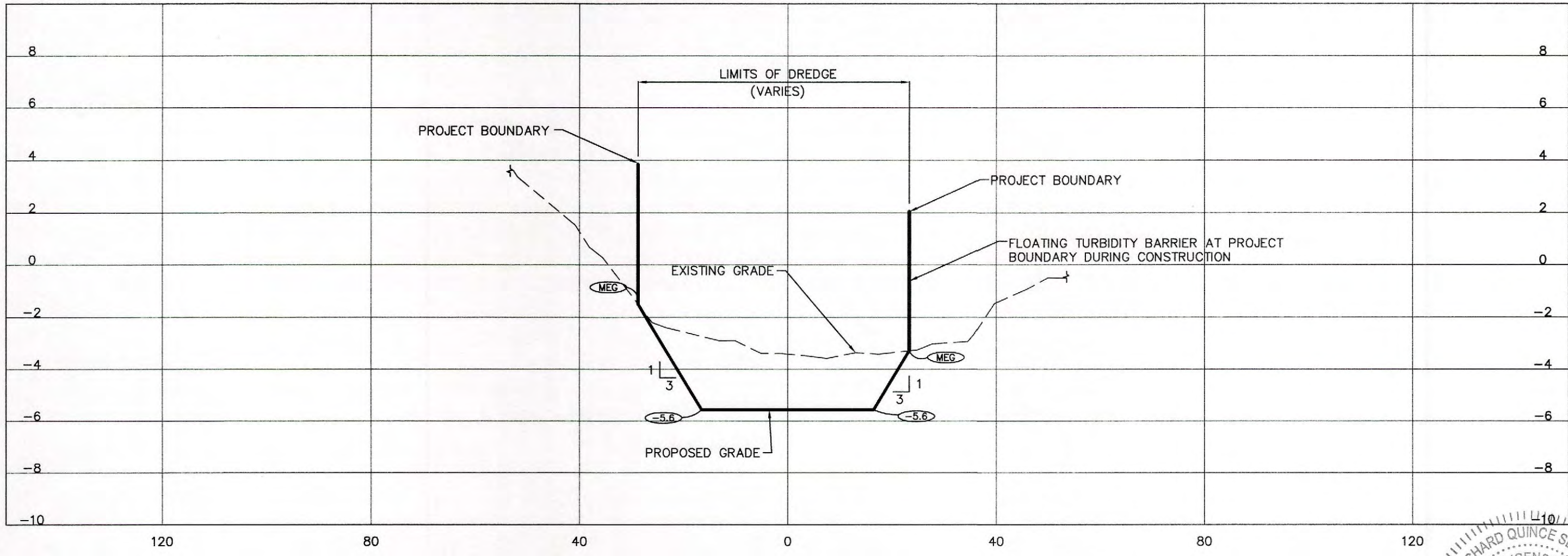
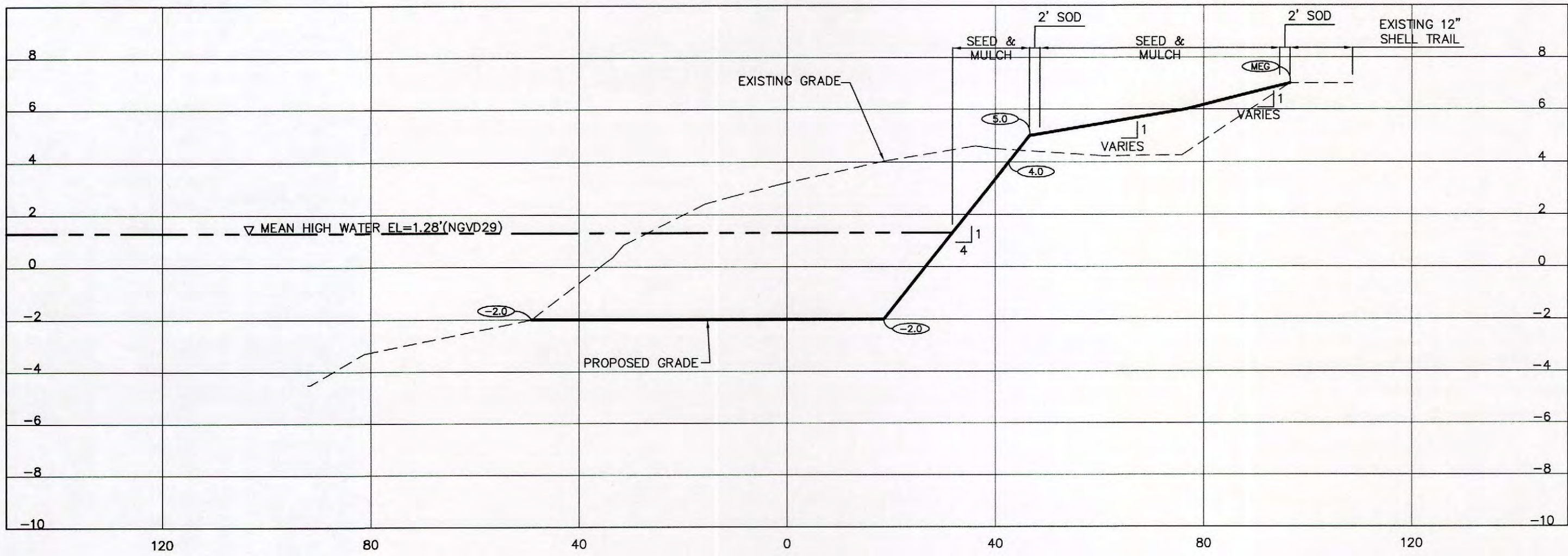
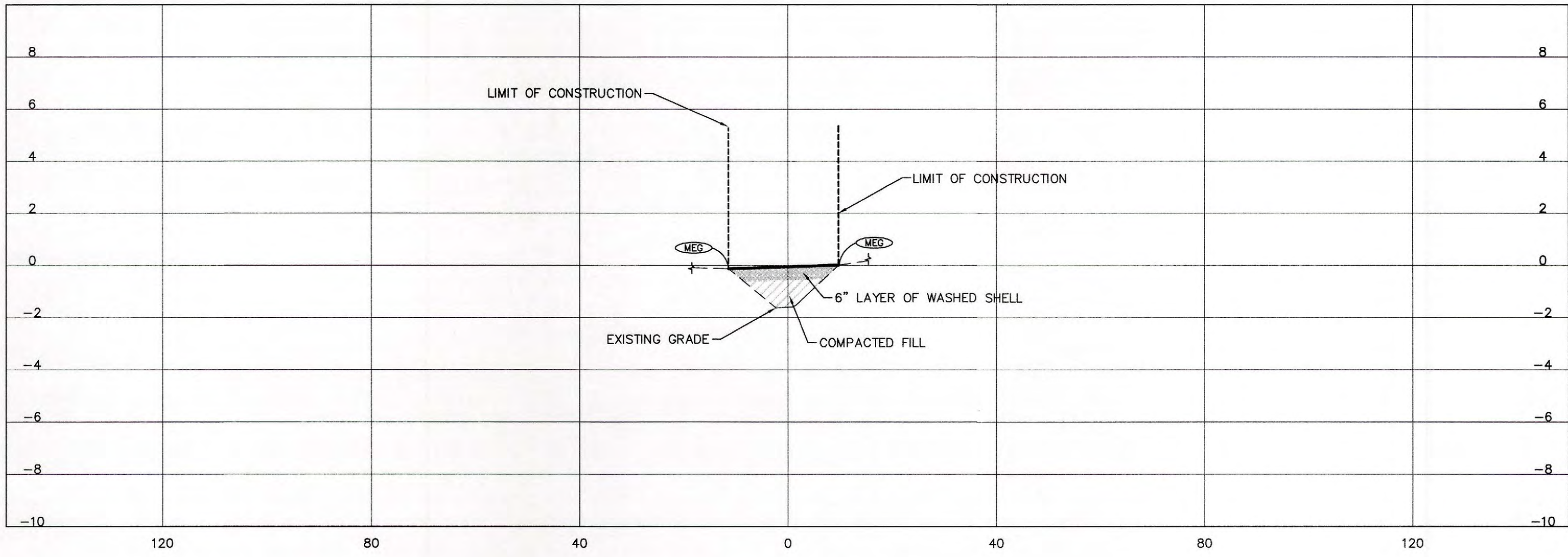
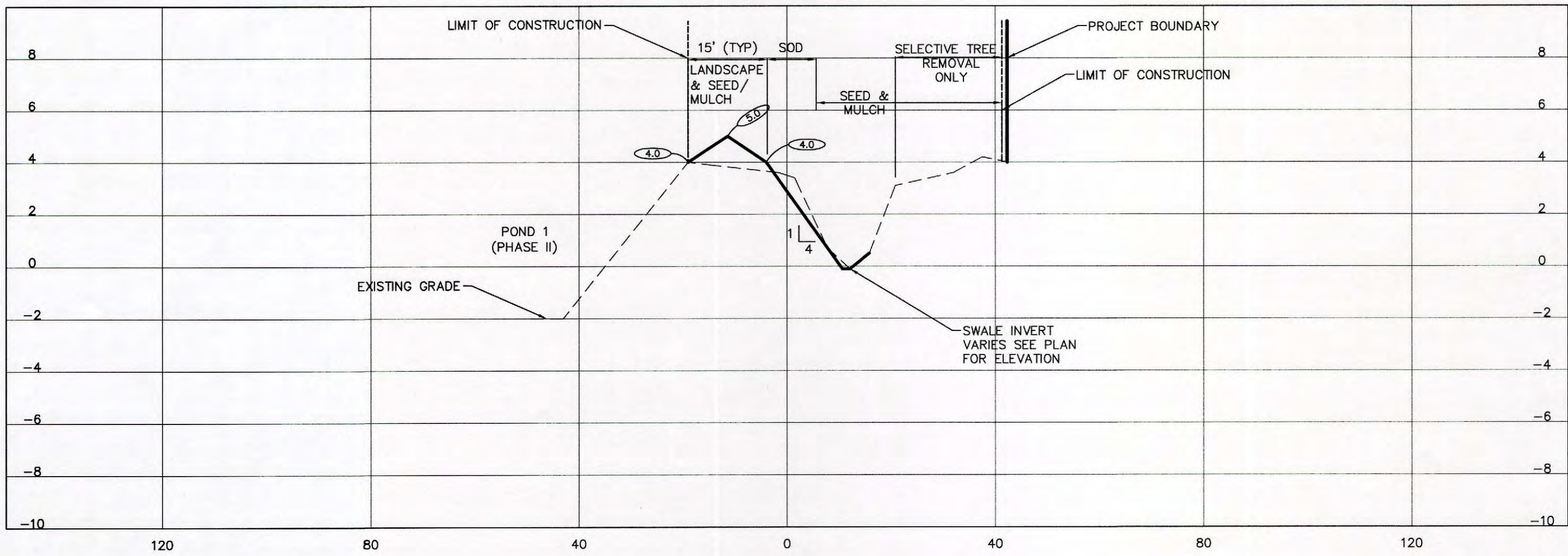
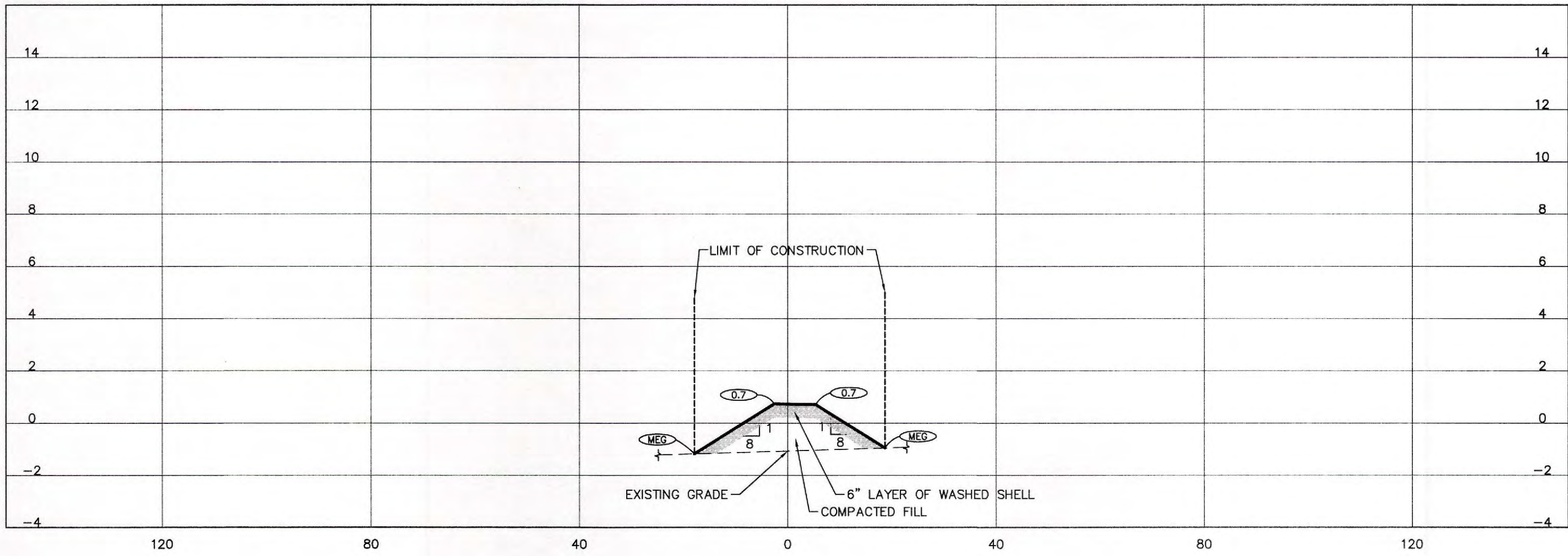
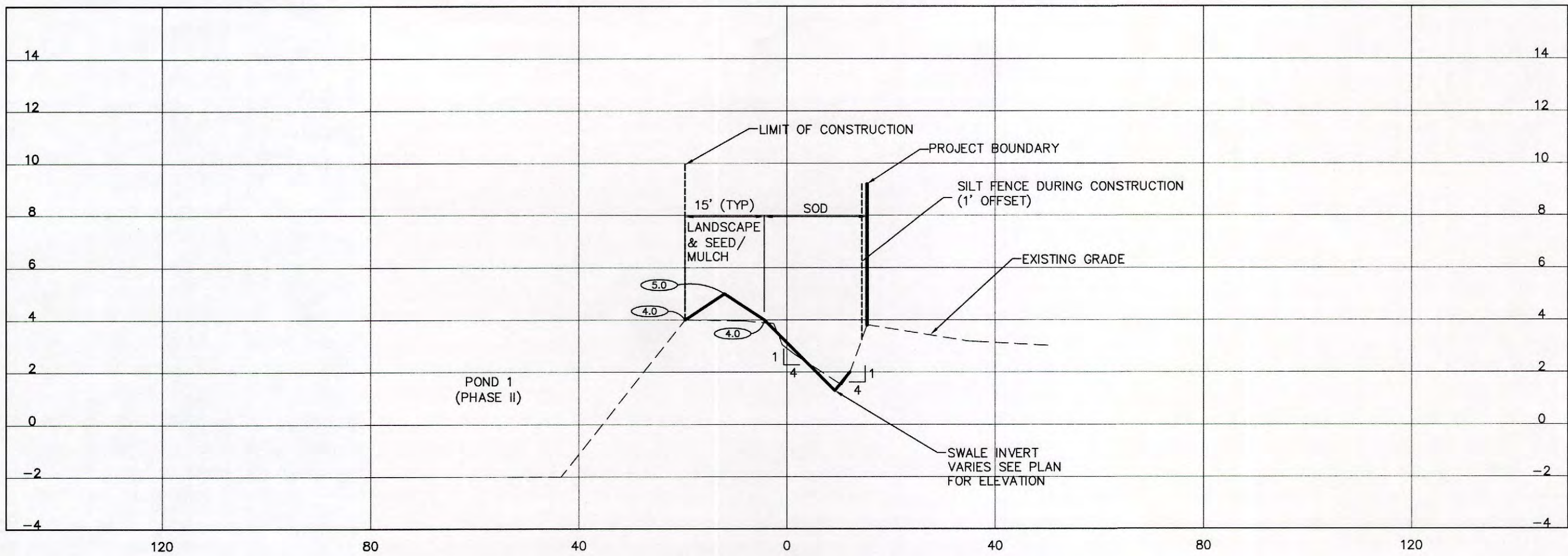




