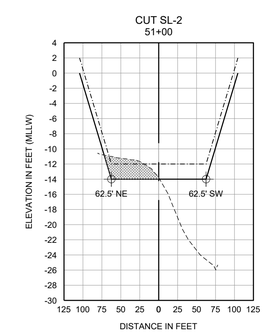

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PROJECT NO	C2014-027-04
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DESIGNED	LSB
DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

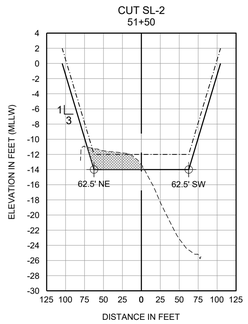
DRAWING TITLE

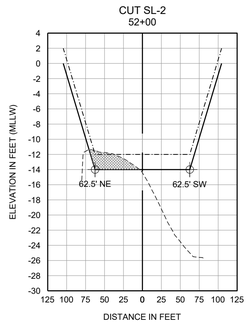
TYPICAL DREDGE SECTIONS

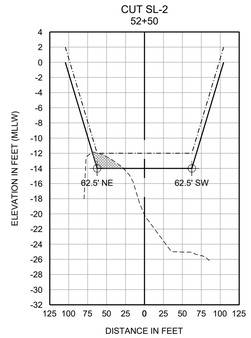
C-7

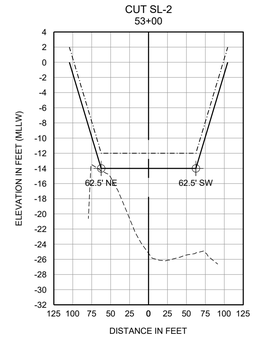
SHEET 7 OF 15

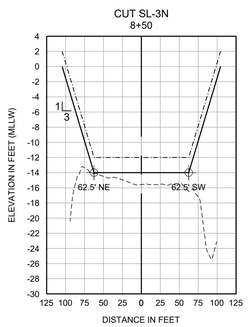
CATHY SHELL, 2/8/2017 4:20:45 PM, x:\cyd\Projects\C2014-027-04 FND St Lucie\Plans\Const\Construction\c2014-027-04-x-Sections.dwg

