CONSTRUCTION PLANS FOR

THREE SISTERS SPRINGS CANAL SHORELINE STABILIZATION PROJECT #W431

SECTION 28, TOWNSHIP 18 SOUTH, RANGE 17 EAST, CITRUS COUNTY, FLORIDA

CLIENT:

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

2379 BROAD STREET BROOKSVILLE, FLORIDA (352) 796-7211

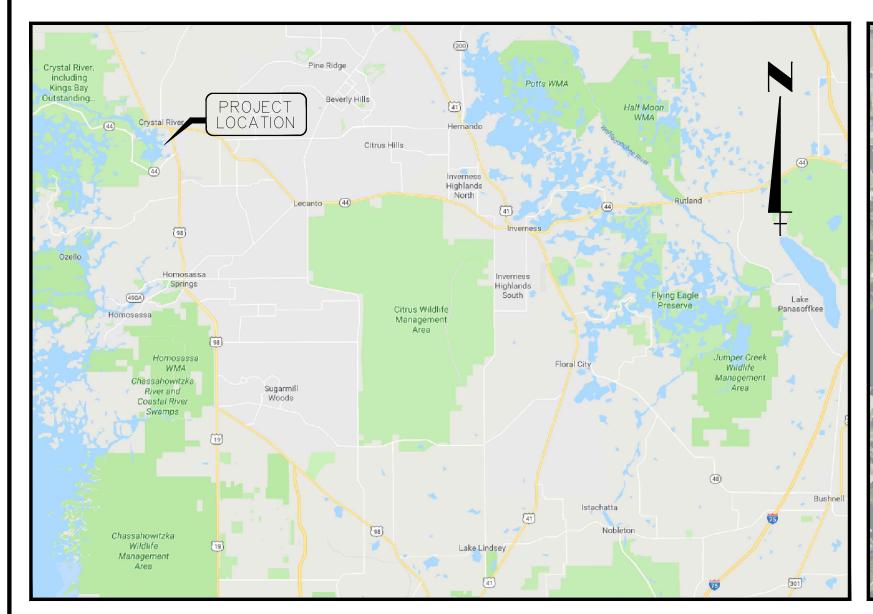
NOTES

GENERAL SITE CONSTRUCTION NOTES:

- 1. THE PURPOSE OF THIS PROJECT IS BANK STABILIZATION AND ECOLOGICAL ENHANCEMENT. THE CONTRACTORS WORKING ON THIS SITE SHALL TAKE GREAT CARE IN AVOIDING UNNECESSARY IMPACTS TO
- 2. THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURI AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED PRIOR TO BIDDING TO CONDUCT INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT MAY BE ENCOUNTERED AN
- 3. THE CONTRACTOR SHALL OBTAIN AND/OR VERIFY EXISTENCE OF ALL REQUIRED PERMITS PRIOR TO STARTING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PERMITS NOT FURNISHED BY
- PRIOR TO THE START OF CONSTRUCTION ACTIVITY IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY "SUNSHINE STATE ONE CALL (1-800-432-4770)", CITY/COUNTY PUBLIC WORKS DEPARTMENT AND ANY OTHER UTILITIES (ELECTRIC, PHONE, GAS, CABLE, ETC.). IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT EXISTING UTILITIES FROM DAMAGE.
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION PLANS AND TECHNICAL SPECIFICATIONS UNLESS OTHERWISE NOTED. SPECIFIC REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION'S ROADWAY AND TRAFFIC DESIGN STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ARE INCORPORATED INTO THE CONTRACT DOCUMENTS BY REFERENCE. ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION UNLESS OTHERWISE NOTED.
- . IF HUMAN REMAINS OR ARCHEOLOGICAL ARTIFACTS ARE DISCOVERED DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR MUST STOP WORK IMMEDIATELY AND PROMPTLY NOTIFY THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (DISTRICT) REPRESENTATIVE, FLORIDA DEPARTMENT OF STATE DIVISION OF HISTORICAL RESOURCES, AND PROJECT ENGINEER.
- THE CONTRACTOR SHALL NOT ENTER UPON, OR ALTER THE WETLAND PRESERVE AREAS THAT MAY ONSITE OR DIRECTLY ADJACENT TO THE PROJECT AREA. ALL WORK PERFORMED IN THE VICINITY OF OPEN WATER, WETLANDS, AND WETLAND HABITAT RESTORATIONS IS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINE RESULTING FROM VIOLATION OF PERMIT CONDITIONS.
- BENCHMARKS #780043 A (A 3/4" ALUMINUM ROD WITH 3" ALUMINUM DISC STAMPED "SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SURVEY CONTROL STATION. LB 6773 2011. NAVD 1988 780043 A" ENCASED IN CONCRETE AT LATITUDE 28 53 17.18N, LONGITUDE 82 35 22.12W) WITH A PUBLISHED ELEVATION OF 2.41' AND #780043 B (A 3/4" ALUMINUM ROD WITH 3" ALUMINUM DISC STAMPED "SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SURVEY CONTROL STATION, LB 6773 2011, NAVD 1988 780043 B" ENCASED IN CONCRETE AT LATITUDE 28 53 16.93N, LONGITUDE 82 35 22.10W) WITH A PUBLISHED ELEVATION OF
- FOR HIRING A FLORIDA REGISTERED PROFESSIONAL SURVEYOR, AT CONTRACTOR'S EXPENSE, TO REPLACE THE MONUMENTS IN THE SAME FASHION AS THEY WERE ORIGINALLY SET — ALUMINUM ROD DRIVEN TO REFUSAL WITH DISTRICT LOGO CAP STAMPED WITH THE SAME NUMBER AS THE MARKER DESTROYED AND ADDITIONAL STAMPING OF 'RESET' WITH RESET DATE, ROD AND LOGO CAP WILL BE INCASED IN CONCRETE.

THE ELEVATION OF THE RESET MARKS WILL BE BASED ON A CLOSED LEVEL LOOP FROM A MINIMUM TWO NGS/SWFWMD BENCHMARKS. THESE EFFORTS WILL RESULT IN A DATA SHEET SUBMITTED TO THE DISTRICT FOR EACH RESET MARK. (A BLANK BM FORM FOR CONSULTANTS IS INCLUDED AS AN ATTACHMENT TO SECTION 01050 OF THE PROJECT TECHNICAL SPECIFICATIONS). METHODOLOGIES AND PROCEDURES WILL BE CONSISTENT WITH THOSE OUTLINED IN THE ATTACHMENT DOCUMENT REFERENCED ABOVE. THE REQUIRED ACCURACY WILL MATCH THAT AS LISTED ON THE DATA SHEET FOR THE DESTROYED MARK.

- 10. ANY CLEARING, GRUBBING AND EXCAVATED MATERIAL WILL BE REMOVED FROM SITE AND DISPOSED OF PROPERLY AT A LICENSED FACILITY OR AS DIRECTED BY THE DISTRICT REPRESENTATIVE.
- 11. ALL CONSTRUCTION DEBRIS WILL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY.
- 12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALCULATE AND VERIFY ALL CUT AND FILL QUANTITIES FOR THE PROJECT. A BULKING/COMPACTION FACTOR SHOULD BE TAKEN INTO ACCOUNT WHEN FIGURING
- 13. IMMEDIATELY BEFORE REQUESTING FINAL INSPECTIONS, THE CONTRACTOR SHALL CHECK ALL LINES AND DRESS TO THE PROPER GRADES/CONTOURS. ALL AREAS ARE TO BE STABILIZED AND MAINTAINED UNTIL ACCEPTANCE. WHEN UPLAND AND WETLAND PLANTING AREAS ARE INDICATED ON DRAWINGS OR SPECIFIED, THE CONTRACTOR SHALL MAKE ALLOWANCES WHEN ROUGH GRADING FOR THE FINISHED GRADES IN THESE
- 14. POST GRADING SOIL CONDITIONS SHALL BE APPROPRIATE FOR PLANTING IN ACCORDANCE WITH TECHNICAL
- 15. ANY DISTURBED AREAS ABOVE MEAN HIGH WATER, NOT HARDSCAPED OR LANDSCAPED, WILL BE SEEDED/MULCHED, HYDROSEEDED, SODDED OR PLANTED WITH MATERIALS AS SPECIFIED.
- 16. EXISTING BOARDWALKS TO BE PROTECTED OUTSIDE LIMITS OF SILT FENCE EXCEPT AS NOTED ON PLANS FOR TEMPORARY CONSTRUCTION ACCESS.
- 17. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE NPDES STORMWATER PERMITTING FOR CONSTRUCTION ACTIVITIES FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR THE APPLICABLE PERMITTING APPLICATION AND
- 18. IF IT IS NECESSARY FOR GROUNDWATER DEWATERING TO DISCHARGE OFFSITE, THEN THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP). THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR OBTAINING AND/OR MODIFYING ALL APPLICABLE PERMITTING FOR THE DISCHARGE OF GROUNDWATER DEWATERING AND FOR COMPLYING WITH ALL USACE, DISTRICT, AND FDEP PERMITTING CONDITIONS.
- 19. UPON COMPLETION OF CONSTRUCTION, BARE EARTH CONDITIONS ARE TO BE GRASSED TO REDUCE THE
- 20. PROPOSED LIMESTONE RIP-RAP LIMITS TO BE STAKED PRIOR TO INSTALLATION. LIMESTONE RIP-RAP LIMIT STAKED ALIGNMENT WILL BE FIELD REVIEWED BY DISTRICT REPRESENTATIVE AND/OR PROJECT ECOLOGIST/ENGINEER. STAKED LIMESTONE RIP-RAP LIMIT ALIGNMENT MAY BE REVISED AND FIELD STAKED BY OR UNDER THE SUPERVISION OF DISTRICT REPRESENTATIVE AND/OR PROJECT ECOLOGIST/ENGINEER WHERE IMPACTS TO ECOLOGICAL RESOURCES (E.G., TREES, ROOTS, OR DESIRABLE VEGETATION) MAY BE
- 21. SEE LANDSCAPE PLANS FOR ADDITIONAL INFORMATION RELATED TO PLANTING PLANS AND DETAILS.