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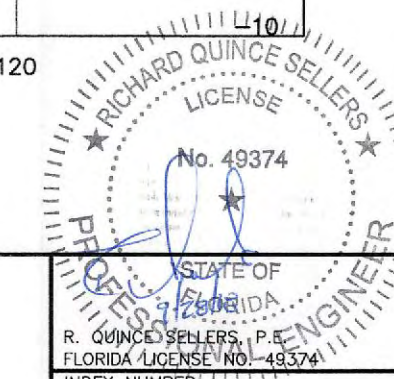
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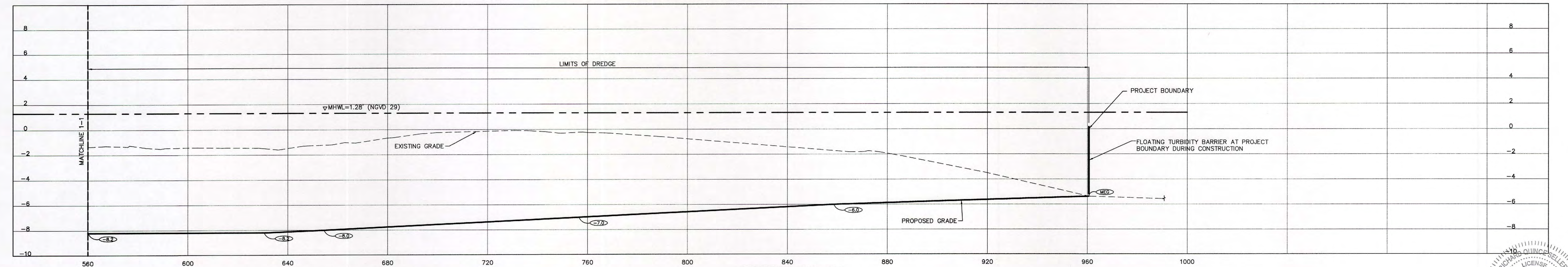
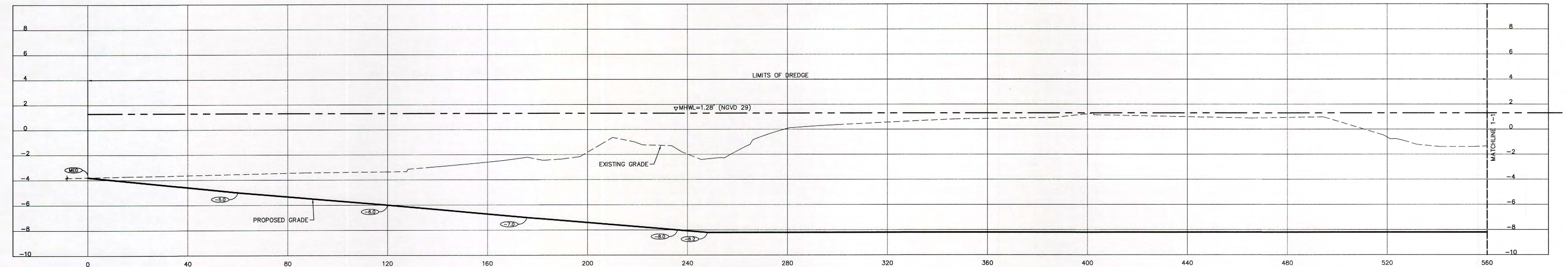
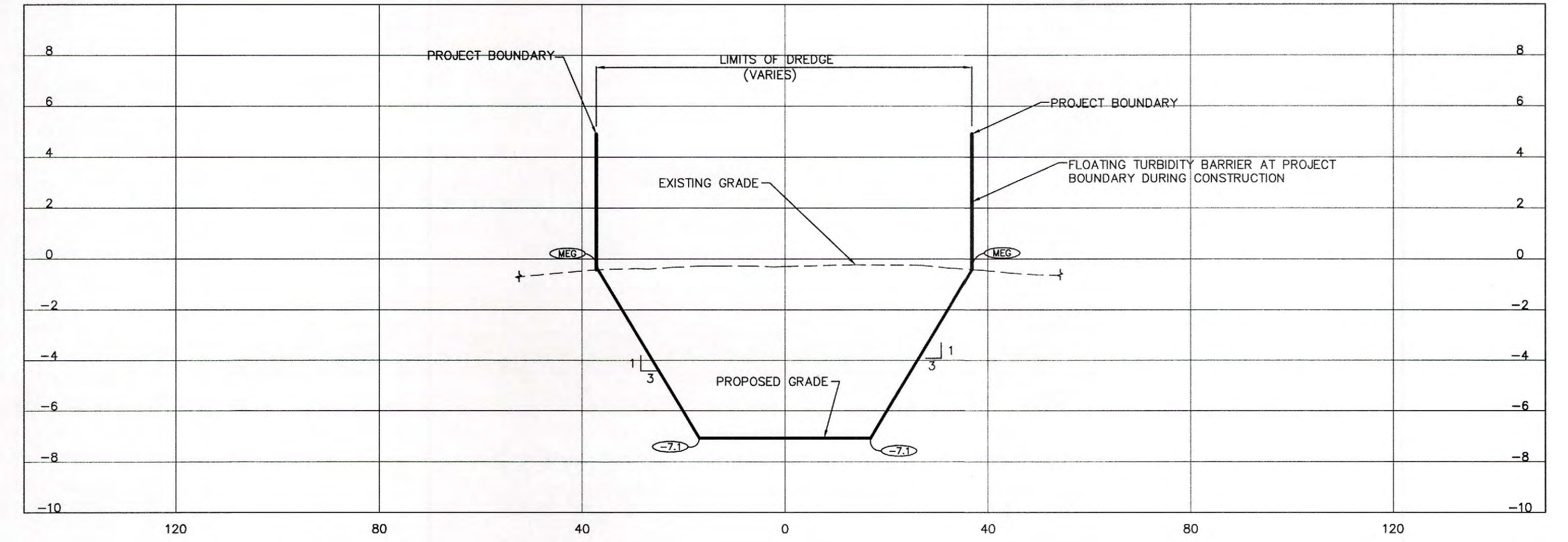
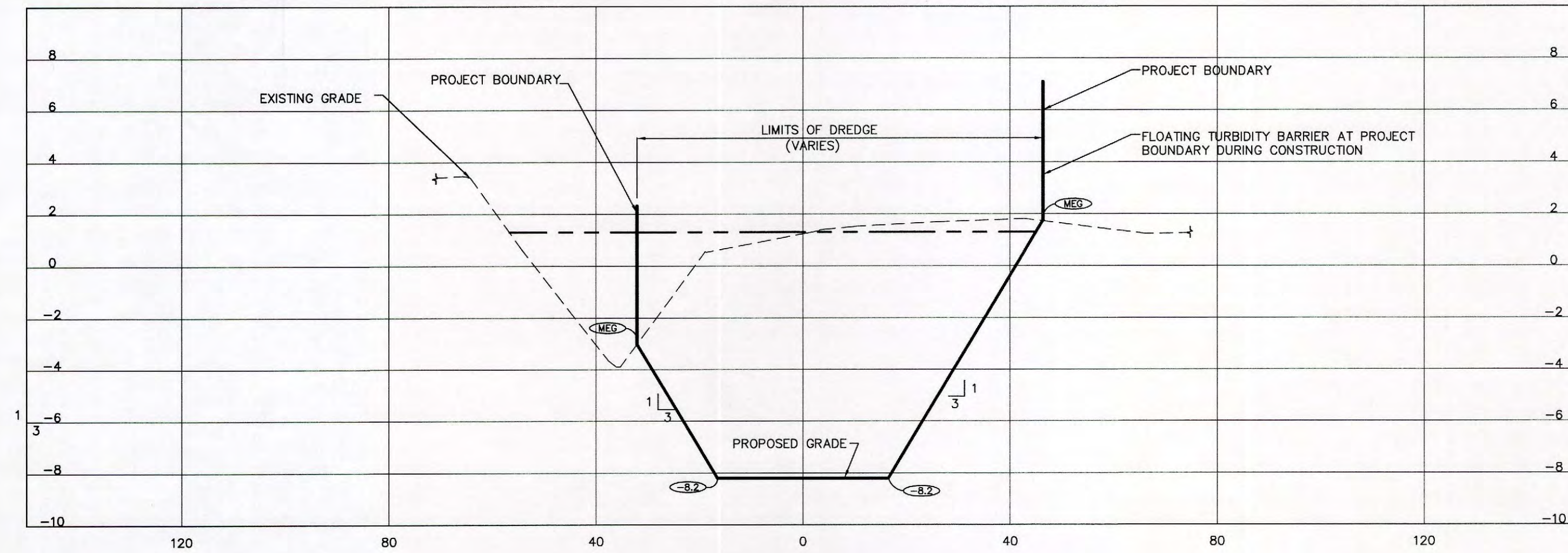
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DESIGNED BY:	RQS/89561	9/2018
DRAWN BY:	KG/101511	9/2018
CHECKED BY:		
CONTRACT ADMIN. BY:		
WM APPROVED BY:		

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CLIENT:	MANATEE BOARD OF COUNTY COMISSIONERS	DATE:	SEPT. 2018	TITLE:	GRADING CROSS SECTION
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION	HORIZONTAL SCALE:		CROSS REFERENCE FILE NO.:	
		VERTICAL SCALE:		PROJECT NUMBER:	177310789
		SEC. TWP. RGE. 23 34S 16E		SHEET NUMBER:	14 OF 19





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REV. NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:

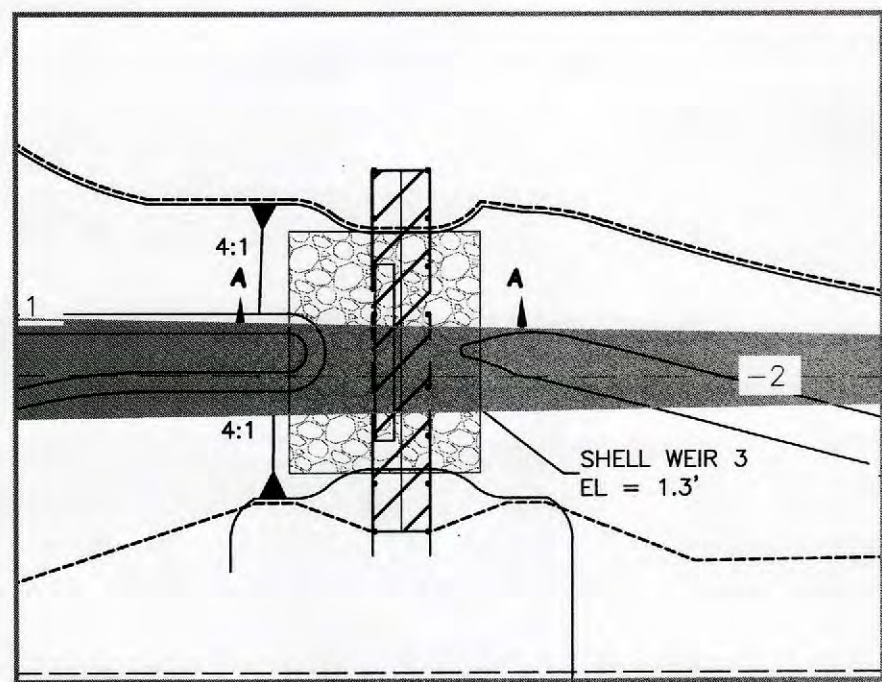
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CLIENT: MANATEE BOARD OF COUNTY COMMISSIONERS
 PROJECT: ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION

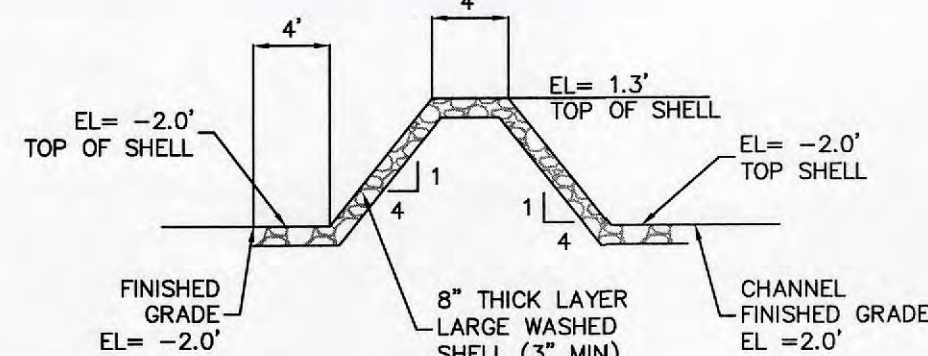
DATE: SEPT. 2018
 HORIZONTAL SCALE:
 VERTICAL SCALE:
 SEC. TWP. RGE. CROSS REFERENCE FILE NO.:
 23 34S 16E

TITLE: GRADING CROSS SECTION
 PROJECT NUMBER: 177310789

RICHARD QUINCE
 LICENSE No. 49374
 PROFESSIONAL ENGINEER
 STATE OF FLORIDA
 INDEX NUMBER: 177310789-02-015-022-03.dwg
 SHEET NUMBER: 15 OF 19