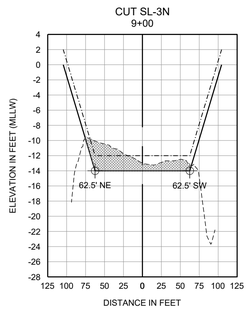


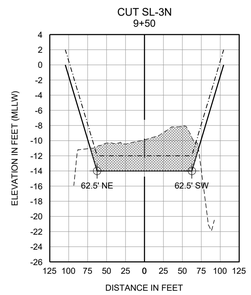


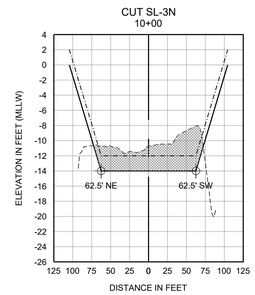


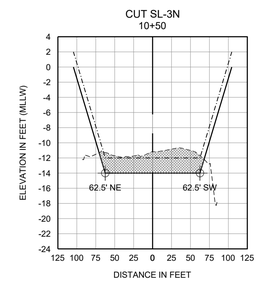


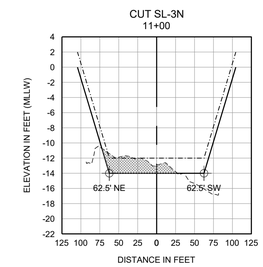


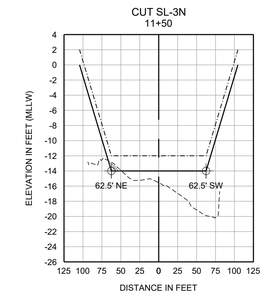


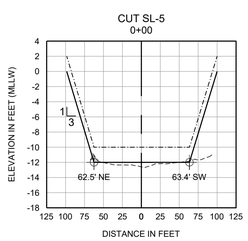


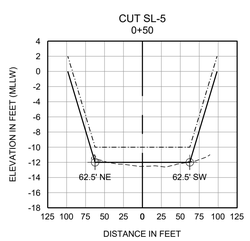


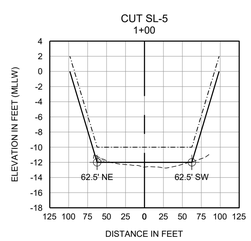


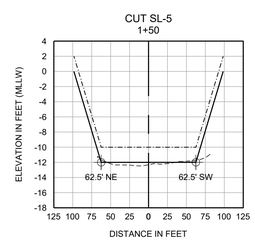


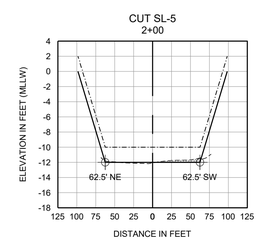


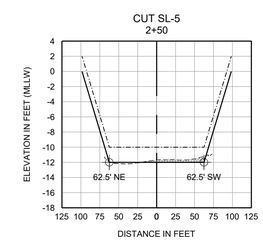


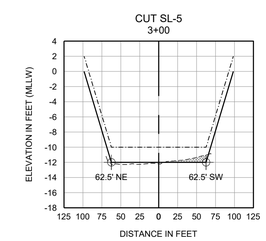


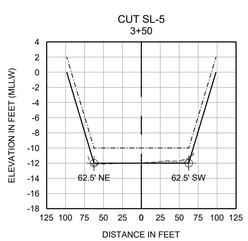


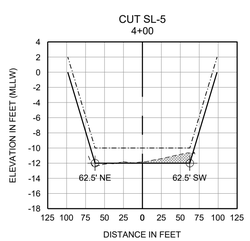


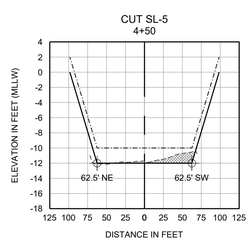


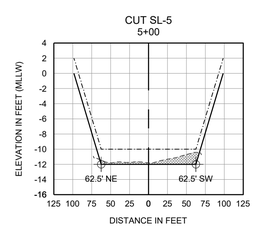


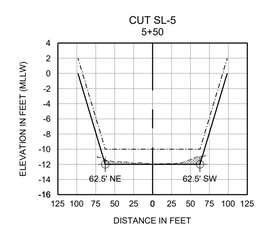


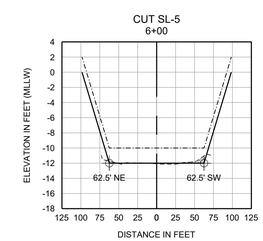


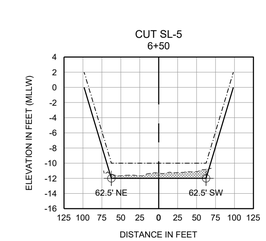












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WEST PALM BEACH, FLORIDA 33401
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CERTIFICATE OF AUTHORIZATION # 4815

SEAL

MICHAEL E. TRUDNAK P.E.# 58200

PROJECT TITLE

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

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NO	ZONE	REVISIONS / SUBMISSIONS	DATE

PROJECT NO	C2014-027-04
DATE	FEB 2017
DESIGNED	LSB
DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

TYPICAL DREDGE SECTIONS

C-8

SHEET 8 OF 15

CATHY SHELL, 2/8/2017 4:20:52 PM, x:\sys\Projects\C2014-027-04 FNID St.LucieFIPlanceConst\Construction\c2014-027-04-c-Sections.dwg

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TYPICAL DREDGE SECTIONS

C-9

SHEET 9 OF 15

CATHY SHELL, 2/8/2017 4:20:57 PM, x:\sys\Projects\C2014-027-04 FNID St.LucieFBPlanceConst\Construction\c2014-027-04-c-Sections.dwg

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NO	ZONE	REVISIONS / SUBMISSIONS	DATE

PROJECT NO	C2014-027-04
DATE	FEB 2017
DESIGNED	LSB
DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

TYPICAL DREDGE SECTIONS

C-10

SHEET 10 OF 15

CATHY SHELL, 2/8/2017 4:21:02 PM, x:\sys\Projects\C2014-027-04 FNO St Lucie\Plans\Const\Construction\C2014-027-04-C-Sections.dwg