LOCATION MAP



CONSTRUCTION ENTRANCE MAP

SCALE 1"=300'

INDEX TO SHEETS

SHEET NO.	DE	SCRIPTION						
1	COVER SHEET							
2	EXISTI	EXISTING CONDITIONS AERIAL PHOTOGRAPH						
3	EXISTI	EXISTING CONDITIONS SITE PLAN KEY SHEET						
4	EXISTI	NG CONDITIONS SITE PLAN						
5	SITE	SITE PLAN KEY SHEET						
6	SITE PLAN							
7–11	CROSS SECTIONS							
12	TYPICAL DETAILS							
13	BEST MANAGEMENT PRACTICES PLANS							
14	BEST MANAGEMENT PRACTICES DETAILS							
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A								
\triangle	6/13/22	REVISED SHEETS 6 AND 12 FOR FINAL CONSTRUCTION PLANS	RQS/8956					
<u> </u>	4/11/22	REVISED FOR FINAL CONSTRUCTION PLANS	RQS/8956					
_ ^	12/07/21	REVISED FOR CONSTRUCTION PLANS COVER SHEET PER FDEP COMMENTS	RQS/8956					
_	8/12/21	REV. NOTES PER SWFWMD COMMENTS	R.C.					
NO.	DATE	DESCRIPTION	BY					
		STATUS: REVISIONS						



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PROJECT NUMBER 177311300

PROJECT ECOLOGIST

CHECKED BY

JENNIFER BRUNTY

DATE **JULY 2021**

RESERVED FOR STATUS AND DATE STAMPS

PROJECT MANAGER

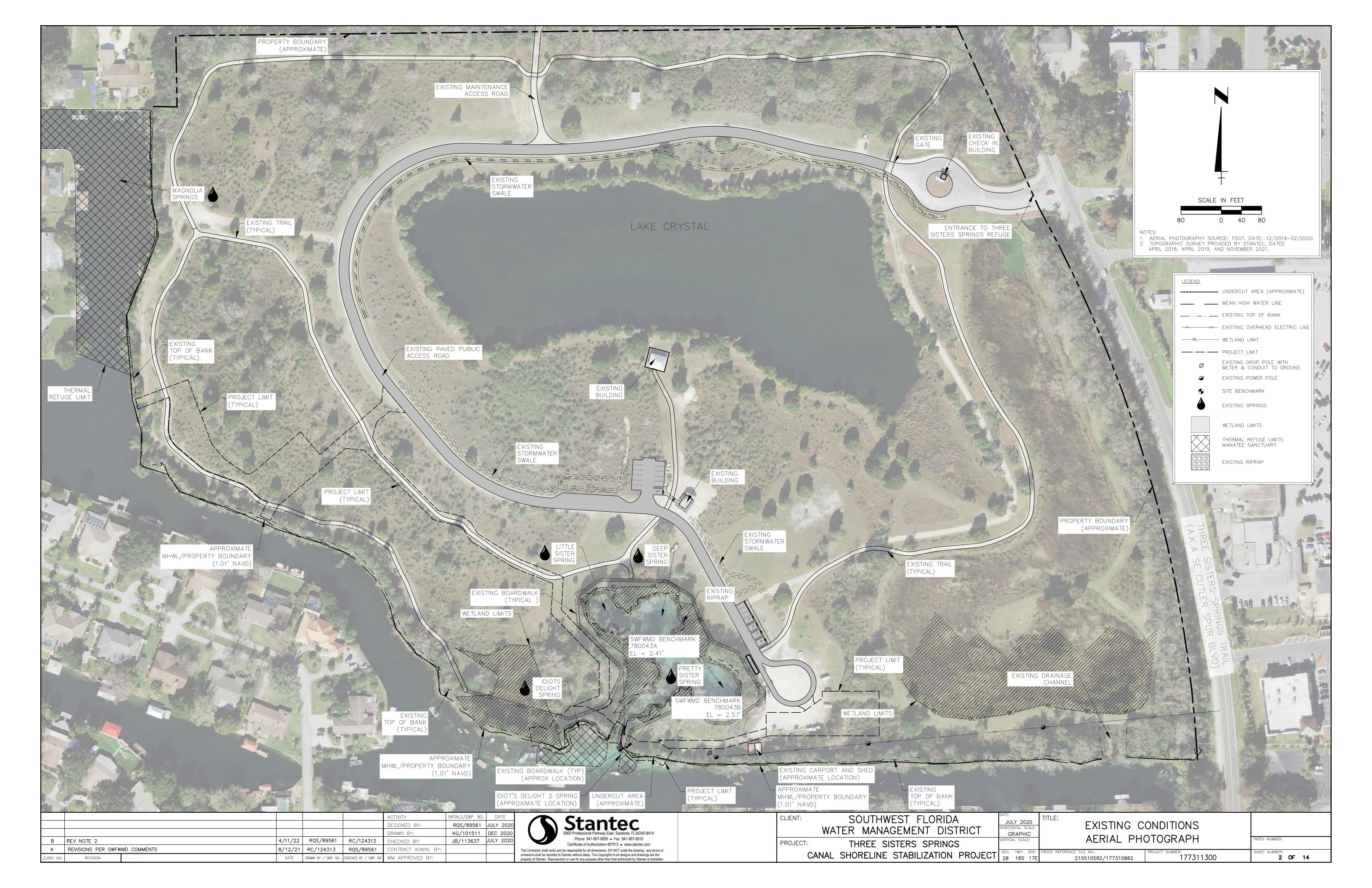
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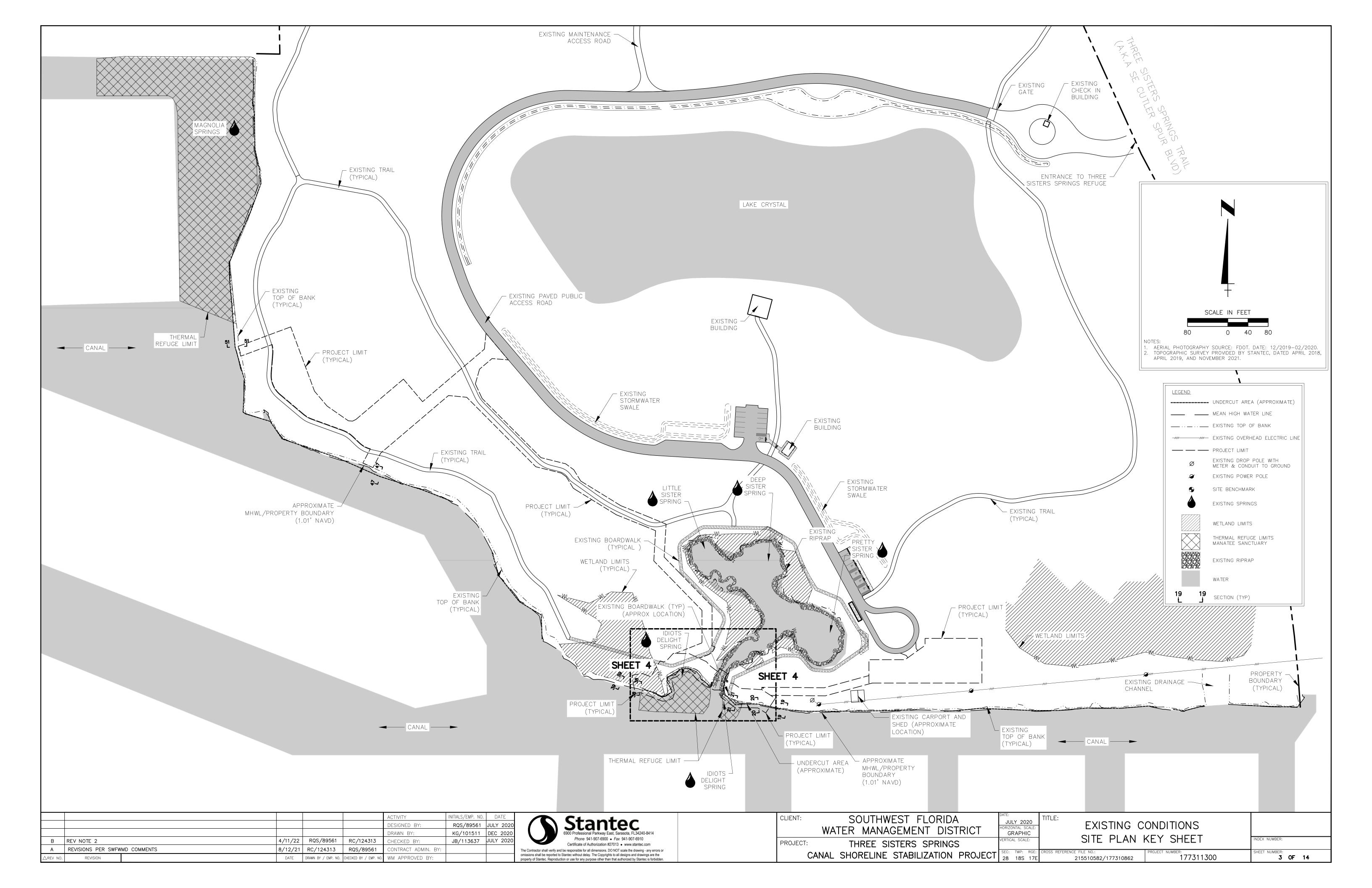
MICHAEL A.G. BURTON