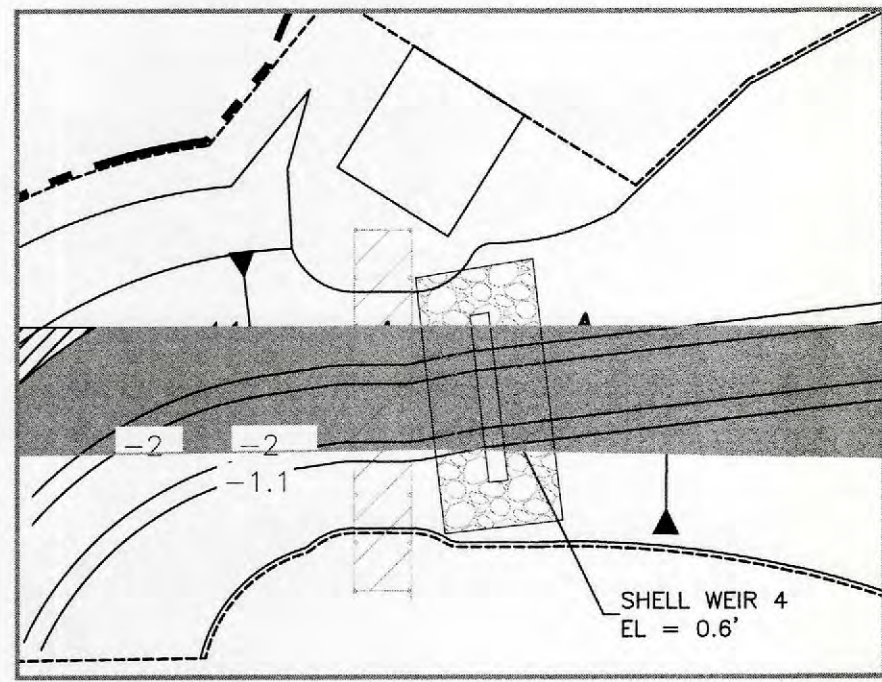


PLAN VIEW

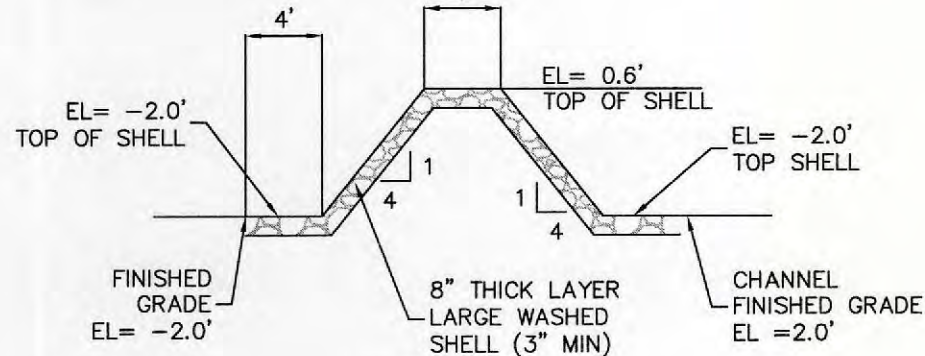


SECTION A-A

W3 SHELL WEIR 3 TYPICAL DETAIL



PLAN VIEW

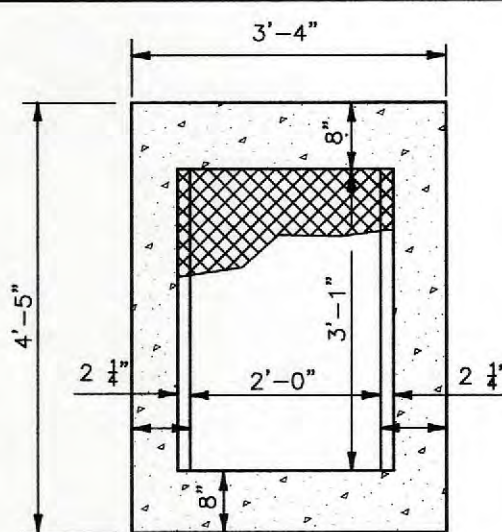


SECTION A-A

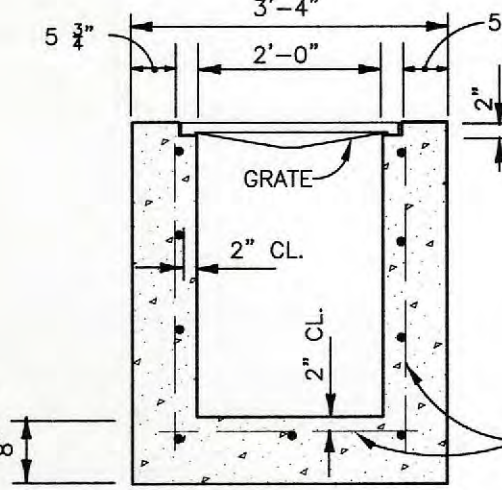
W4 SHELL WEIR 4 TYPICAL DETAIL

NOTES

1. INLET SHALL HAVE 3" DIA. HOLE AT THE BOTTOM OF THE BOX CLEAR OF THE PIPE CONSTRUCTION, TO BE PLUGGED WHEN CONCRETE INVERT FORMED.
2. U.S.F. GRATE NO. 6606 (STEEL)
3. FRAME & GRATE SHALL BE OF STEEL CONSTRUCTION COATED WITH 2 APPLICATIONS OF BLACK ENAMEL, 4.0 MILS DRY FILM THICKNESS EACH COAT, 8 MILS TOTAL COATING SHALL MEET OR EXCEED FDOT SPECIFICATION 971-8. CONTRACTOR SHALL APPLY ONE FIELD COAT TO ANY BARE AREAS AS DETERMINED BY ENGINEER.
4. 3/4" CHAMFER ALL EXPOSED EDGES.
5. 3000 PSI CONCRETE @ 28 DAYS SHALL BE USED THROUGHOUT.
6. POURED CONCRETE INVERT AFTER INLET & PIPE PLACED IN GROUND, 3000 PSI @ 28 DAYS.
7. REINFORCING STEEL SHALL BE INTERMEDIATE GRADE BILLET WITH DEFORMATIONS CONFORMING TO ASTM A-615-76A. ALL STEEL SHALL BE 2" CLEAR UNLESS OTHERWISE NOTED.
8. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE SKIMMER ASSEMBLY, FOR APPROVAL, PRIOR TO CONSTRUCTION.



PLAN

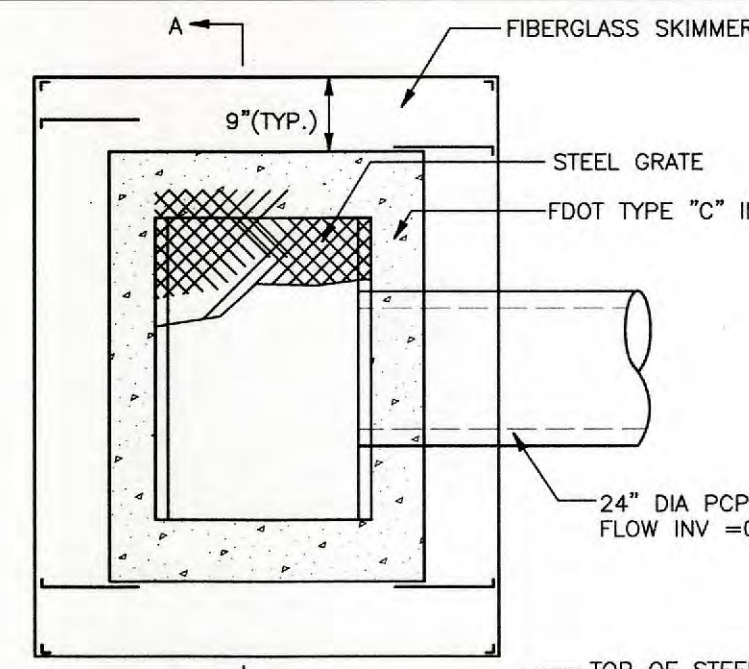


SECTION

F.D.O.T. TYPE "C" INLET

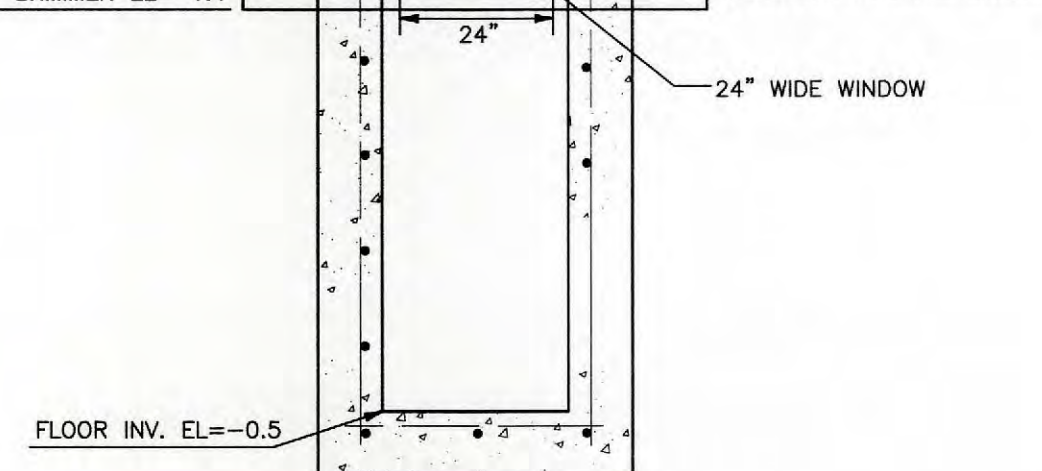
S-D048(04/09/04)

N.T.S.



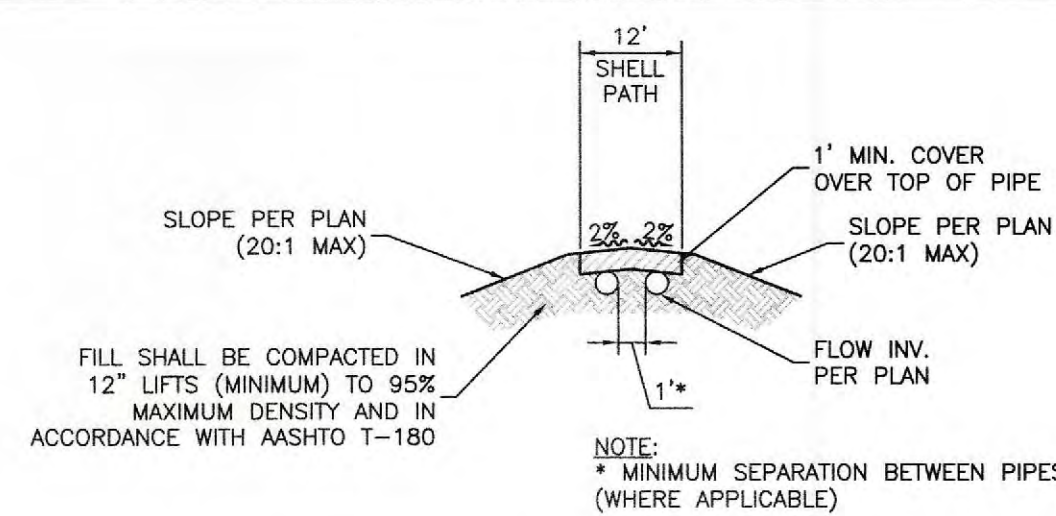
PLAN

TOP OF SKIMMER EL= 3.5
25 YR-MHWL EL= 3.3
BOTTOM OF SKIMMER EL= 1.4



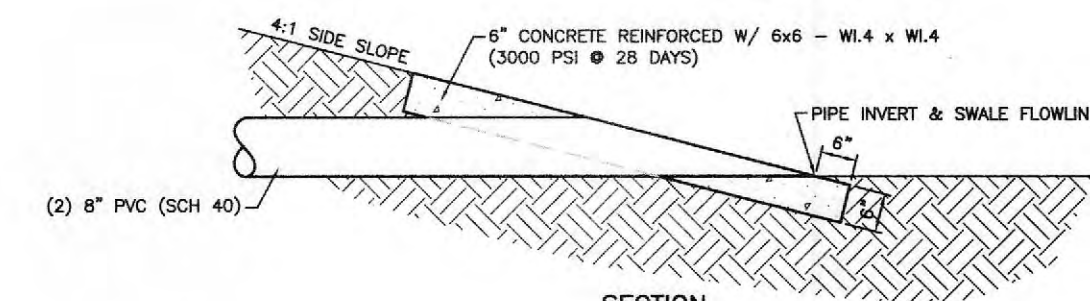
SECTION A-A

F.D.O.T. TYPE "C" CONTROL STRUCTURE D#1

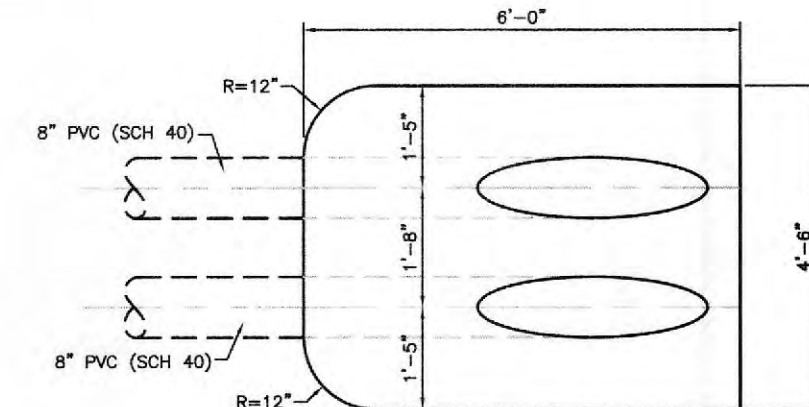


TYPICAL TRAIL CULVERT DETAIL

N.T.S.