LEGEND

- EXISTING GRADE
- DESIGN CHANNEL TEMPLATE (-12 / -10 FT MLLW)
- ALLOWABLE 2 FT OVERDREDGE
- DREDGED MATERIAL TO BE REMOVED

0 100' 200' 400'

GRAPHIC SCALE
22X34: 1" = 100'
11X17: 1" = 200'
VERT. SCALE: 1" = 10' (22x34)
VERT. SCALE: 1" = 20' (11X17)

TAYLOR ENGINEERING INC.
10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FLORIDA 32256
(904)-731-7040
1655 PALM BEACH LAKES, SUITE 1012
WEST PALM BEACH, FLORIDA 33401
(561)-640-7310
CERTIFICATE OF AUTHORIZATION # 4815

SEAL

MICHAEL E. TRUDNAK P.E.# 58200

PROJECT TITLE

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

Always call 811 two full business days before you dig

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DRAWING TITLE

TYPICAL DREDGE SECTIONS

C-11

SHEET 11 OF 15

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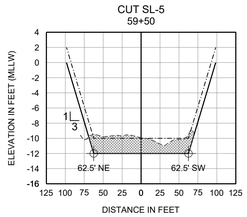

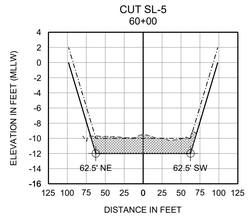

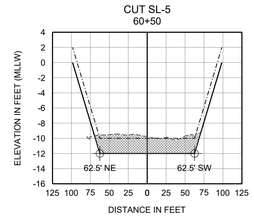

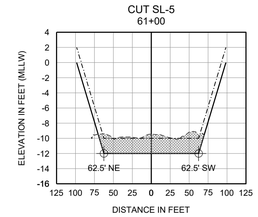

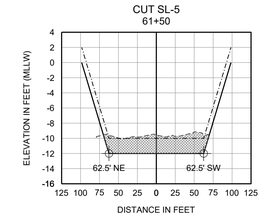

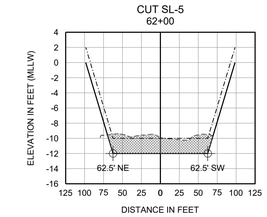

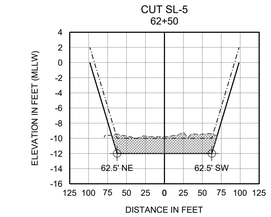

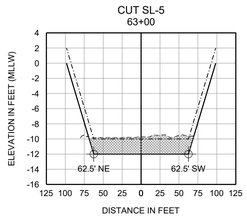

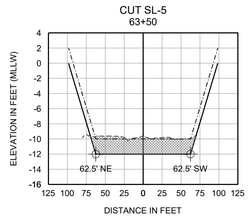

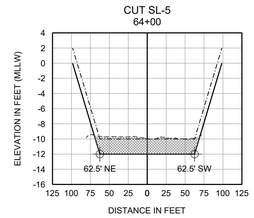

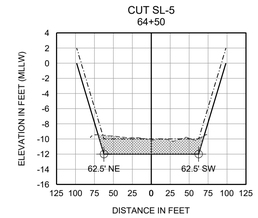

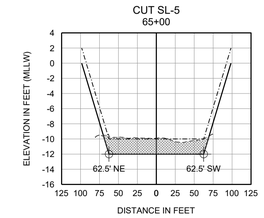