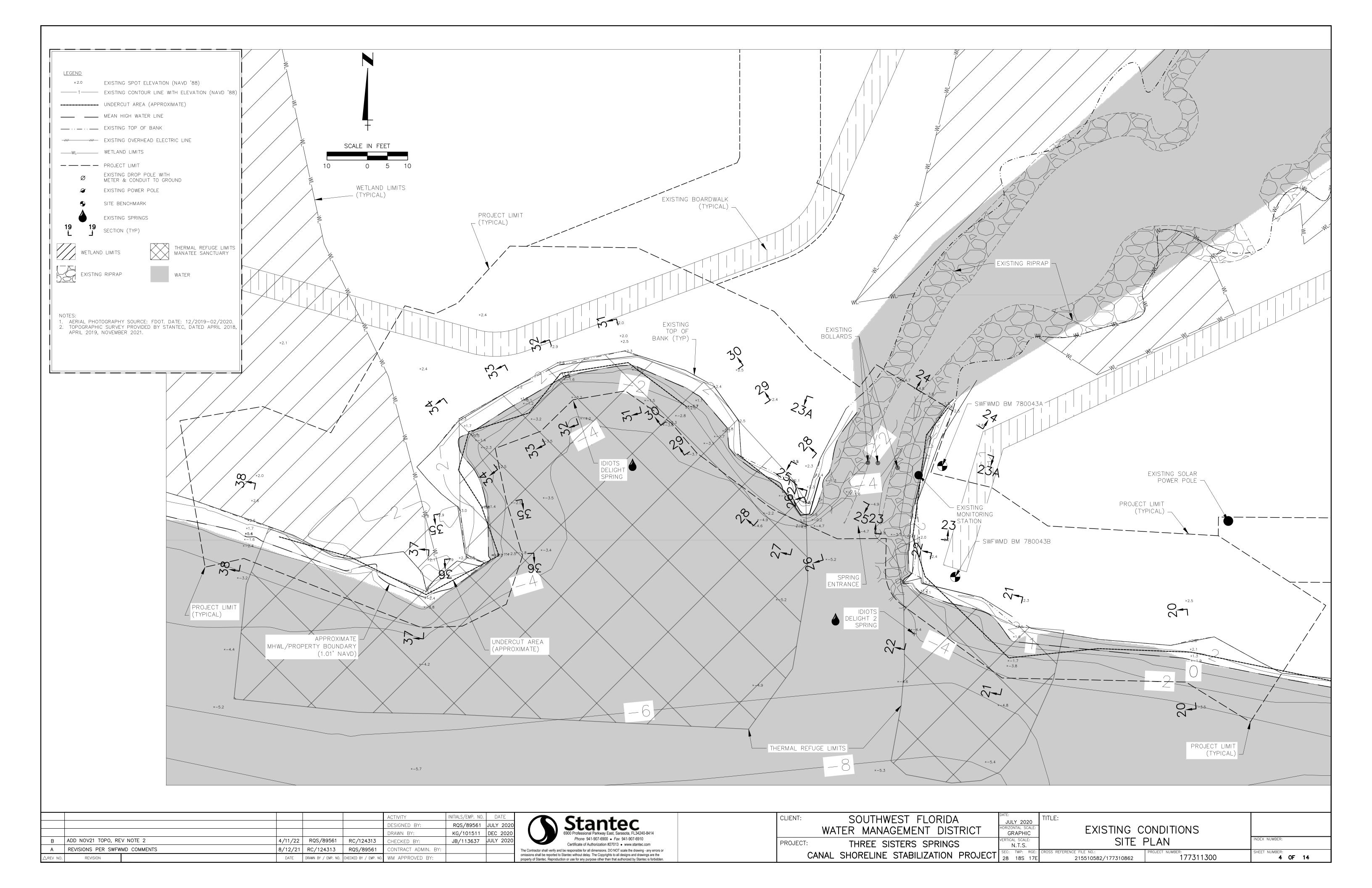
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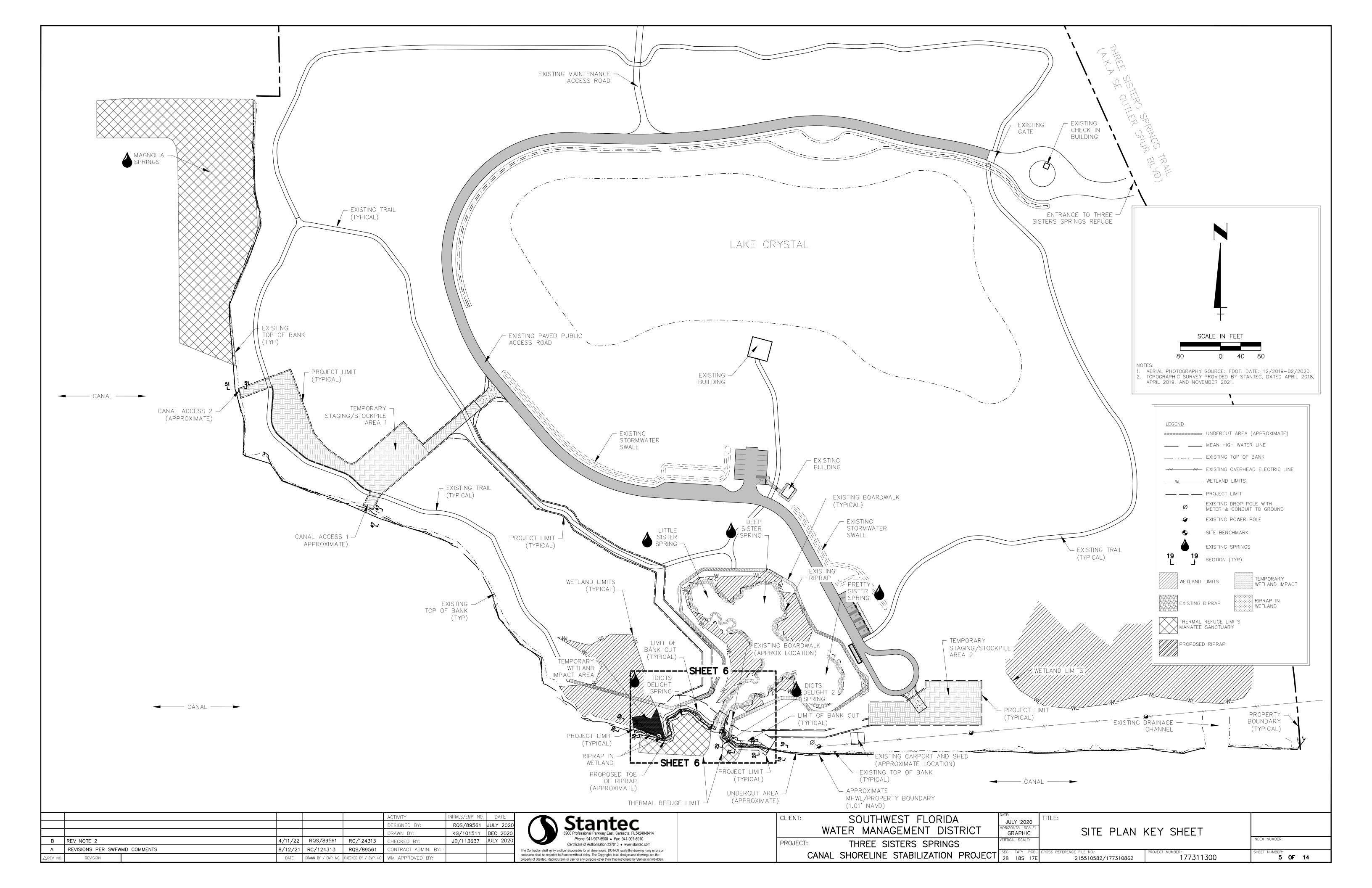
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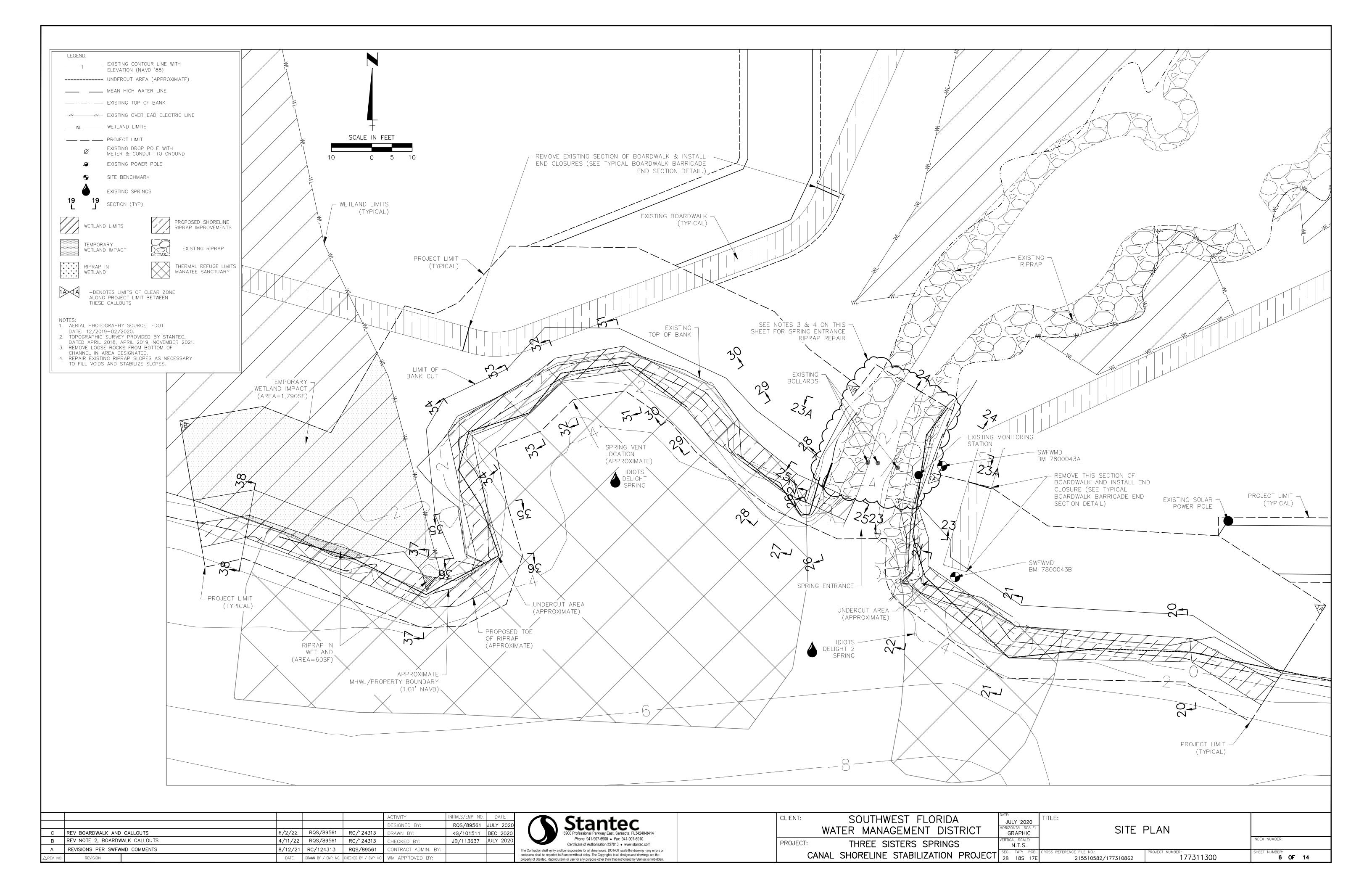
R. QUINCE SELLERS, P.E