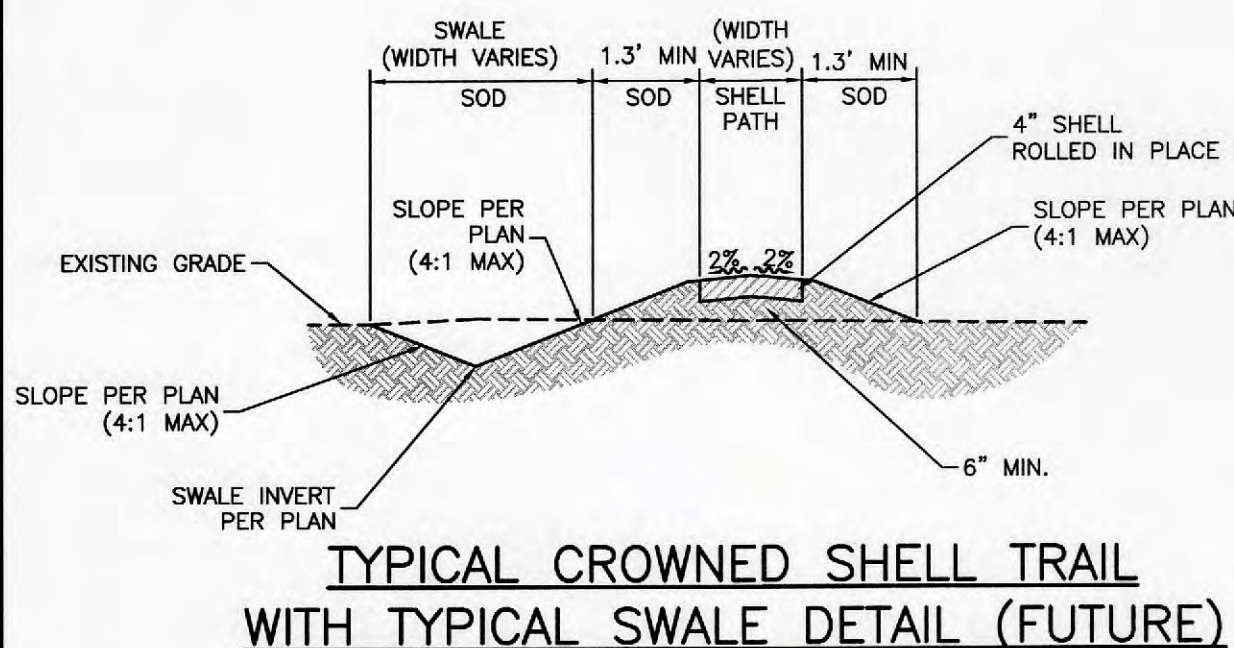
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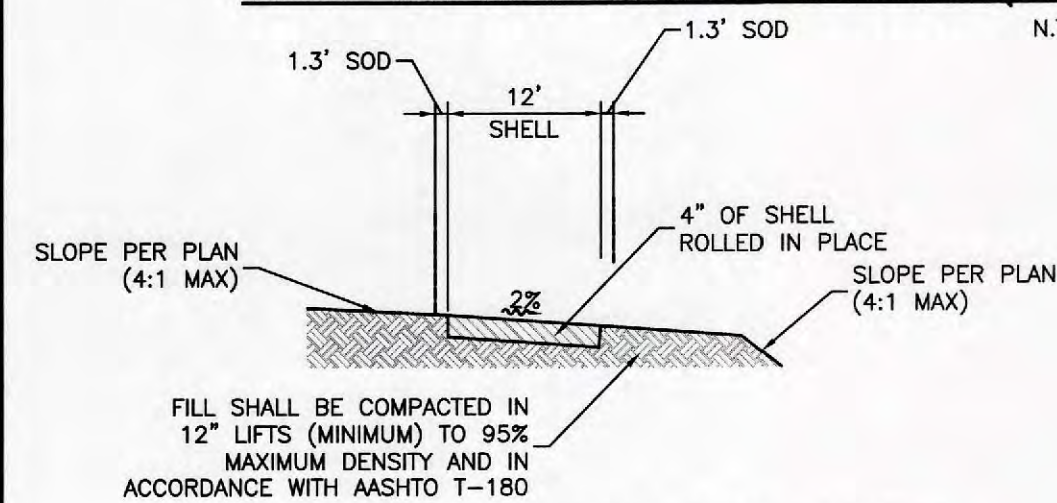
PLAN

MITERED END SECTION DETAIL FOR PVC CROSS DRAINS

NOT TO SCALE



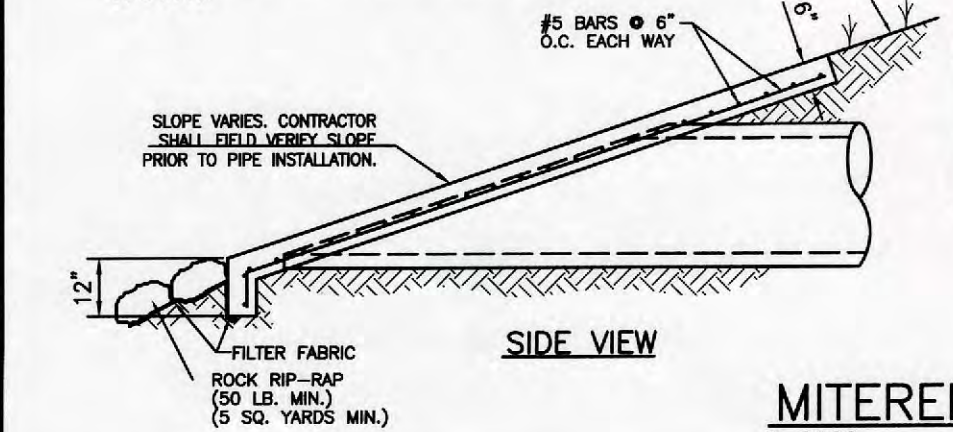
N.T.S.



N.T.S.

NOTES

1. CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS
2. CHAMFER ALL EXPOSED EDGES 3/4".
3. RIP-RAP SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 530, "CONSTRUCTION METHODS" 5 SY. RIP-RAP AND FILTER CLOTH TO BE INCLUDED IN THE UNIT PRICE OF THE MITERED END SECTION. IF ADDITIONAL RIP-RAP (> 5 SY.) IS REQUIRED AND DIRECTED, IT SHALL BE PAID FOR ON PER YARD BASIS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
4. FILTER FABRIC SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 514, PLASTIC FILTER FABRIC, SPECIFICALLY SEC. 514-3.4 RIPRAP, INCLUDED IN UNIT COST OF MITERED END SECTION.

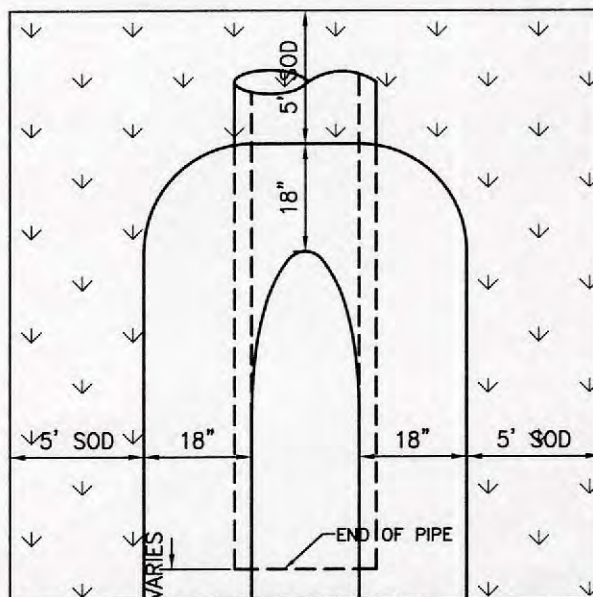


SIDE VIEW

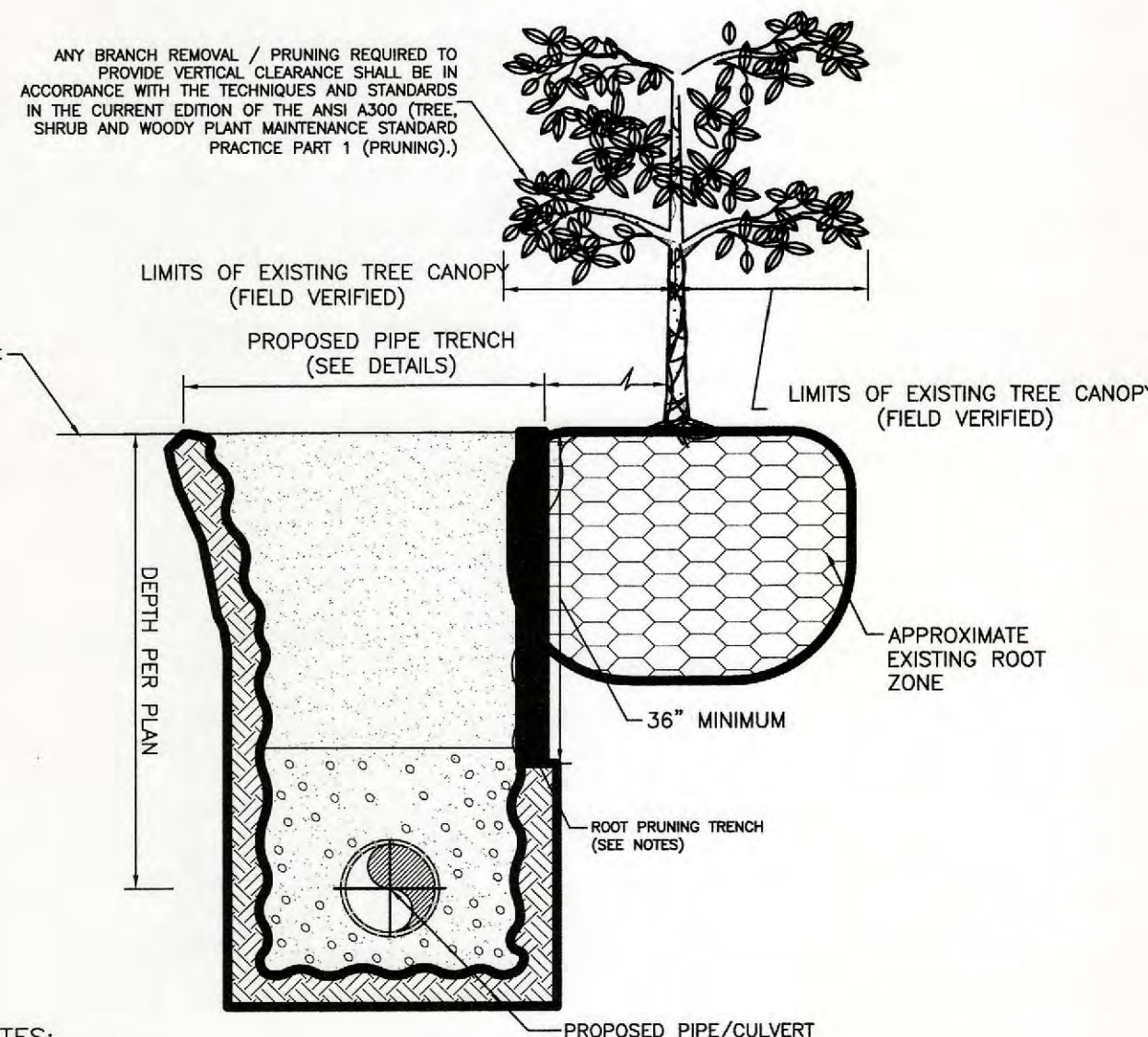
MITERED END SECTION

S-D022

N.T.S.



PLAN VIEW



NOTES

1. WHERE PIPE TRENCH EXCAVATION WILL OCCUR INSIDE ROOT ZONE (AS SHOWN) A ROOT PRUNING TRENCH SHALL BE CREATED PRIOR TO EXCAVATION OF THE PIPE TRENCH. ROOT PRUNING TRENCH SHALL BE CONSTRUCTED IN A MANNER SUCH THAT EXISTING ROOTS WILL BE CLEANLY SEVERED TO PRESENT A CLEAN, SMOOTH FACE. NO FRAYED OR SPLIT ROOTS SHALL BE LEFT WITHOUT CORRECTION. PRIOR TO COMMENCEMENT OF ROOT - DISTURBING ACTIVITIES CONTRACTOR SHALL SUBMIT SHOP DRAWINGS DETAILING PROPOSED METHODS AND EQUIPMENT TO BE USED TO THE ENGINEER FOR REVIEW AND APPROVAL. IN NO CASE SHALL EXCAVATION ENDOUR MORE THAN 1/3 INTO THE EXISTING TREE CANOPY LIMITS. SHEETING (OR EQUIVALENT METHOD) MAY BE REQUIRED TO LIMIT ENCROACHMENT INTO THE EXISTING TREE CANOPY.
2. NOTWITHSTANDING THE CONSTRUCTION OF THE ROOT PRUNING TRENCH, ANY ROOTS EXPOSED AND OR DAMAGED DURING CONSTRUCTION SHALL BE TREATED IN THE SAME MANNER AS DESCRIBED ABOVE.
3. PRIOR TO COMMENCEMENT OF ANY EXCAVATION, CONTRACTOR TO FIELD MARK LOCATIONS OF ROOT PRUNING TRENCHES AND BRANCH PRUNING FOR REVIEW AND APPROVAL BY ENGINEER.
4. TREE ROOTS EXPOSED DURING CONSTRUCTION SHALL HAVE A SUITABLE BROAD SPECTRUM FUNGICIDE APPLIED SUCH AS "SUBDUE MAXX" (Mefenoxam) OR APPROVED EQUAL. THIS APPLICATION SHALL BE APPLIED AT LABELED RATES AND ACCORDING TO LABELED DIRECTIONS PRIOR TO THE INTRODUCTION OF ANY BACKFILL.
5. ENGINEER TO REVIEW COMPLETED ROOT PRUNING TRENCH PRIOR TO BACKFILLING.
6. UPON COMPLETION OF ROOT PRUNING AND GRADING, PHC INJECTABLE FOR TREES TO BE SOIL INJECTED AT LABELED RATES AND ACCORDING TO LABELED DIRECTIONS WITHIN ENTIRE CANOPY AREA OF ANY TREE WHERE ROOT PRUNING HAS BEEN COMPLETED.