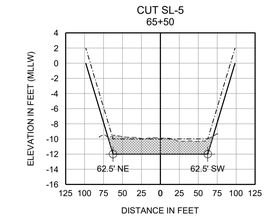

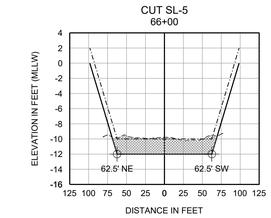

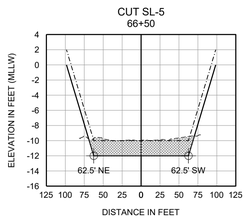

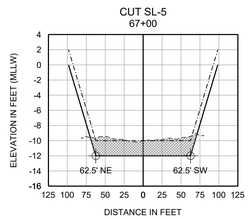

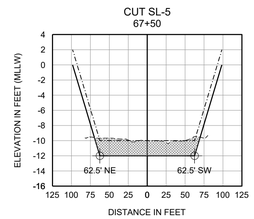

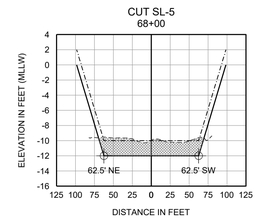

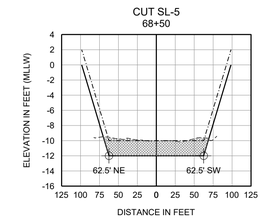

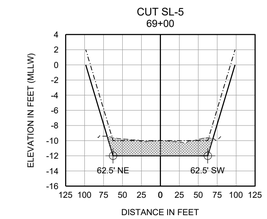

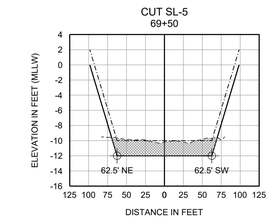

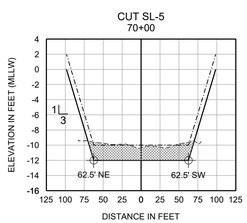

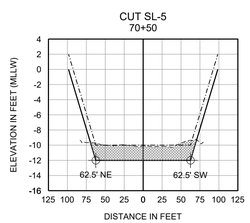

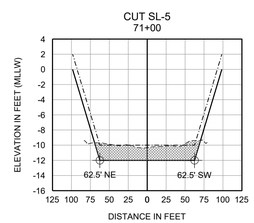

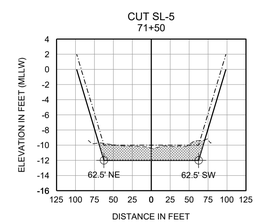

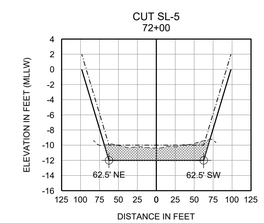

LEGEND

- EXISTING GRADE
- DESIGN CHANNEL TEMPLATE (-12 / -10 FT MLLW)
- ALLOWABLE 2 FT OVERDREDGE
- DREDGED MATERIAL TO BE REMOVED

0 100' 200' 400'

GRAPHIC SCALE
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11X17: 1" = 200'
VERT. SCALE: 1" = 10' (22x34)
VERT. SCALE: 1" = 20' (11X17)

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CERTIFICATE OF AUTHORIZATION # 4815

SEAL

MICHAEL E. TRUDNAK P.E.# 58200

PROJECT TITLE

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

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TYPICAL DREDGE SECTIONS

C-12

SHEET 12 OF 15

CATHY SHELL, 2/8/2017 4:21:13 PM, x:\sys\Projects\C2014-027-04 FND St.Lucie\PierceConst\Construction\c2014-027-04-c-Sections.dwg