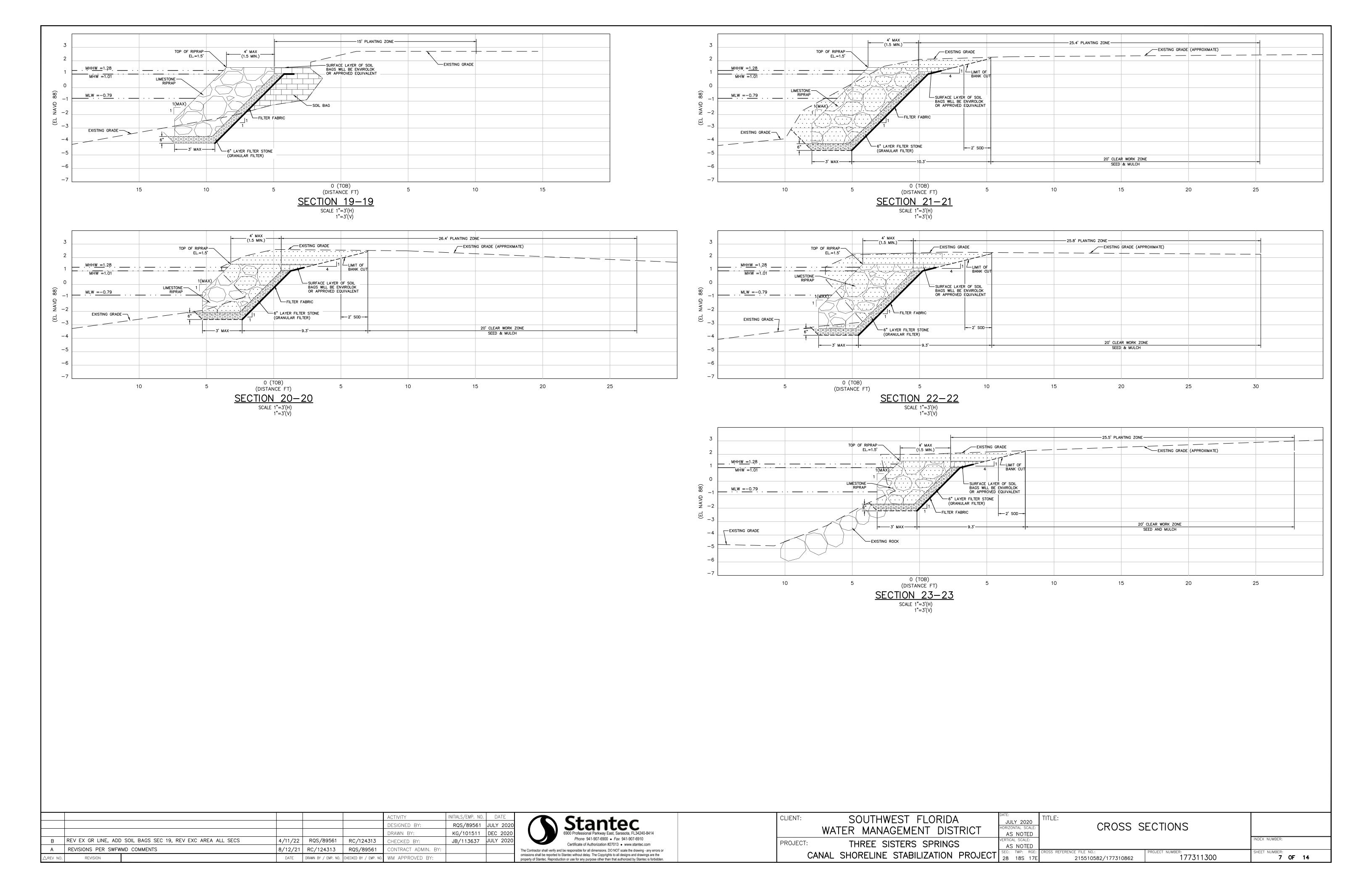


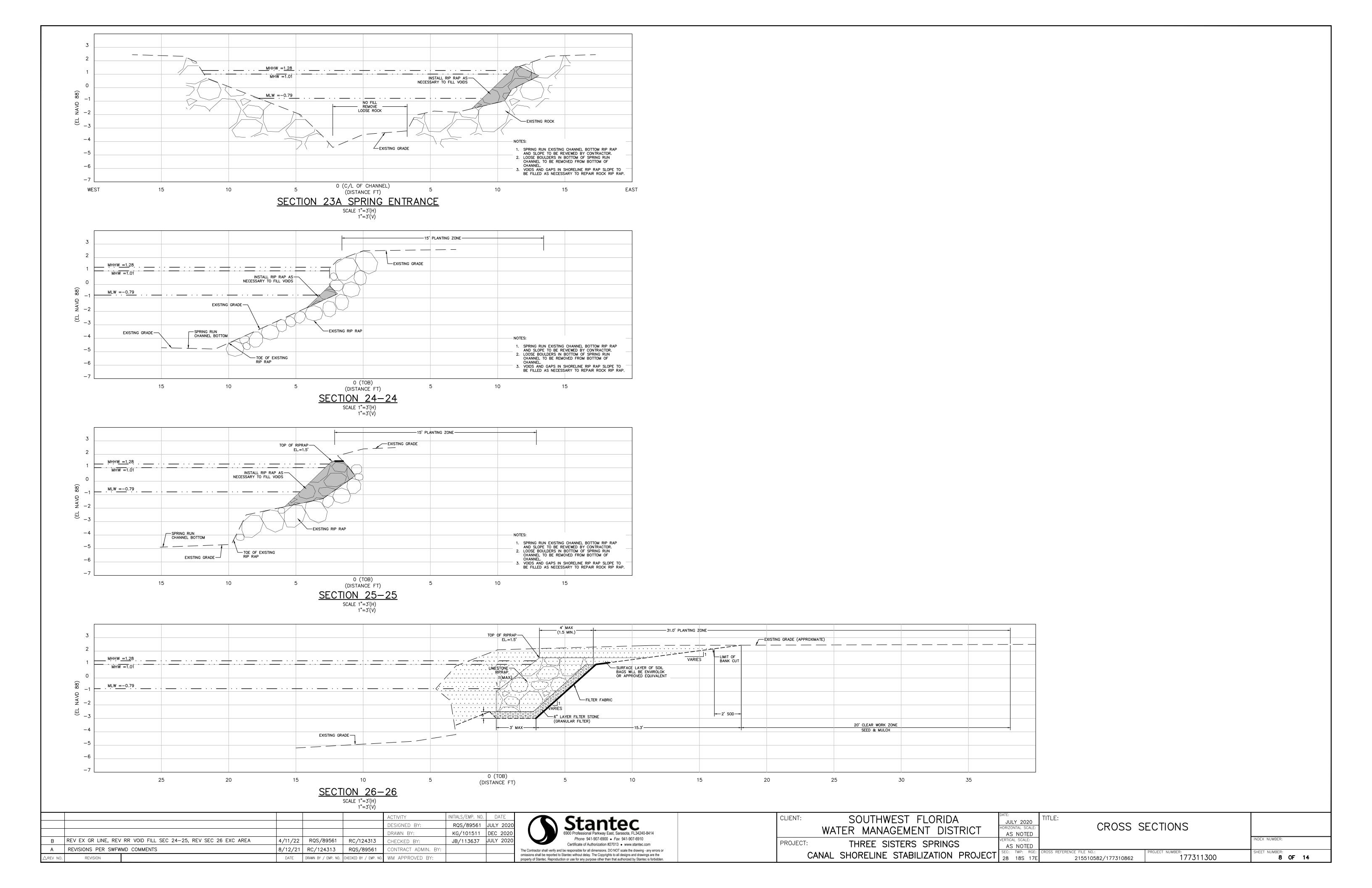


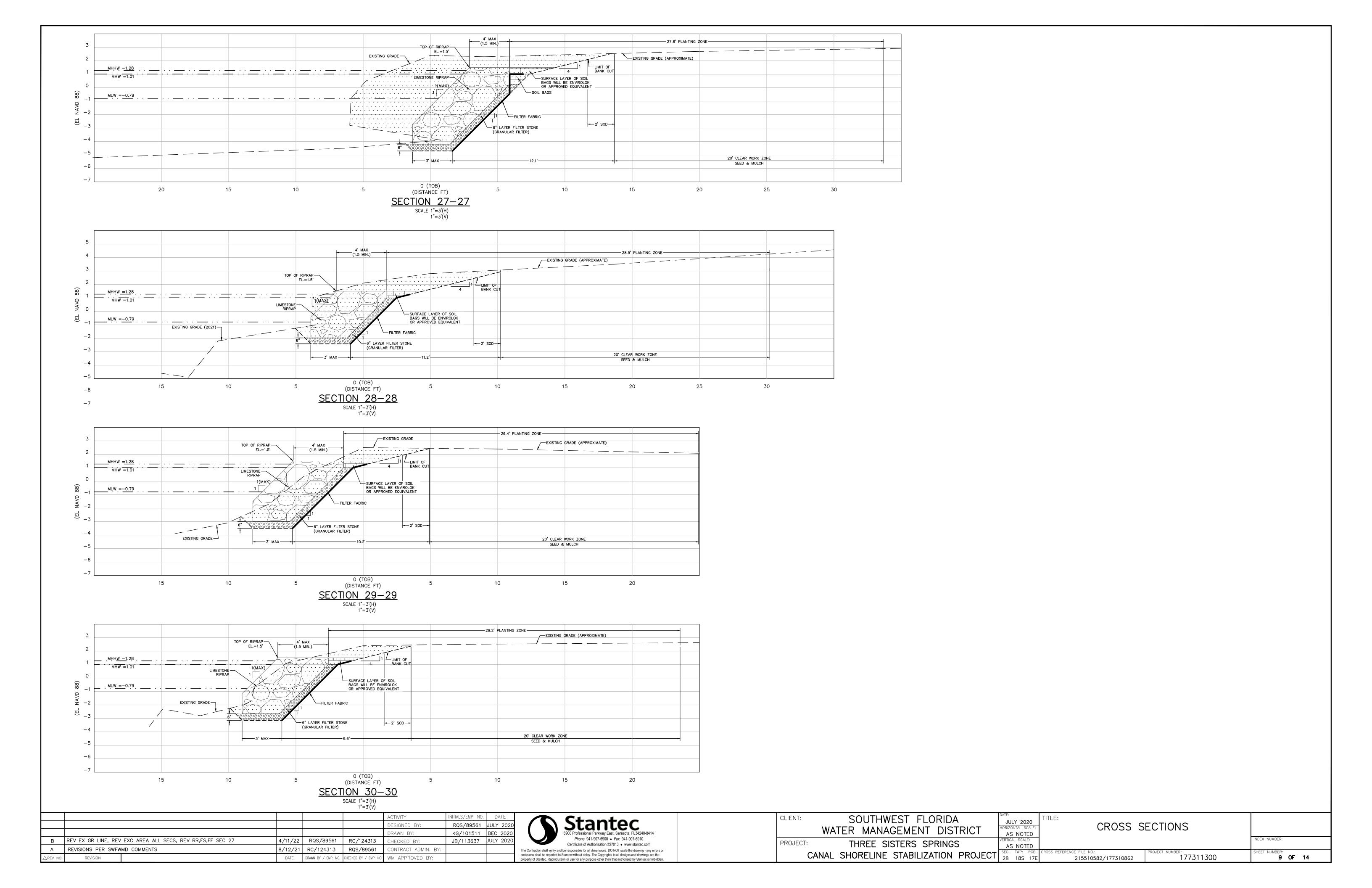


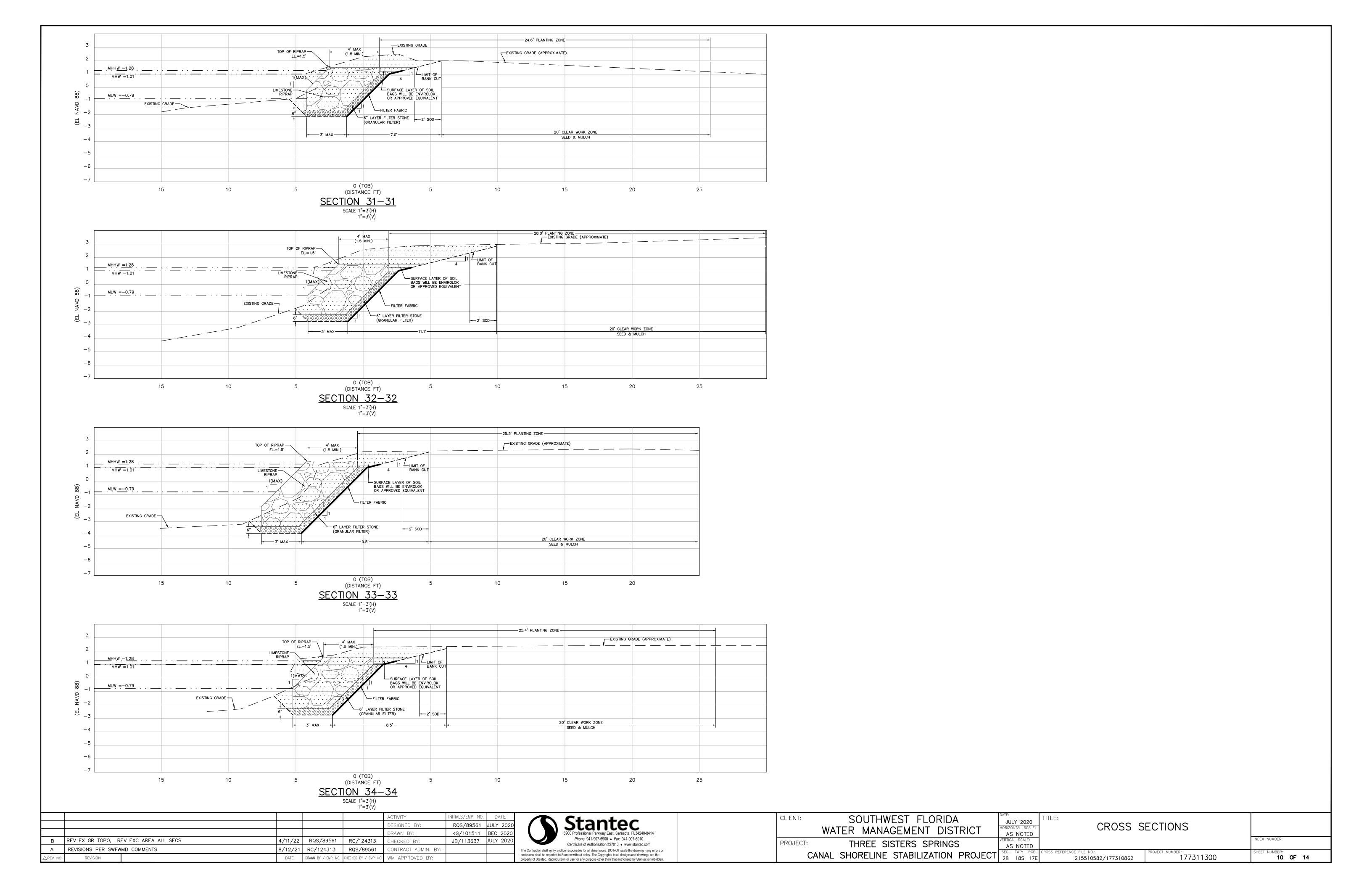


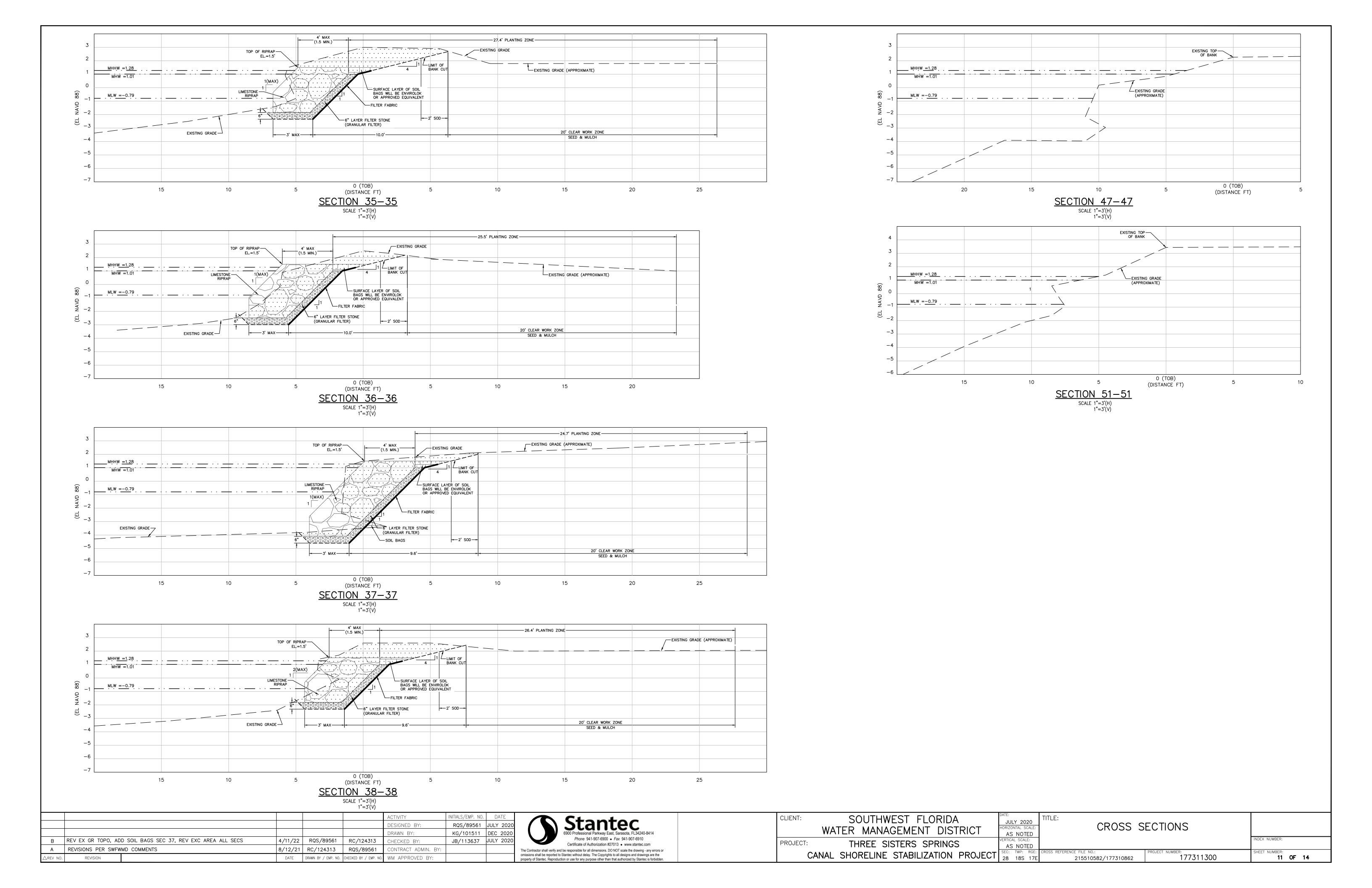












MANATEE PROTECTION

PART I — GENERAL

1.01 SUMMARY

THE SCOPE OF THIS SECTION IS TO INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER—RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S).