ROOT PRUNING DETAIL



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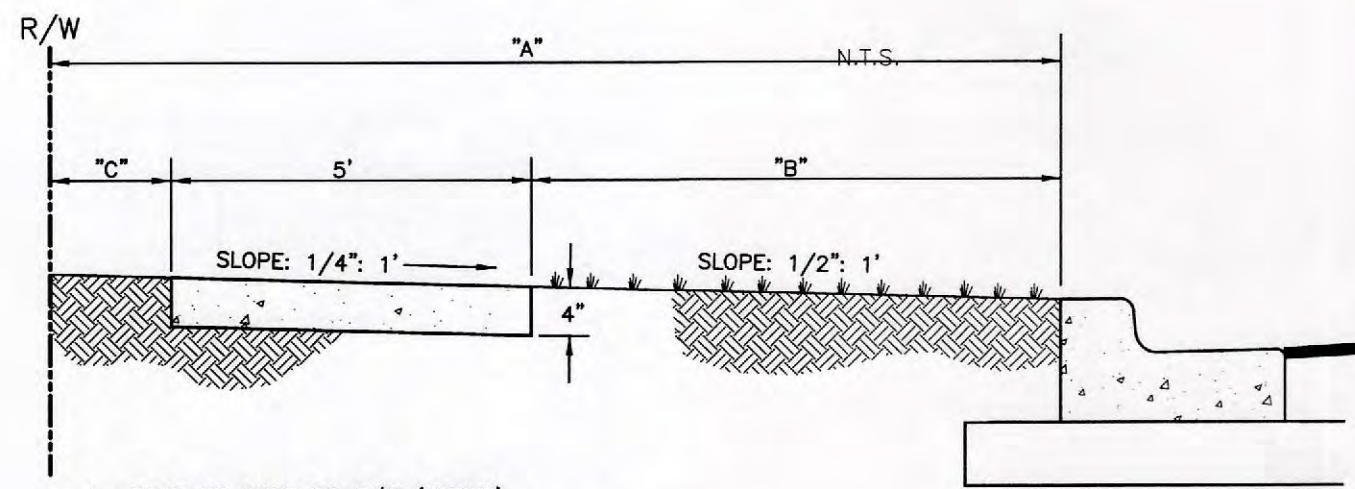
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CLIENT: MANATEE BOARD OF COUNTY COMMISSIONERS
PROJECT: ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION

DATE: SEPT. 2018
HORIZONTAL SCALE:
VERTICAL SCALE:
SEC: TWP: RGE: 23 34S 16E

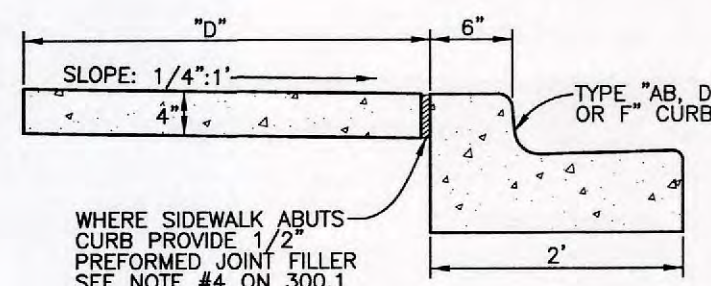
TITLE: CONSTRUCTION DETAILS
CROSS REFERENCE FILE NO.:
PROJECT NUMBER: 177310789

STATE OF FLORIDA
R. QUINCE SELLERS, P.E.
LICENSE # 49374
INDEX NUMBER 1111111111
SHEET NUMBER: 16 OF 19



A= BACK OF CURB TO R/W (VARIES)
B= UNPAVED AREA (VARIES). REFER TO F.D.O.T. GREEN BOOK, TABLE 3-12, LATEST REVISION.
C= VARIES, SEE 401 SERIES

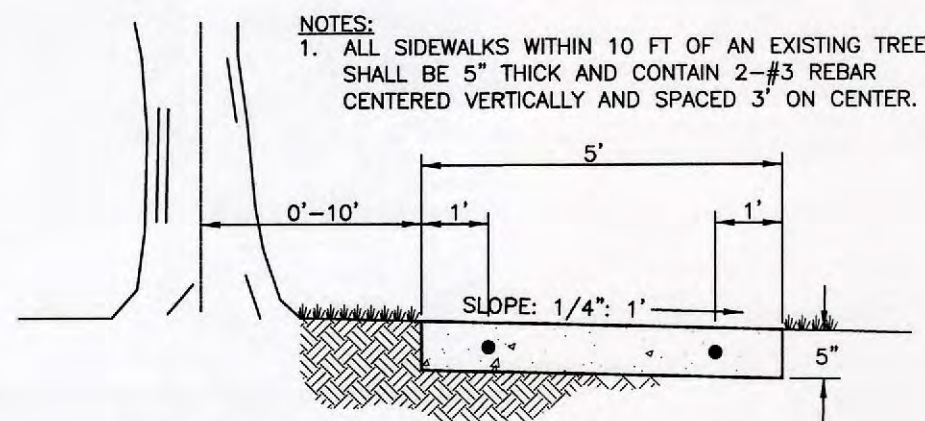
TYPICAL SIDEWALK LOCATION



D= SIDEWALK WIDTH SHALL BE 6" STANDARD, WHERE WALK ABUTS TYPE "AB, D OR F" CURB. WHERE SPEED LIMIT IS 25 MPH OR LESS, WIDTH CAN BE 5"-6".

* SEE SHEET 300.1 "GENERAL NOTES" FOR FURTHER INFORMATION

ALTERNATE SIDEWALK LOCATION

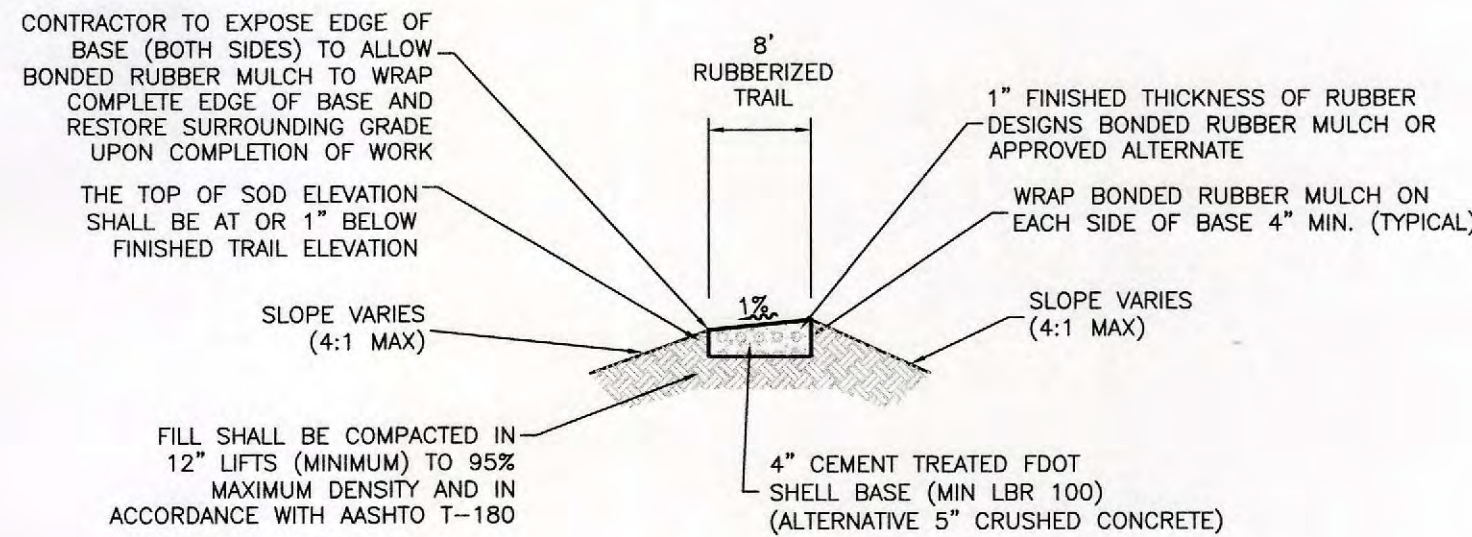


NOTES:
1. ALL SIDEWALKS WITHIN 10 FT OF AN EXISTING TREE SHALL BE 5" THICK AND CONTAIN 2-#3 REBAR CENTERED VERTICALLY AND SPACED 3' ON CENTER.

SIDEWALK LOCATION CLOSE TO TREES

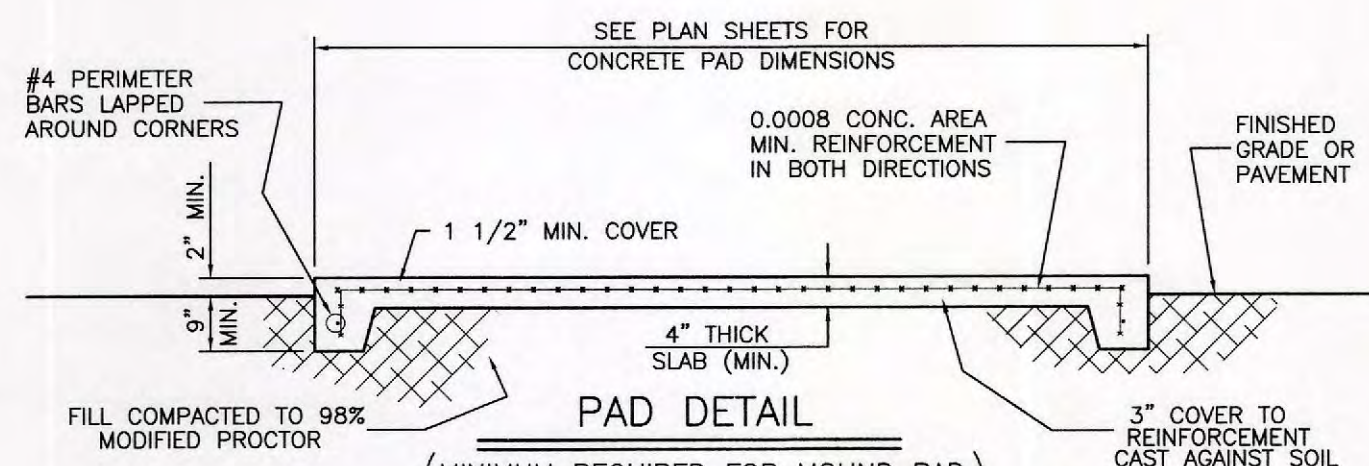
SIDEWALK REQUIREMENTS (FUTURE)

N.T.S.



TYPICAL BONDED RUBBER MULCH TRAIL DETAIL (EXISTING)

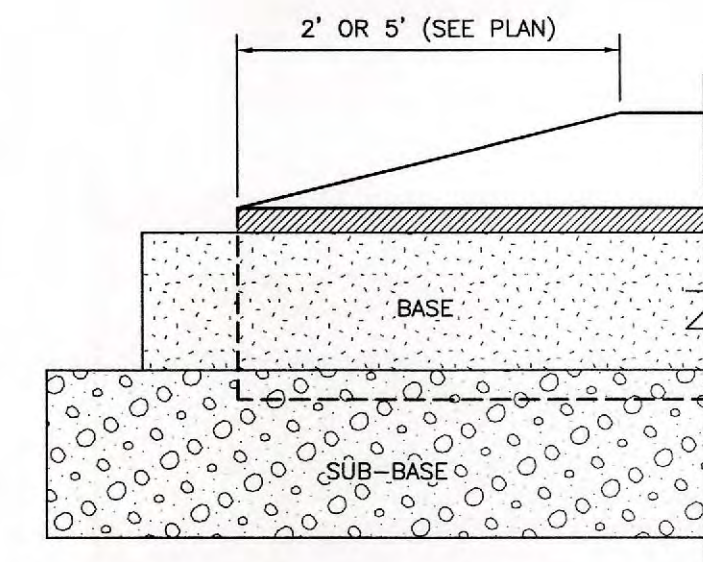
N.T.S.



MIN. CONC. STRENGTH $f'c$ = 3000 P.S.I.
MIN. REINFORCEMENT STRENGTH f_y = 60,000 P.S.I.

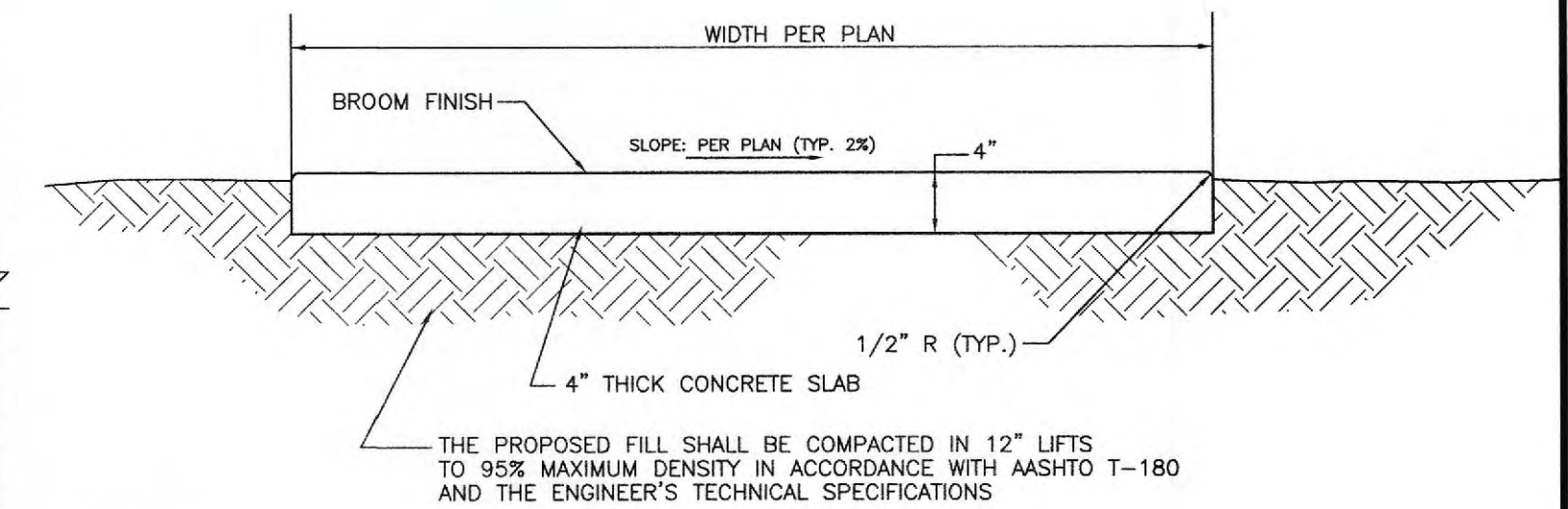
CONCRETE PAD TYPICAL DETAILS (FUTURE)

N.T.S.



CURB END TAPER (FUTURE)

N.T.S.