ATLANTIC OCEAN

FT. PIERCE INLET

FEDERAL SPP PERMITTED EQUILIBRIUM TOE OF FILL

CONSTRUCTION TOE OF FILL

R-34 TRANSECT

R-34.5 TRANSECT

R-35 TRANSECT

R-35.5 TRANSECT

10H:1V

SEAWARD EDGE OF BERM

N: 1140869.15
E: 886445.77

NORTHERN LIMITS OF CONSTRUCTION

N: 1139819.08
E: 886371.78

SEAWARD EDGE OF DUNE TOE

SEAWARD EDGE OF DUNE CREST

LANDWARD EDGE OF DUNE CREST

4H:1V

LANDWARD DUNE TOE

R-34

R-34.5

R-35

R-35.5

R-36

SOUTHERN LIMITS OF CONSTRUCTION

N: 1138769.74
E: 886449.17

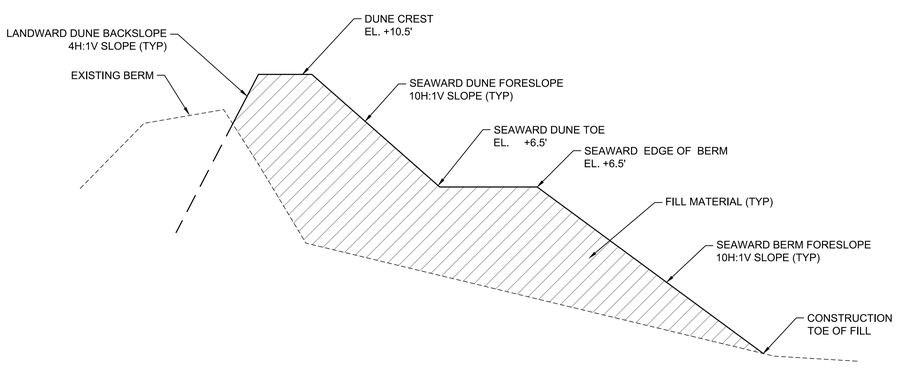
TAPER TO EXISTING

CONTRACTOR STAGING AREA

0 100' 200' 400'

GRAPHIC SCALE
22X34: 1" = 100'
11X17: 1" = 200'

N



TYPICAL BEACH FILL SECTION

NOT TO SCALE

TAYLOR ENGINEERING INC.
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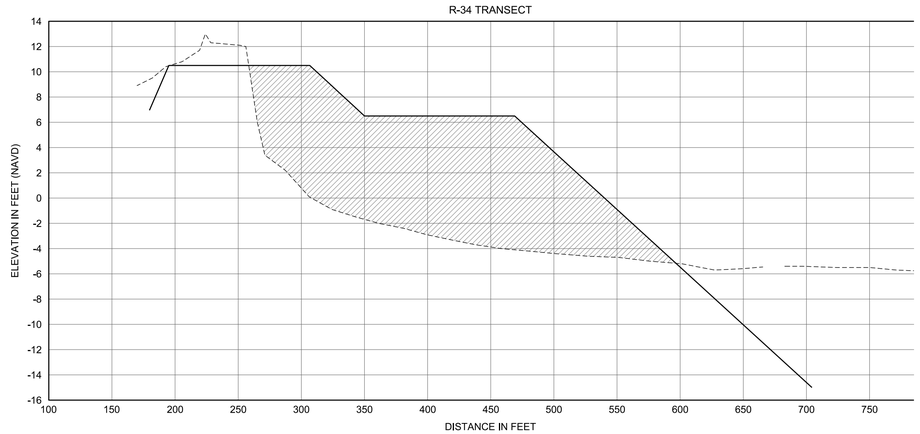
DRAWING TITLE