- 1.02 RELATED WORK SPECIFIED ELSEWHERE
- A. SECTION 01530 TEMPORARY BARRIERS AND CONTROLS
- SECTION 02435 TURBIDITY CONTROL AND MONITORING
- 1.03 REFERENCES
 - A. MARINE MAMMAL PROTECTION ACT OF 1972
 - B. ENDANGERED SPECIES ACT OF 1973
- C. FLORIDA MANATEE SANCTUARY ACT OF 1978

PART II — PRODUCTS (NOT USED)

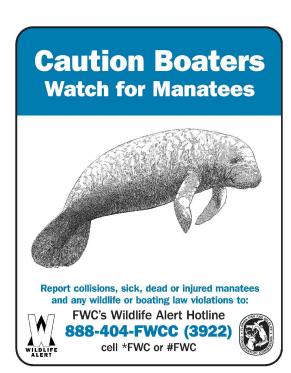
PART III - EXECUTION

1.01 MANATEE PROTECTION

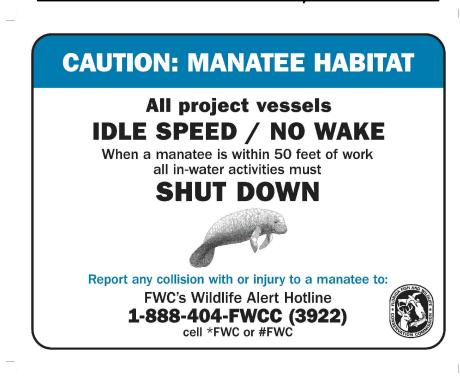
- A. THE CONTRACTOR SHALL ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES, WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT OF 1972, THE ENDANGERED SPECIES ACT OF 1973, AND THE FLORIDA MANATEE SANCTUARY ACT OF 1978. THE CONTRACTOR MAY BE HELD RESPONSIBLE FOR ANY MANATEE HARMED, HARASSED, OR KILLED AS A RESULT OF CONSTRUCTION ACTIVITIES.
- B. SILTATION BARRIERS SHALL BE INSTALLED AND SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE MONITORED REGULARLY TO AVOID MANATEE ENTANGLEMENT OR ENTRAPMENT. BARRIERS SHALL NOT IMPEDE MANATEE MOVEMENT OR BLOCK MANATEE ENTRY TO OR EXIT FROM ESSENTIAL HABITAT.
- C. ALL VESSELS ASSOCIATED WITH THE PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN FOUR FEET CLEARANCE FROM THE BOTTOM. ALL VESSELS SHALL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
- D. IF A MANATEE IS SIGHTED WITHIN 100 YARDS OF THE PROJECT AREA, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED BY THE CONTRACTOR TO ENSURE PROTECTION OF THE MANATEE. ALL IN-WATER OPERATIONS, INCLUDING VESSELS, MUST BE SHUTDOWN IF A MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION. ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
- E. ANY COLLISION WITH AND/OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE DISTRICT'S REPRESENTATIVE AND TO THE "FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) MANATEE HOTLINE" AT 1-888-404-FWCC (1-888-404-3922). COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-731-3336) FOR NORTH FLORIDA OR VERO BEACH (1-772-562-3909) IN SOUTH FLORIDA.
- F. TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES, INCLUDING CONSTRUCTION/DREDGING ACTIVITIES. AWARENESS SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FWC MUST BE USED. SAMPLES OF MANATEE SIGNAGE ARE INCLUDED AT THE END OF THIS SPECIFICATION. ALL SIGNS SHALL BE REMOVED BY THE CONTRACTOR UPON COMPLETION OF THE PROJECT. ONE (1) SIGN MEASURING AT LEAST THREE (3) FEET BY FOUR (4) FEET WHICH READS "CAUTION BOATERS: WATCH FOR MANATEES" SHALL BE POSTED IN A LOCATION WHERE IT IS PROMINENTLY VISIBLE TO WATER RELATED CONSTRUCTION CREWS. A SECOND SIGN SHALL BE POSTED IF VESSELS ARE ASSOCIATED WITH THE CONSTRUCTION, AND SHALL BE PLACED IN A LOCATION THAT IS PROMINENTLY VISIBLE TO THE VESSEL OPERATOR. THE SECOND SIGN SHALL BE AT LEAST 8½ INCHES BY 11 INCHES AND READ:

"CAUTION: MANATEE HABITAT. IDLE SPEED IS REQUIRED IF OPERATING A VESSEL IN THE CONSTRUCTION AREA. ALL EQUIPMENT MUST BE SHUTDOWN IF A MANATEE COMES WITHIN 50 FEET OF THE OPERATION. A COLLISION WITH AND/OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) AT 1-888-404-FWCC (1-888-404-3922) AND THE U.S. FISH AND WILDLIFE SERVICE AT (1-904-731-3336) FOR NORTH FLORIDA OR (1-772-562-3909) FOR SOUTH FLORIDA."

SIGN 1 : CAUTION MANATEE AREA



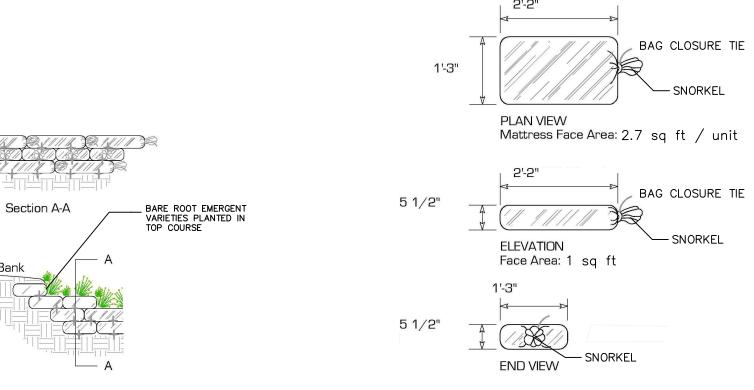
SIGN 2 : IDLE SPEED / NO WAKE



MANATEE PROTECTION PLAN

						ACTIVITY	INITIALS/EMP. NO.	DATE
						DESIGNED BY:	RQS/89561	JULY 2020
С	REVISE TYPICAL BOAR	DWALK BARRICADE END SECTION DETAIL NOTE 1	6/3/22	RQS/89561	RC/124313	DRAWN BY:	KG/101511	DEC 2020
В	ADD BOARDWALK BARRICADE END SECTION DETAIL		4/11/22	RQS/89561	RC/124313	CHECKED BY:	JB/113637	JULY 2020
Α	REVISIONS PER SWFWMD COMMENTS		8/12/21	RC/124313	RQS/89561	CONTRACT ADMIN. BY:		
△REV NO.	REVISION		DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:		

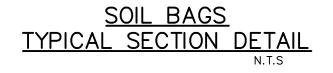




TYPICAL SOIL BAG SPECIFICATION:

Calculated Unit Fill: 1.25 cu ft (.0354 m³) / unit Face Area: 1 sq ft (.093 m²)

Mattress Face Area: 2.7 sq ft (.25 m²) / unit



SOIL BAGS TYPICAL DETAIL

SOIL BAG SYSTEM FILL MATERIALS

- A. GRANULAR FILL (TO BE USED IN BAGS PLACED BELOW 0.5' ELEV.)
- 1. FOR BAG INSTALLATIONS AT APPROXIMATELY 6" BELOW MEAN HIGH WATER ELEVATION OR LOWER, BAGS WILL BE FILLED WITH CLEAN GRANULAR MATERIAL; MAXIMUM PARTICLE SIZE 0.80" TO MINIMUM PARTICLE SIZE 0.08".
- 2. EXCAVATED MATERIAL MAY BE USED IF IT MEETS REQUIREMENTS IN A.1. ABOVE AND APPROVED BY DISTRICT REPRESENTATIVE
- 3. BAGS SHALL BE BURLAP BAGS OR APPROVED ALTERNATE.
- B. GROWING MEDIUM FILL (TO BE USED IN BAGS PLACED AT OR ABOVE 0.5' ELEV.)
- 1. FOR BAG INSTALLATIONS ABOVE 6" BELOW MEAN HIGH WATER ELEVATION, BAGS WILL BE FILLED WITH GROWING MEDIUM.
- 2. GROWING MEDIUM WILL CONSIST OF FREELY DRAINING NATIVE SOILS AND GRANULAR MATERIALS CLEANED OF ALL DEBRIS, ROOTS, BRANCHES, STONES IN EXCESS OF 2" DIAMETER AND OTHER DELETERIOUS MATERIALS.
- 3. GROWING MEDIUM PROPERTIES SHALL INCLUDE (BY VOLUME):
 APPROXIMATE ORGANIC CONTENT 10%-15%
 GRANULAR CONTENT: SMALLER THAN 2", LARGER THAN 0.08" 60%-70%
 GRANULAR CONTENT: LARGER THAN 0.002", SMALLER THAN 0.08" 10%-15%
 CLAY AND SILTS 0% -5%
- 4. ORGANIC ADDITIVE MATERIALS SHALL BE A LOCALLY AVAILABLE COMMERCIAL COMPOST PRODUCT.
- 5. MIX ALL ORGANIC MATERIALS EVENLY THROUGH THE MATERIAL.
- 6. BAGS SHALL BE ENVIROLOK BAGS OR APPROVED ALTERNATE.
- 7. THE "SNORKEL" OF EACH BAG SHALL BE FOLDED AND PLACED UNDER EACH BAG. 8. BAG CLOSURE TIE SHALL BE BIODEGRADABLE FOR TOP LAYER OF SOIL BAGS.
 - EXISTING BOARDWALK
 TOP OF RAILING