TYPICAL SIDEWALK DETAIL (FUTURE)

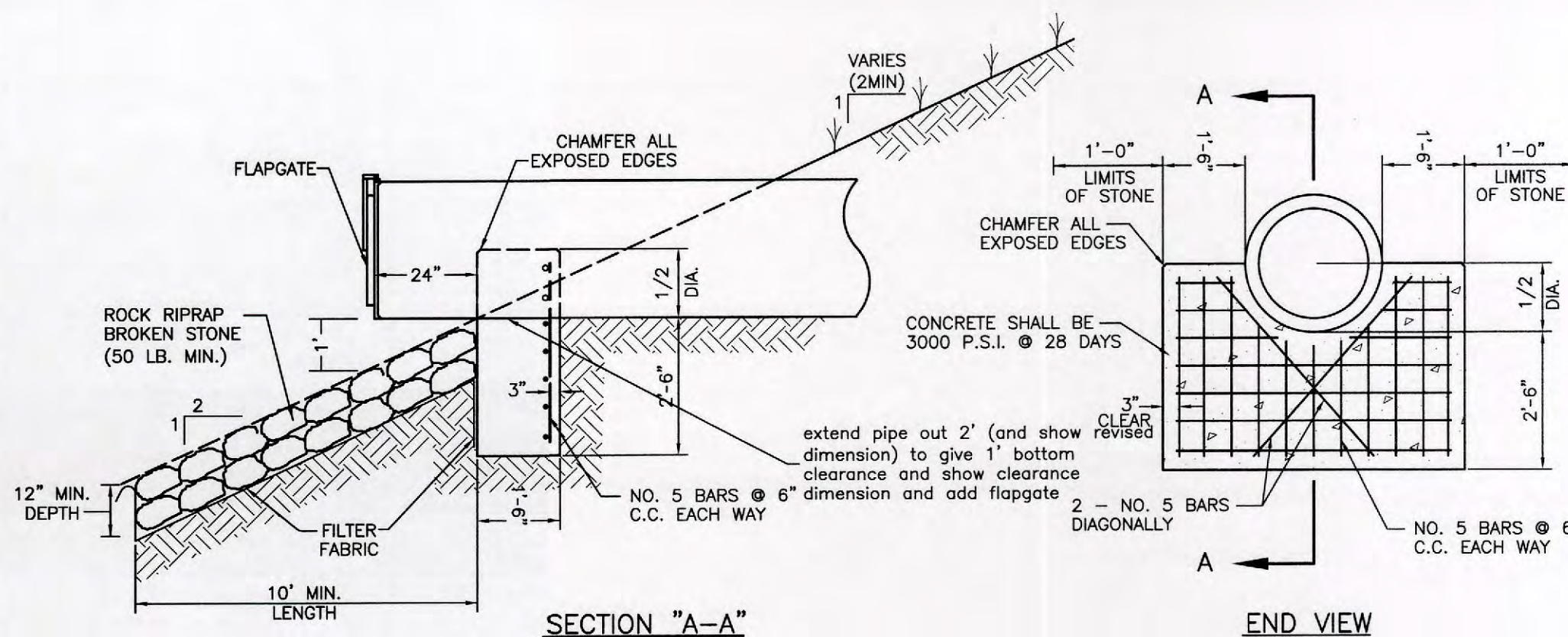
- SIDEWALK NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 P.S.I. IN 28 DAYS UNLESS OTHERWISE NOTED.
 2. CONTRACTION JOINTS SHALL BE SAW CUT TO A 1 1/2" DEPTH AT INTERVALS EQUAL TO THE WIDTH OF THE SIDEWALK.
 3. AN EXPANSION JOINT WILL BE PLACED AT THE END OF ALL RETURNS, AT FIXED OBJECTS (DRIVEWAYS, CURBS ETC.) AND INTERVALS NOT TO EXCEED 50' EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" PREFORMED JOINT FILLER.
 4. ALL SIDEWALKS AND SIDEWALK CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA).

(MANATEE)
S-P023(9/3/02)

N.T.S.

ROBINSON PRESERVE EXPANSION PHASE II-B - MANGROVE MITIGATION PLANTING SPECIFICATIONS								
PLANTING AREA	ELEVATION RANGE (FT. NAVD)	PLANT SPECIES (COMMON)	PLANT SPECIES (SCIENTIFIC)	PLANT TYPE	PLANTING AREA (SQ. FT.)	PERCENT OF PLANTING AREA	MAXIMUM ON-CENTER SPACING (FT.)	PLANT QUALITY TOTAL
MANGROVE FOREST MITIGATION AREA	0 - 1.5	RED MANGROVE	RHIZOPHORA MANGLE	TREE	28,750	100%	2	7,188
	1 - 2.5	BLACK MANGROVE	AVICENNIA GERMINANS	TREE	28,750	100%	3	3,194

PROP = COLLECTED, VIABLE PROPAGULES
TT = 2" MINIMUM DIAMETER, 5" MINIMUM DEPTH TREE TUBES WITH MINIMUM 10" TALL SEEDLING
NOTE: SUBSTITUTION OF LARGER PLANT SIZES MAY BE PERMISSIBLE WITH COUNTY AUTHORIZATION.
SPECIES AND QUANTITY SUBSTITUTIONS WILL NOT BE ALLOWED.



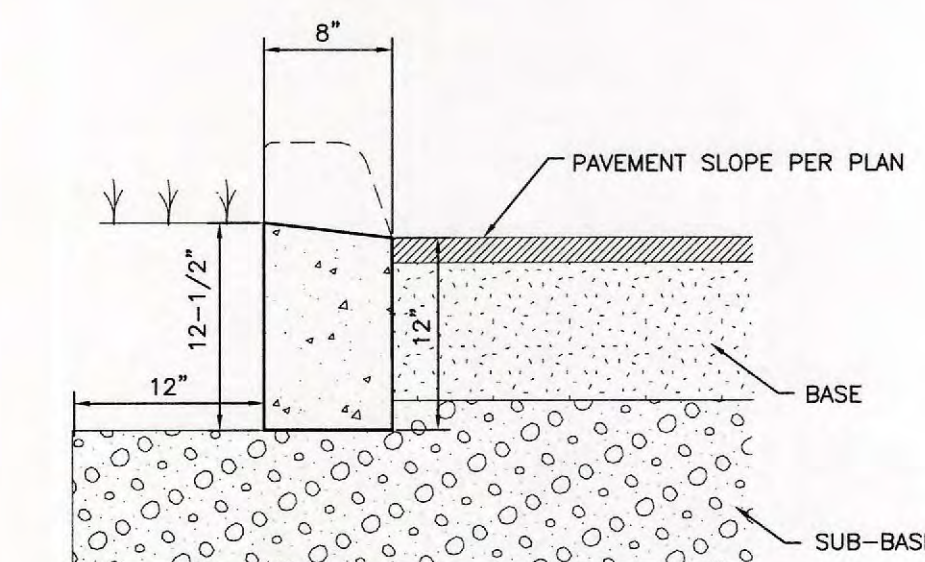
NOTES:

1. CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS
2. CHAMFER ALL EXPOSED EDGES 3/4".
3. RIPRAP SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 530, RIPRAP, SPECIFICALLY SEC. 530-3.3 RUBBLE. NO BROKEN CONCRETE SHALL BE USED.

U-TYPE ENDWALL DETAIL

N.T.S.

4. FILTER FABRIC SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 514, PLASTIC FILTER FABRIC, SPECIFICALLY SEC. 514-3.4 RIPRAP, INCLUDED IN UNIT COST OF ENDWALL.
5. FLAPGATE SHALL BE WATERMAN AF-41 ALUMINUM DRAINAGE FLAPGATE (OR APPROVED EQUIVALENT).

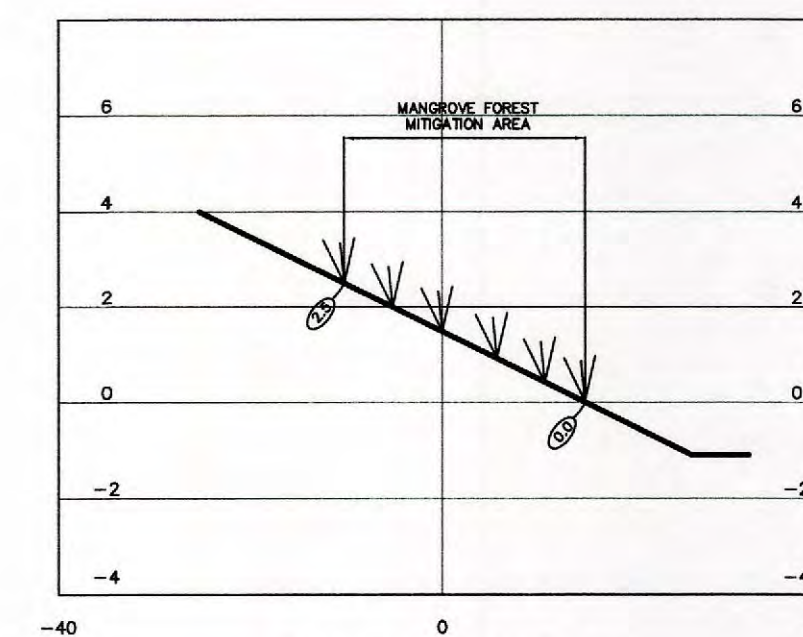


CURB NOTES:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 P.S.I. IN 28 DAYS UNLESS OTHERWISE NOTED.
2. CURB SHALL MEET THE SPECIFICATIONS ESTABLISHED BY F.D.O.T. STANDARD SPECIFICATIONS PER F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX NO. 300, LATEST REVISION.
3. AN EXPANSION JOINT WILL BE PLACED AT THE END OF ALL RETURNS AT INTERVALS NOT TO EXCEED 50'. CONTRACTION JOINTS AT A MAXIMUM SPACING OF 10' SHALL BE SAW CUT AT DEPTH PER FDOT INDEX NO. 300
4. EXPANSION JOINTS SHALL BE CONSTRUCTED WITH 1/2" BITUMINOUS IMPREGNATED EXPANSION JOINT MATERIAL.

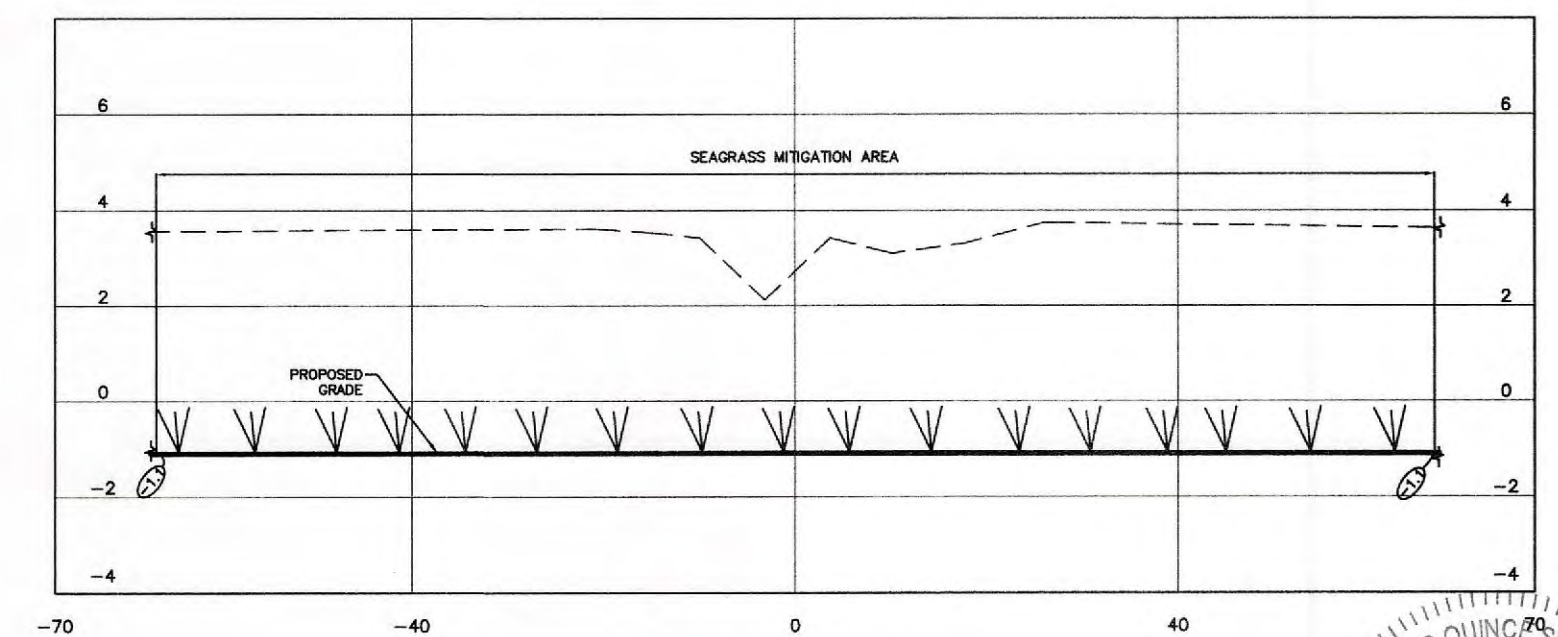
TYPE "D" DROP CURB (FUTURE)

N.T.S.



TYPICAL MITIGATION PLANTING SECTION

PSEC#2-PSEC#2



TYPICAL MITIGATION PLANTING SECTION

PSEC#1-PSEC#1

TYPICAL MITIGATION PLANTING SECTIONS

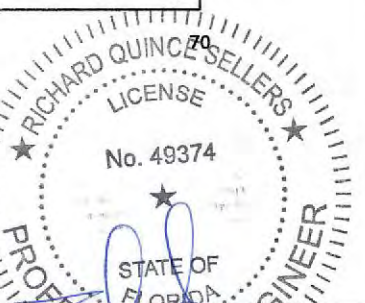
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REV. NO.	REVISION	DATE	DRAWN BY / EMP. NO.	CHECKED BY / EMP. NO.	WM APPROVED BY:
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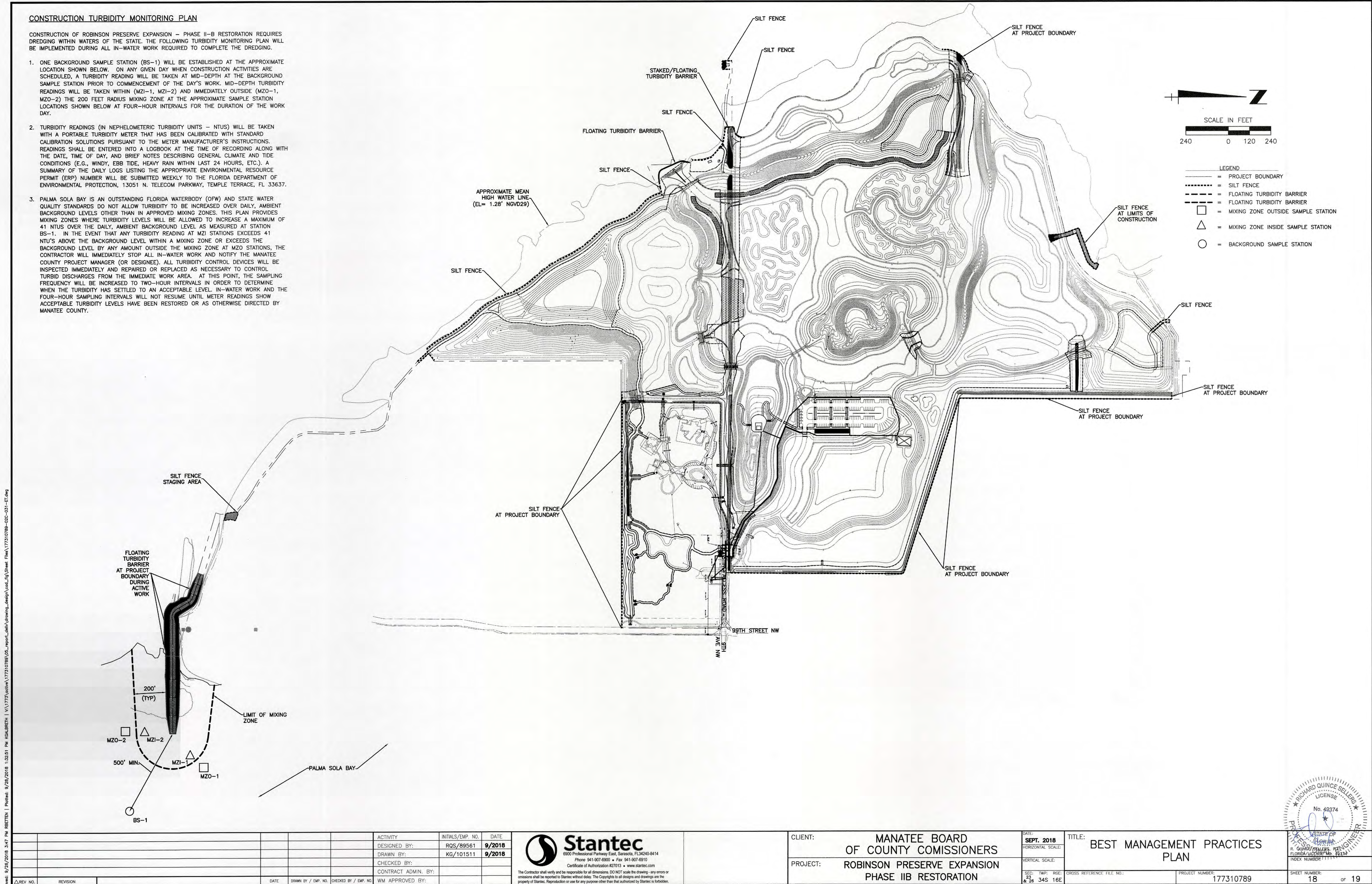
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CLIENT:	MANATEE BOARD OF COUNTY COMMISSIONERS	DATE:	SEPT. 2018	TITLE:	CONSTRUCTION DETAILS
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION	HORIZONTAL SCALE:		VERTICAL SCALE:	
		SEC. TWP. RGE.	23 28 34S 16E	CROSS REFERENCE FILE NO.:	
		PROJECT NUMBER:	177310789	SHEET NUMBER:	17 OF 19



CONSTRUCTION OF ROBINSON PRESERVE EXPANSION - PHASE II-B RESTORATION REQUIRES DREDGING WITHIN WATERS OF THE STATE. THE FOLLOWING TURBIDITY MONITORING PLAN WILL BE IMPLEMENTED DURING ALL IN-WATER WORK REQUIRED TO COMPLETE THE DREDGING.