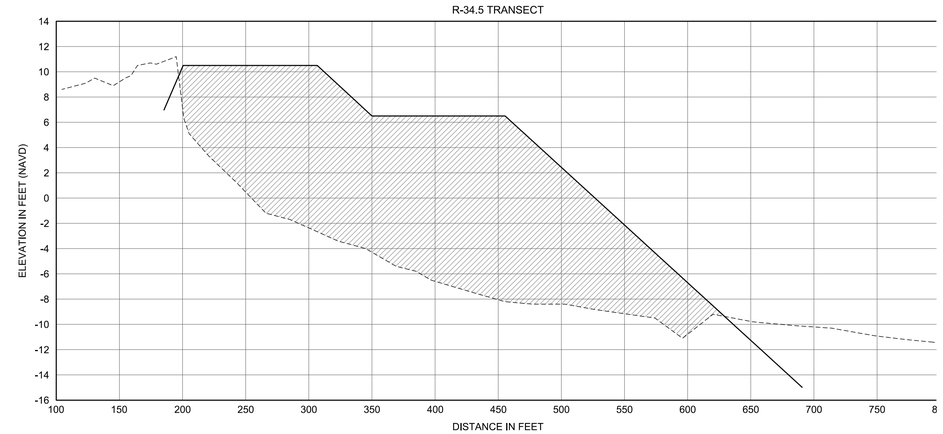
BEACH DISPOSAL PLAN

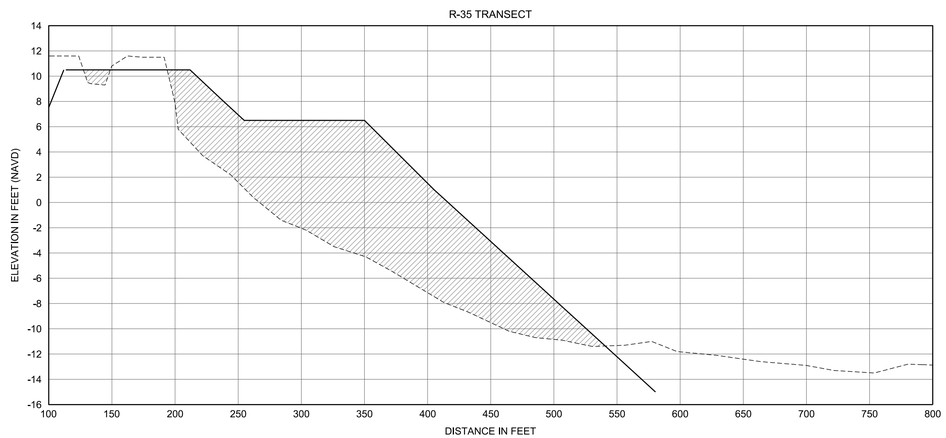
C-13

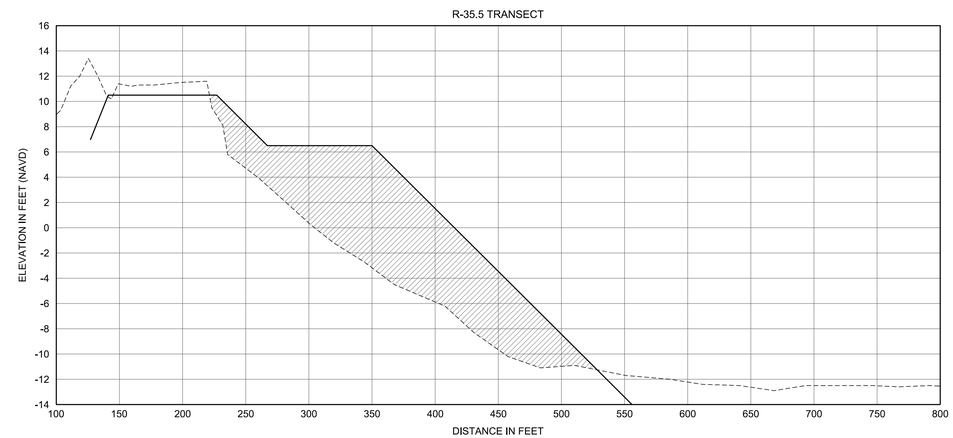
SHEET 13 OF 15

CATHY SHELL, 2/8/2017 4:21:18 PM, X:\Eng\Projects\C2014-027-04 FND St Lucie\FtPierceConstConstruction\c2014-027-04-c-Beach Plans.dwg









EXISTING GRADE (JAN 2017)

FINISH GRADE

TYPICAL BEACH FILL SECTIONS AT R-MONUMENTS

22X34: 1" = 50'
11X17: 1" = 100'
VERT. SCALE: 1" = 5' (22x34)
VERT. SCALE: 1" = 10' (11x17)

0 50 100'

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BEACH DISPOSAL SECTIONS

C-14

SHEET 14 OF 15

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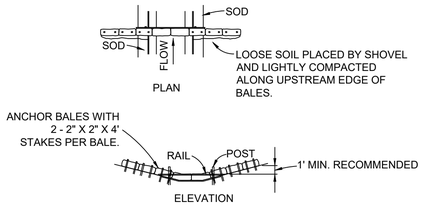
EROSION CONTROL