 EXISTING BOARDWALK
 TOP OF DECK

 EXISTING GRADE

TYPICAL BOARDWALK BARRICADE END SECTION DETAIL

NOTES

- 1. SHEET 6 OF 14 OF THE CONSTRUCTION PLANS IDENTIFIES TWO EXISTING SECTIONS OF BOARDWALK THAT ARE TO BE REMOVED TO FACILITATE CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONSTRUCT END CLOSURES AT THE THREE OPEN ENDS OF THE BOARDWALK THAT WERE CREATED BY THE REMOVAL OF THE TWO SECTIONS IDENTIFIED ON SHEET 6 OF 14. RESTORATION OF THESE TWO REMOVED SECTIONS OF THE BOARDWALK SHALL BE PERFORMED BY OTHERS UNDER A SEPARATE CONTRACT AT A LATER DATE.
- 2. THE CONSTRUCTION OF THE END CLOSURES SHALL BE PERFORMED BY CONTRACTOR UTILIZING MATERIALS THAT ARE SUBSTANTIALLY EQUIVALENT TO THE MATERIALS AND APPEARANCE AS THE EXISTING BOARDWALKS.

CLIENT: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

PROJECT: THREE SISTERS SPRINGS

CANAL SHORELINE STABILIZATION PROJECT

SOUTHWEST FLORIDA JULY 2020
HORIZONTAL SCALE:

SCRAPHIC
VERTICAL SCALE:

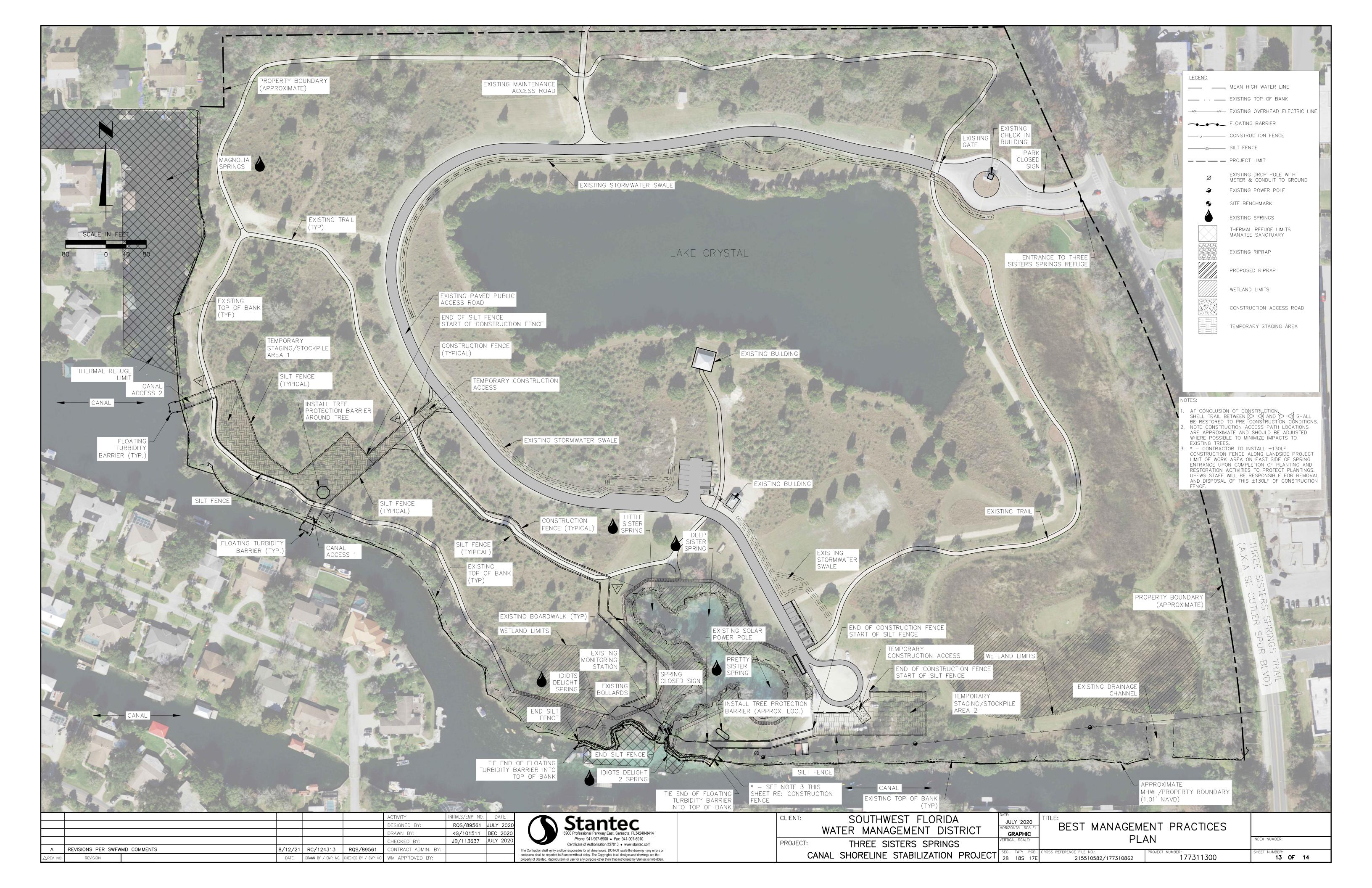
TYPICAL DETAILS

TYPICAL DETAILS

INDEX NUMBER:
215510582/177310862

PROJECT NUMBER:
215510582/177311300

SHEET NUMBER:
12 OF 14

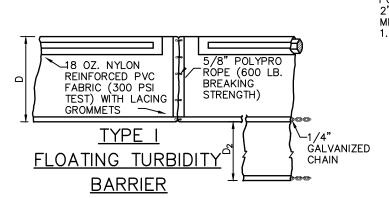


- 1. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE CONDITIONS OF THE REGULATORY AGENCY PERMITS AND HAVE COPIES OF THE PERMITS ON SITE. THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND COSTS FOR OBTAINING AND/OR MODIFYING ALL
- APPLICABLE NPDES PERMITTING AND FOR COMPLYING WITH ALL DISTRICT, FDEP AND USACOE PERMITTING CONDITIONS.
- 2. THE CONTRACTOR SHALL STAGE CONSTRUCTION IN PHASES WHENEVER POSSIBLE TO MINIMIZE SOIL LOSS AND CONTROL EROSION.
- 3. THE CONTRACTOR SHALL PROVIDE A STABILIZED CONSTRUCTION ENTRANCE TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREET ADJACENT TO THE SITE ENTRANCE WILL BE SWEPT AS REQUIRED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL TO OR FROM THE CONSTRUCTION SITE SHALL BE COVERED WITH A TARPAULIN.
- 4. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT AND SHALL USE WATER, STRAW MULCH, OR OTHER SUITABLE MATERIAL AS REQUIRED.
- 5. AT A MINIMUM, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA.
- 6. THE CONTRACTOR SHALL ERECT SILT FENCE, STAKED HAY BALES, STAKED TURBIDITY BARRIERS, AND FLOATING TURBIDITY BARRIERS PRIOR TO COMMENCEMENT OF EXCAVATION/GRADING ACTIVITY. FLOATING TURBIDITY BARRIERS MAY BE DEPLOYED IN SECTIONS AROUND ACTIVE CONSTRUCTION AND BE MOVED AS APPROPIATE AS CONSTRUCTION AND RESTORATION IS COMPLETED.
- 7. REQUIRED EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED AS REQUIRED THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.
- 8. ALL EROSION PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR IN COMPLIANCE WITH DISTRICT AND NPDES PERMIT REQUIREMENTS THROUGHOUT THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL INSPECT THE EROSION CONTROL DEVICES WEEKLY AND WITHIN 4 HOURS AFTER EACH RAINFALL EVENT OF 0.5 INCHES OR MORE. ALL MAINTENANCE SHALL BE PERFORMED WITHIN 24 HOURS OF INSPECTION
- 9. ALL PRACTICABLE AND NECESSARY EFFORTS SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, WETLANDS, AND OFFSITE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.

NOTE:

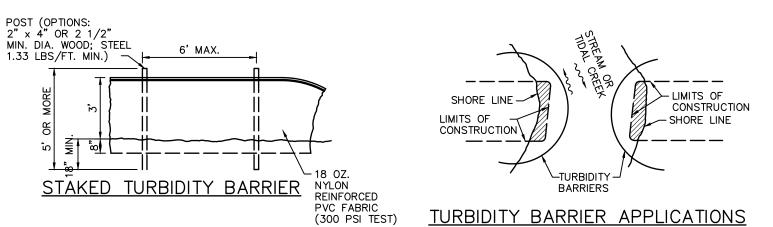
THE ENGINEER

- 10. EROSION AND SEDIMENT CONTROL DEVICES (SILT FENCE, TURBIDITY BARRIERS, ETC.) ARE DEPICTED IN APPROXIMATE LOCATIONS AND SHALL BE ADJUSTED AS NECESSARY WITH THE APPROVAL OF THE DISTRICT REPRESENTATIVE.
- 11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL EROSION AND SEDIMENT CONTROL DEVICES AT THE COMPLETION OF THE PROJECT.
- 12. ALL EXCAVATION, AND ACCESS TO AND FROM CONSTRUCTION AREAS SHALL BE WITHIN THE LIMITS OF THE PROJECT AREA.