1. ONE BACKGROUND SAMPLE STATION (BS-1) WILL BE ESTABLISHED AT THE APPROXIMATE LOCATION SHOWN BELOW, ON ANY GIVEN DAY WHEN CONSTRUCTION ACTIVITIES ARE SCHEDULED, A TURBIDITY READING WILL BE TAKEN AT MID-DEPTH AT THE BACKGROUND SAMPLE STATION PRIOR TO COMMENCEMENT OF THE DAY'S WORK. MID-DEPTH TURBIDITY READINGS WILL BE TAKEN WITHIN (MZ1-1, MZ1-2) AND IMMEDIATELY OUTSIDE (MZ0-1, MZ0-2) THE 200 FEET RADIUS MIXING ZONE AT THE APPROXIMATE SAMPLE STATION LOCATIONS SHOWN BELOW AT FOUR-HOUR INTERVALS FOR THE DURATION OF THE WORK DAY.
2. TURBIDITY READINGS (IN NEPHELOMETERIC TURBIDITY UNITS - NTUS) WILL BE TAKEN WITH A PORTABLE TURBIDITY METER THAT HAS BEEN CALIBRATED WITH STANDARD CALIBRATION SOLUTIONS PURSUANT TO THE METER MANUFACTURER'S INSTRUCTIONS. READINGS SHALL BE ENTERED INTO A LOGBOOK AT THE TIME OF RECORDING ALONG WITH THE DATE, TIME OF DAY, AND BRIEF NOTES DESCRIBING GENERAL CLIMATE AND TIDE CONDITIONS (E.G., WINDY, EBB TIDE, HEAVY RAIN WITHIN LAST 24 HOURS, ETC.). A SUMMARY OF THE DAILY LOGS LISTING THE APPROPRIATE ENVIRONMENTAL RESOURCE PERMIT (ERP) NUMBER WILL BE SUBMITTED WEEKLY TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 13051 N. TELECOM PARKWAY, TEMPLE TERRACE, FL 33637.
3. PALMA SOLA BAY IS AN OUTSTANDING FLORIDA WATERBODY (OFW) AND STATE WATER QUALITY STANDARDS DO NOT ALLOW TURBIDITY TO BE INCREASED OVER DAILY, AMBIENT BACKGROUND LEVELS OTHER THAN IN APPROVED MIXING ZONES. THIS PLAN PROVIDES MIXING ZONES WHERE TURBIDITY LEVELS WILL BE ALLOWED TO INCREASE A MAXIMUM OF 41 NTUS OVER THE DAILY, AMBIENT BACKGROUND LEVEL AS MEASURED AT STATION BS-1. IN THE EVENT THAT ANY TURBIDITY READING AT MZ1 STATIONS EXCEEDS 41 NTUS ABOVE THE BACKGROUND LEVEL WITHIN A MIXING ZONE OR EXCEEDS THE BACKGROUND LEVEL BY ANY AMOUNT OUTSIDE THE MIXING ZONE AT MZ0 STATIONS, THE CONTRACTOR WILL IMMEDIATELY STOP ALL IN-WATER WORK AND NOTIFY THE MANATEE COUNTY PROJECT MANAGER (OR DESIGNEE). ALL TURBIDITY CONTROL DEVICES WILL BE INSPECTED IMMEDIATELY AND REPAIRED OR REPLACED AS NECESSARY TO CONTROL TURBID DISCHARGES FROM THE IMMEDIATE WORK AREA. AT THIS POINT, THE SAMPLING FREQUENCY WILL BE INCREASED TO TWO-HOUR INTERVALS IN ORDER TO DETERMINE WHEN THE TURBIDITY HAS SETTLED TO AN ACCEPTABLE LEVEL. IN-WATER WORK AND THE FOUR-HOUR SAMPLING INTERVALS WILL NOT RESUME UNTIL METER READINGS SHOW ACCEPTABLE TURBIDITY LEVELS HAVE BEEN RESTORED OR AS OTHERWISE DIRECTED BY MANATEE COUNTY.