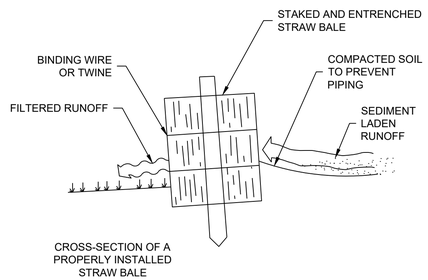
1. THE CONTRACTOR SHALL SUBMIT A DETAILED TURBIDITY AND WATER QUALITY MANAGEMENT AND MONITORING PLAN (SEE SECTION 01 35 43, PARAGRAPH 1.2.G) AND DREDGE PLAN (SEE SECTION 35 20 23.13, PARAGRAPH 1.3.G) FOR ENGINEER APPROVAL BEFORE ISSUANCE OF A NOTICE TO PROCEED.
2. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES AS NECESSARY TO COMPLY WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND COMPLY WITH STATE WATER QUALITY CRITERIA FOR STORM WATER DISCHARGE. EROSION CONTROL MEASURES INCLUDE BUT ARE NOT LIMITED TO TURBIDITY SCREENS, MULCHING, HAY BALES, AND SILT FENCE. IF A WATER QUALITY VIOLATION OCCURS, THE CONTRACTOR SHALL BE WHOLLY RESPONSIBLE FOR ALL DAMAGE AND ALL COSTS WHICH MAY RESULT INCLUDING LEGAL FEES, CONSTRUCTION COSTS, AND FINES.
3. EROSION CONTROL MEASURES SHALL BE PLACED TO CONTAIN ALL POINTS OF DISCHARGE TO SURFACE WATERS OR WETLANDS INCLUDING CURB INLETS, DITCH BOTTOM INLETS, DITCHES, AND DOWNSTREAM PORTIONS OF STREAMS AND TIDAL WATERS ADJACENT TO CONSTRUCTION.
4. EROSION CONTROL MEASURES SHALL BE MAINTAINED FOR THE ENTIRE DURATION OF THE PROJECT OR UNTIL SODDING AND/OR GRASS IS ESTABLISHED.
5. DISTURBED AREAS NOT INCLUDING ROADWAYS AND WETLANDS SHALL BE SEEDED/GRASSED, FERTILIZED, MULCHED, AND MAINTAINED IN ACCORDANCE WITH SPECIFICATION REQUIREMENTS UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF SOD AND/OR GRASS AT ALL DISTURBED AREAS AND SPECIFICATIONS AND MEETING THE NPDES FINAL STABILIZATION REQUIREMENTS.
7. 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR WILL SUBMIT A NPDES PERMIT TO FDEP.
8. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
9. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.



SPACING: BALE BARRIERS FOR PAVED DITCHES SHOULD BE SPACED IN ACCORDANCE WITH CHART I, SHEET 1 OF 3, INDEX NO. 102 OF F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS.