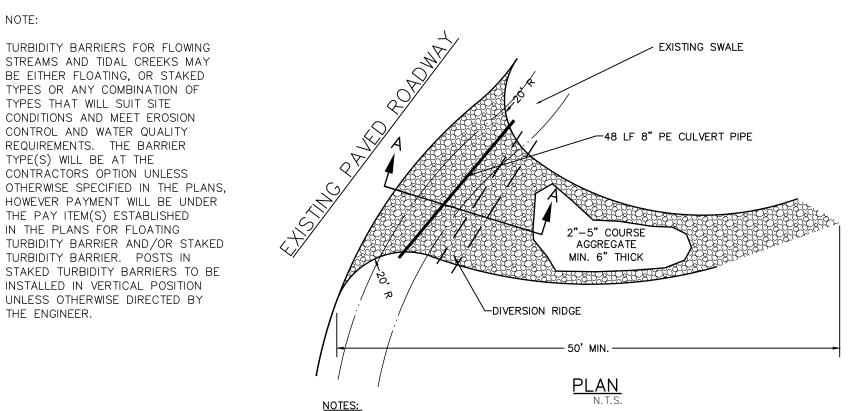


D1 = 5' STD. (SINGLE PANEL FOR DEPTH 5' OR LESS) D2 = 5' STD (ADDITIONAL PANEL FOR DEPTHS > 5') CURTAIN TO RÈACH BOTTOM UP TO DEPTHS OF 10 FEET TWO (2) PANELS TO BE USED FOR DEPTHS GREATER THAN 10 FEET UNLESS SPECIAL DEPTH CURTAINS SPECIFICALLY CALLED FOR IN PLANS OR AS DETERMINED BY THE ENGINEER. NOTICE:

COMPONENTS OF TYPE I MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPE I SHALL BE AS APPROVED BY THE ENGINEER.

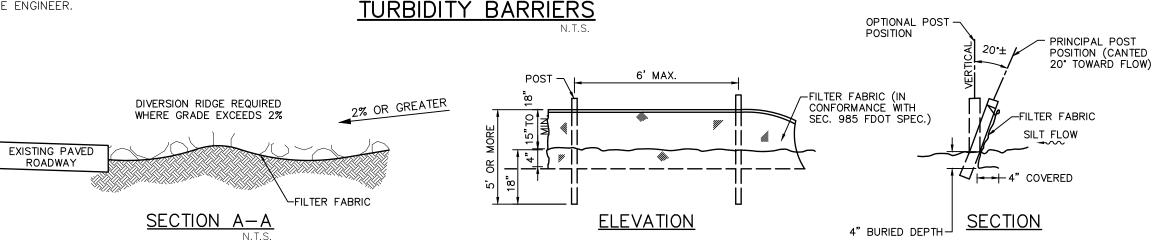


- 1. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF
- WATER REGARDLESS OF WATER DEPTH. 2. NUMBER AND SPACING OF ANCHORS DEPENDENT ON WATER VELOCITIES.
- 3. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMODATE CONSTRUCTION OPERATIONS.
- 4. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION



- 1. CONTRACTOR SHALL REMOVE TEMPORARY CONSTRUCTION ACCESS (INCLUDING CROSSING CULVERT) AND RESTORE GRADES (INCLUDING ROADSIDE SWALE) TO PRE-CONSTRUCTION ELEVATIONS; SOD ALL BARE EARTH SURFACES; REPAIR ANY DAMAGE TO THE ASPHALT ENTRANCE DRIVE.
- 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO

TEMPORARY CONSTRUCTION

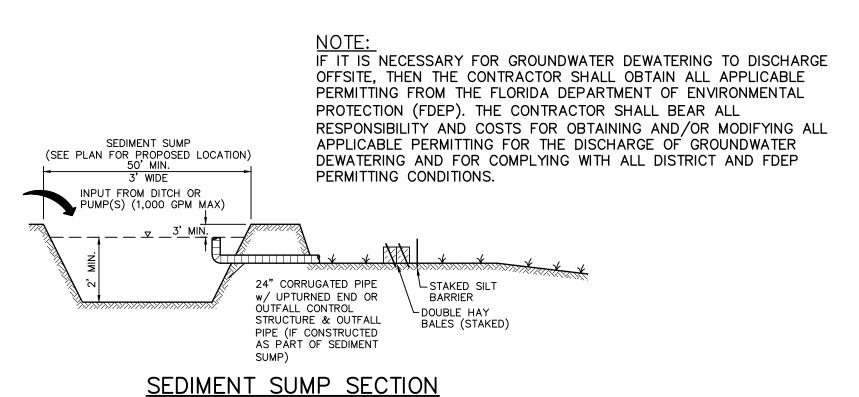


TYPICAL SILT FENCE

PROTECTIVE BARRIERS ARE USED DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES TO PROTECT TREES AND NATURAL AREAS TO BE RETAINED ON A SITE.

PROTECTIVE BARRIERS MUST BE ERECTED AROUND TREES TO BE RETAINED WITHIN AN AREA WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES WILL OCCUR AS WELL AS ALONG NATURAL AREAS WHERE SUCH AREAS ARE ADJACENT TO PERMITTED LAND ALTERATION OR CONSTRUCTION ACTIVITIES. A PROTECTIVE BARRIER MUST REMAIN IN PLACE UNTIL THE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE COMPLETED OR UNTIL COMMENCEMENT OF GRADE FINISHING, SODDING, AND LANDSCAPING. NO GROUND DISTURBANCE SHALL OCCUR WITHIN THE BARRICADED AREA.

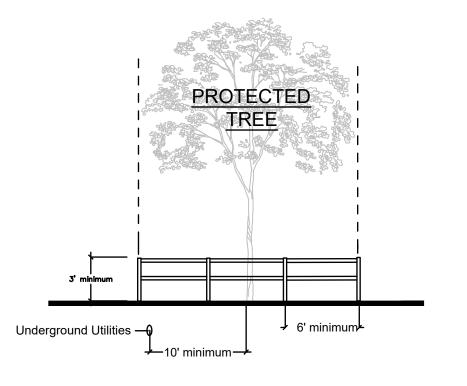
- 1. TREES TO RESTRICT ACCESS INTO THE AREA WITHIN THE ROOTZONE OF A TREE, A PHYSICAL STRUCTURE NOT LESS THAN 3 FEET IN HEIGHT, COMPRISED OF WOOD OR OTHER SUITABLE MATERIAL, IS PLACED AROUND THE TREE AT THE MINIMUMS SHOWN ABOVE, EXCEPT WHERE LAND ALTERATION OR CONSTRUCTION ACTIVITIES ARE APPROVED WITHIN THE ROOTZONE. VERTICAL MEMBERS SHALL BE MADE OF A MINIMUM OF 2X2 WOOD OR 5/8" STEEL REINFORCEMENT BAR. AT LEAST 3' IN HEIGHT AND INSTALLED TO A MINIMUM DEPTH OF 1' BELOW GRADE. SPACING BETWEEN VERTICAL MEMBERS SHALL BE NO GREATER THAN 6'. HORIZONTAL MEMBERS SHALL BE MADE OF A MINIMUM 1X2 WOOD OR OTHER FENCING MATERIAL, SUCH AS CHAIN LINK, AND BE A MINIMUM OF THREE FEET IN HEIGHT.
- 2. NATURAL AREAS TO RESTRICT ACCESS INTO AREAS WHERE LAND ALTERATION AND CONSTRUCTION ACTIVITIES ARE NOT AUTHORIZED, A PHYSICAL STRUCTURE NOT LESS THAN 3 FEET IN HEIGHT IS PLACED ALONG THE PERIMETER OF SUCH AREAS. UPRIGHT STAKES OF NO LESS THAN 2" X 2" LUMBER SPACED NO MORE THAN 25' APART AND CONNECTED BY EXTRA STRENGTH FILTER FABRIC AT 6' MAXIMUM SPACING WITHOUT WIRE SUPPORT FENCE. OTHER METHODS OF DEMARCATION WILL BE CONSIDERED DEPENDING UPON THE CHARACTERISTICS OF THE SITE.



						ACTIVITY	INITIALS/EMP. NO.	DATE	i
						DESIGNED BY:	RQS/89561	JULY 2020	
						DRAWN BY:	KG/101511	DEC 2020	ĺ
						CHECKED BY:	JB/113637	JULY 2020	
Α	REVISIONS PER SWFWMD COMMENTS		8/12/21	RC/124313	RQS/89561	CONTRACT ADMIN. BY:			7
∆REV NO.	REVISION		DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:			ŗ





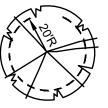




IF THE DRIP LINE IS LESS THAN SIX (6) FEET FROM THE TRUNK OF THE TREE. THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF SIX (6) FEET AROUND



IF THE DRIP LINE IS MORE THAN SIX (6) FEET FROM THE TRUNK OF THE TREE, BUT LESS THAN TWENTY (20) FEET, THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF THE FULL DRIP LINE AROUND THE



IF THE DRIP LINE IS TWENTY (20) FEET OR MORE FROM THE TRUNK OF THE TREE, THE PROTECTION ZONE SHALL BE THAT AREA WITHIN A RADIUS OF TWENTY (20) FEET AROUND THE

TREE BARRICADE REQUIREMENTS