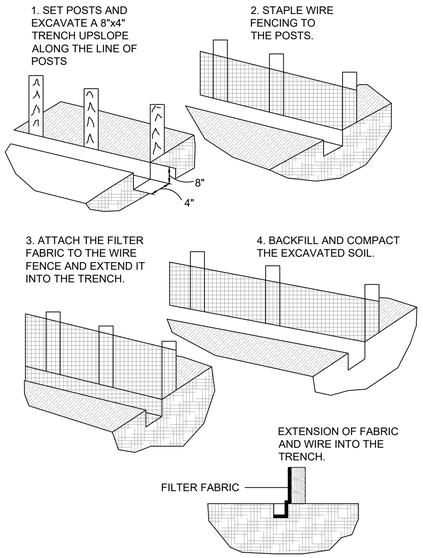
BARRIER FOR PAVED DITCH

NOT TO SCALE



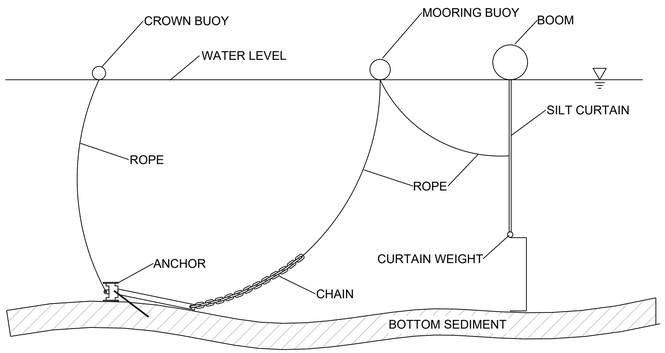
STAKED HAY BALE

NOT TO SCALE



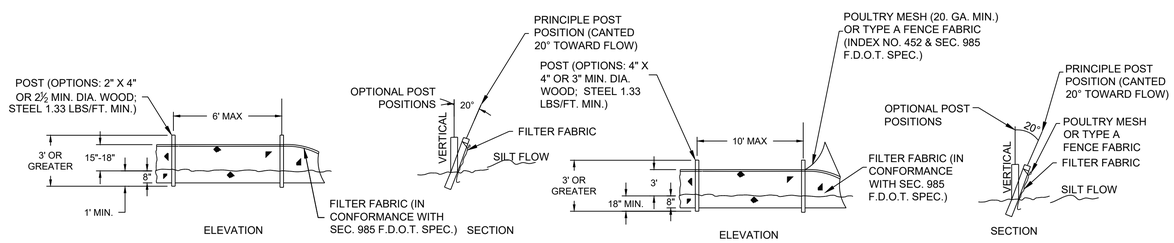
CONSTRUCTION DETAILS FOR SILT FENCES

NOT TO SCALE



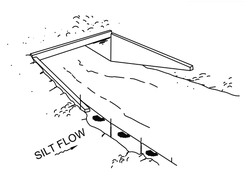
TURBIDITY CURTAIN DETAIL

NOT TO SCALE



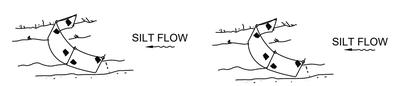
TYPE III SILT FENCE

TYPE IV SILT FENCE



TYPE III OR TYPE IV SILT FENCE

TYPE III OR TYPE IV SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS.



TYPE IV SILT FENCE

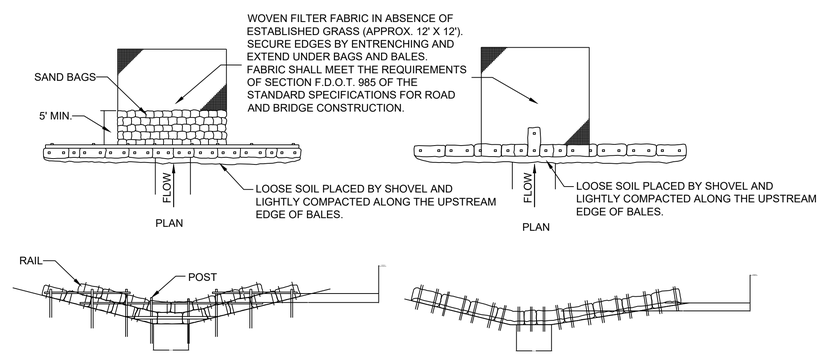
TYPE III SILT FENCE

DITCH INSTALLATION AND SPACING FOR TYPE III & TYPE IV FENCE TO BE IN ACCORDANCE WITH SHEET 1 OF 3, F.D.O.T. INDEX NO. 102.

DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE TYPE III & IV

NOT TO SCALE



ANCHOR LOWER BALES WITH 2 - 2" X 2" X 4' STAKES PER BALE.
ANCHOR TOP BALES TO LOWER BALES WITH 2 - 2" X 2" X 4' STAKES PER BALE.

ELEVATION

ANCHOR BALES WITH 2 - 2" X 2" X 4' STAKES PER BALE

ELEVATION

APPLICATION AND SPACING OF TYPES I & II HAY BALE BARRIERS SHELL BE IN ACCORDANCE WITH SHEET 1 OF 3, F.D.O.T. INDEX NO. 102

TYPE II

TYPE I

HAY BARRIERS TYPE I & II

NOT TO SCALE

TAYLOR ENGINEERING INC.
10151 DEERWOOD PARK BLVD.
BLDG. 300, SUITE 300
JACKSONVILLE, FLORIDA 32256
(904)-731-7040
1655 PALM BEACH LAKES, SUITE 1012
WEST PALM BEACH, FLORIDA 33401
(561)-640-7310
CERTIFICATE OF AUTHORIZATION # 4815

SEAL

MICHAEL E. TRUDNAK P.E.# 58200

PROJECT TITLE

INTRACOASTAL WATERWAY
ST. LUCIE REACH 1
MAINTENANCE DREDGING
ST. LUCIE COUNTY, FLORIDA

Always call 811 two full business days before you dig

Sunshine811.com

NO	ZONE	REVISIONS / SUBMISSIONS	DATE

PROJECT NO	C2014-027-04
DATE	FEB 2017
DESIGNED	LSB
DRAWN	CAS
CHECKED	WCA
REVIEWED	JWS
SCALE	AS SHOWN

DRAWING TITLE

EROSION AND SEDIMENT CONTROL DETAILS

C-15

SHEET 15 OF 15

CATHY SHELL, 2/8/2017 4:21:22 PM, x:\sys\Projects\C2014-027-04 FIND St Lucie\Plans\Const\Construction\C2014-027-04-c-Erosion.dwg