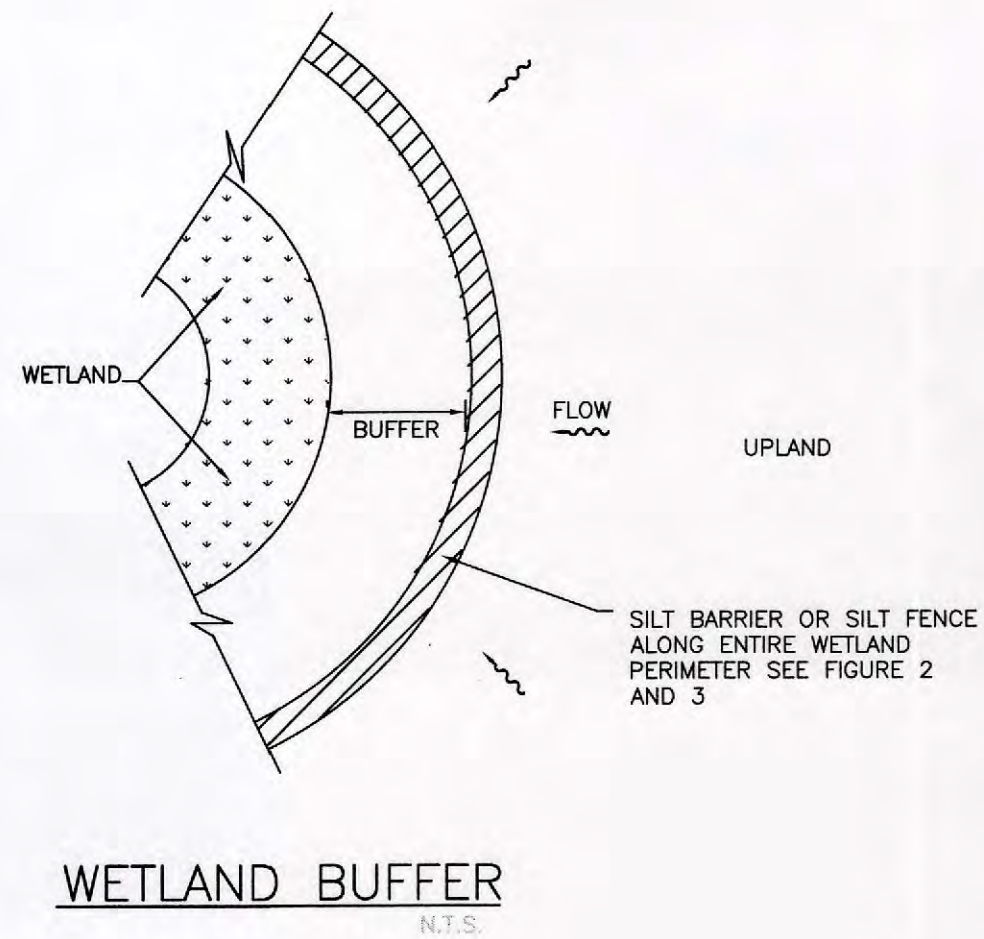


FIGURE 1

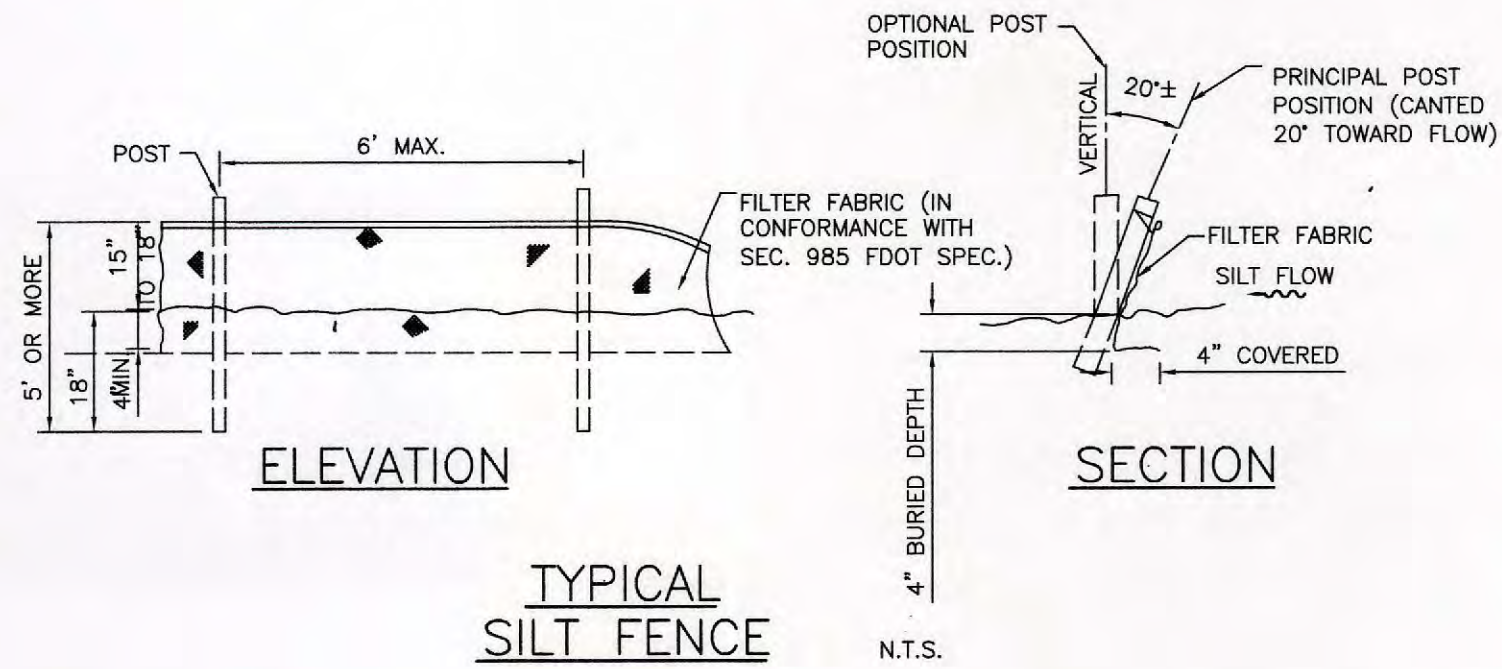


FIGURE 2

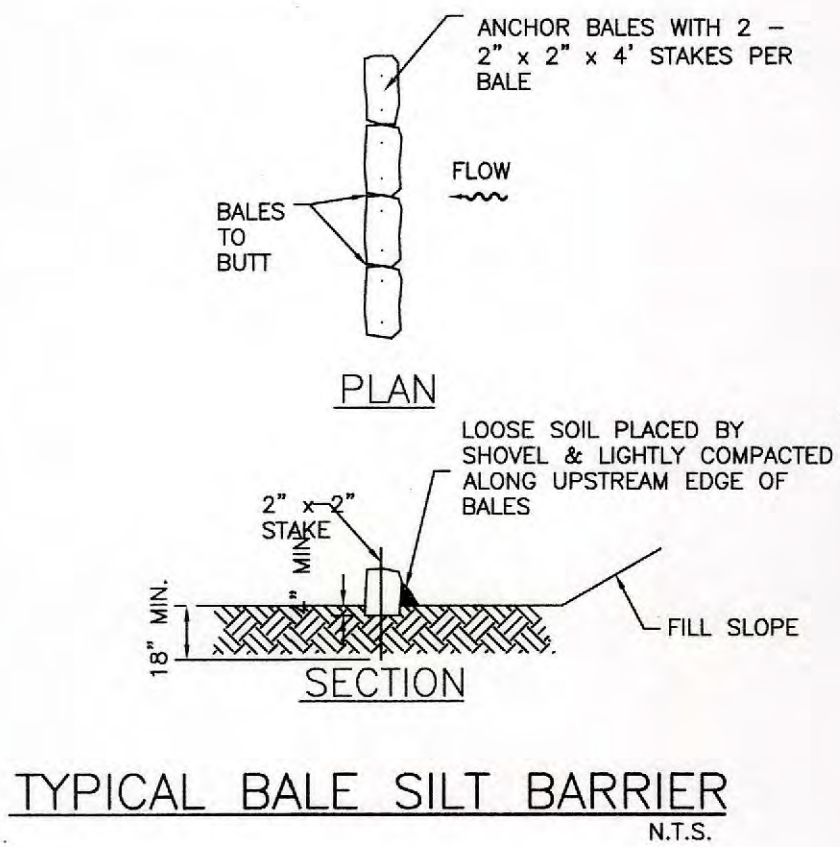


FIGURE 3

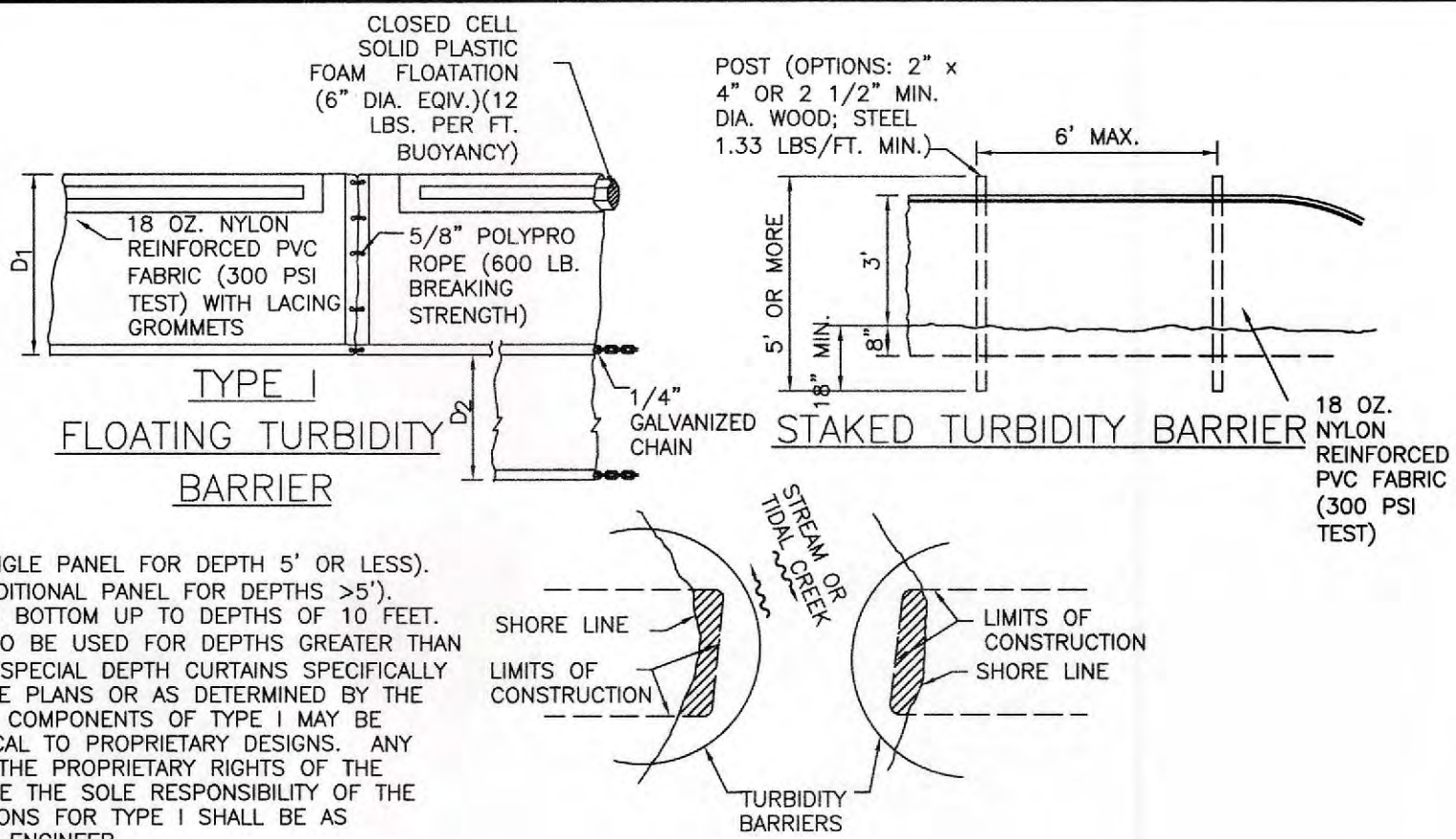


FIGURE 4

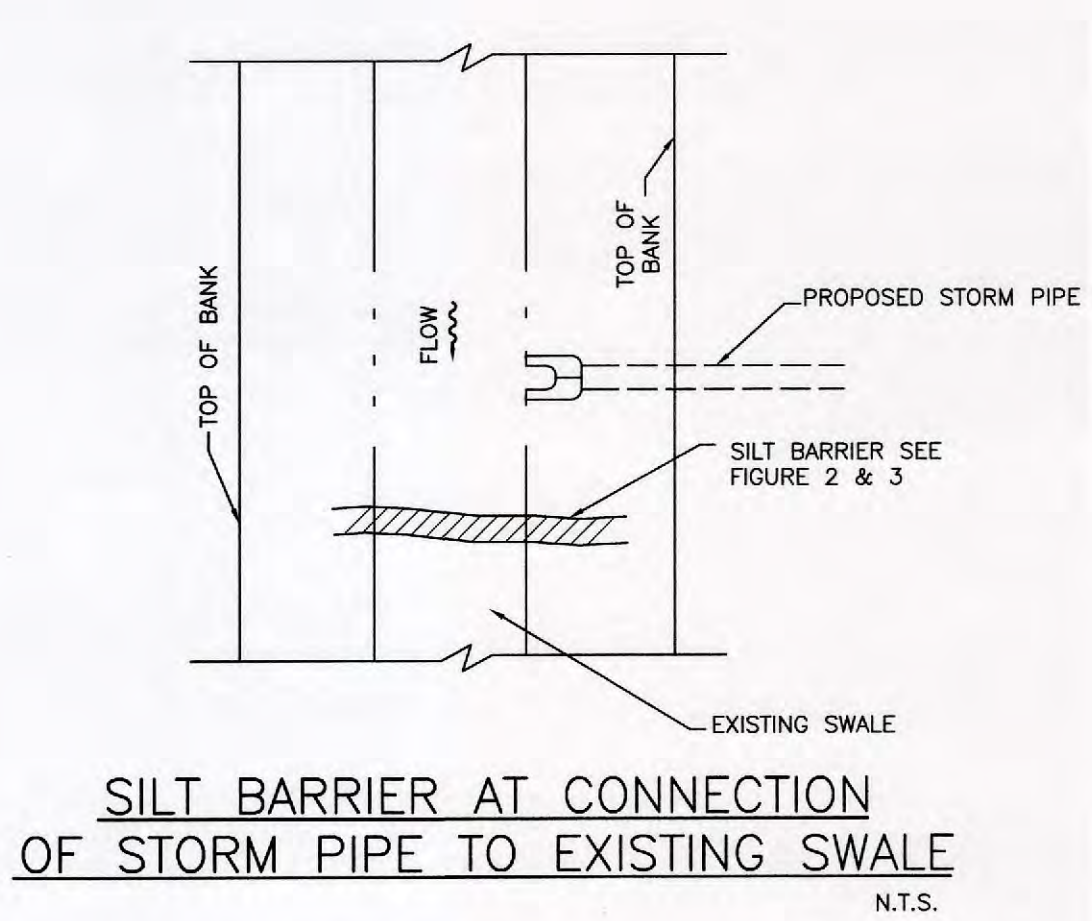


FIGURE 5

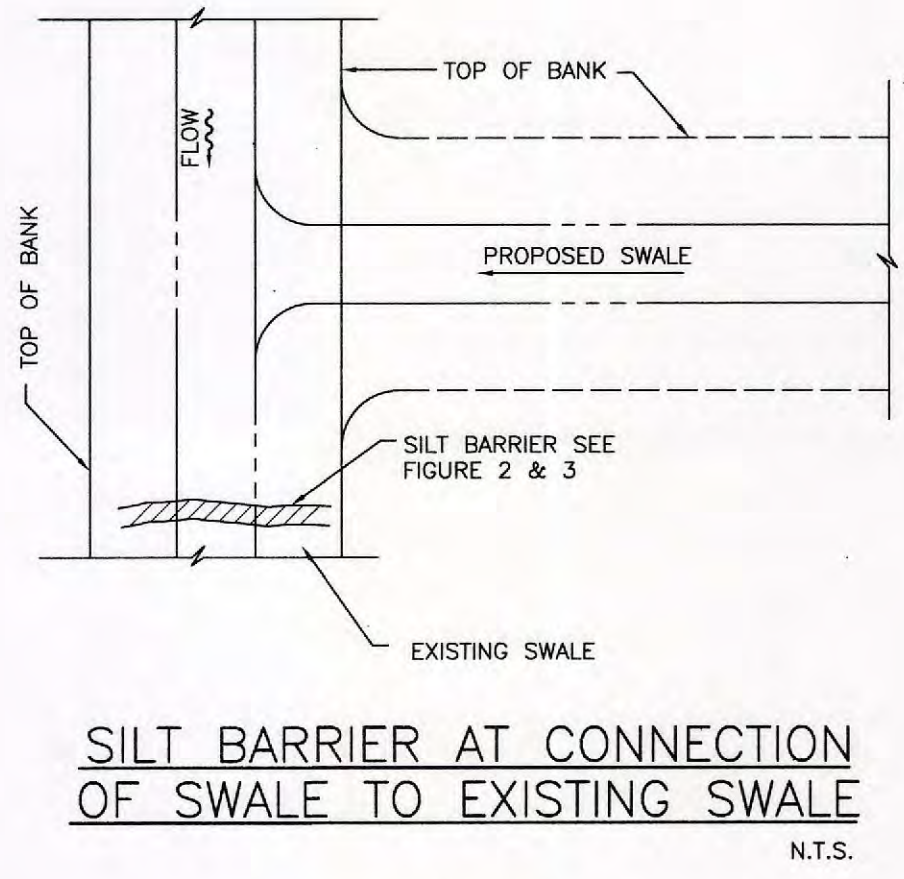


FIGURE 6

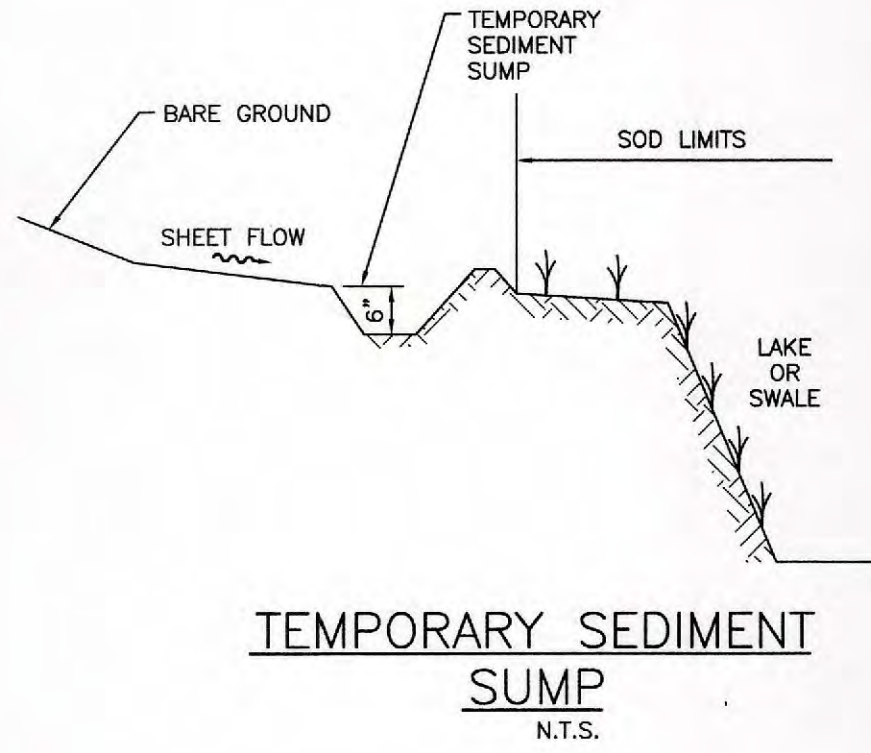


FIGURE 7

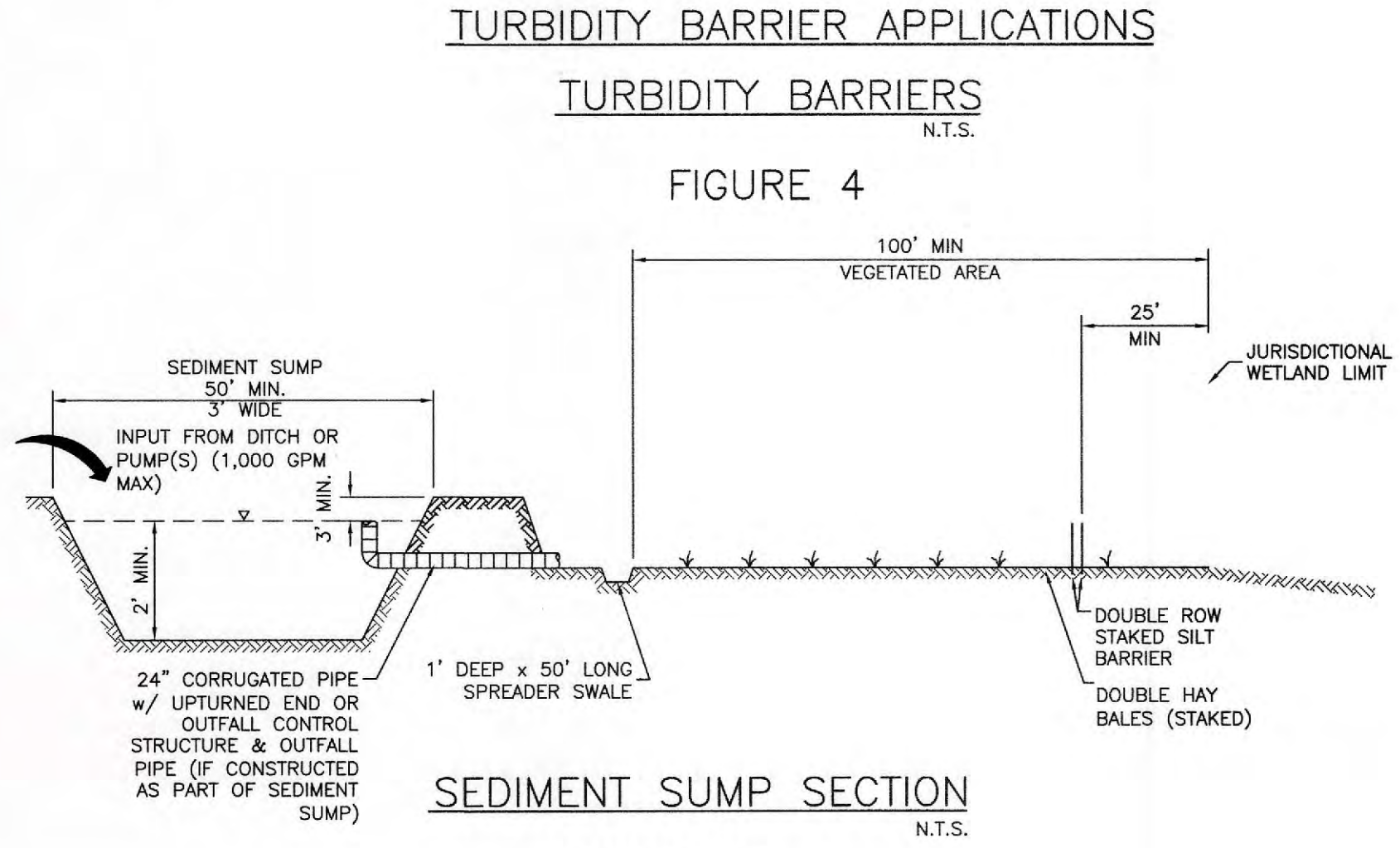
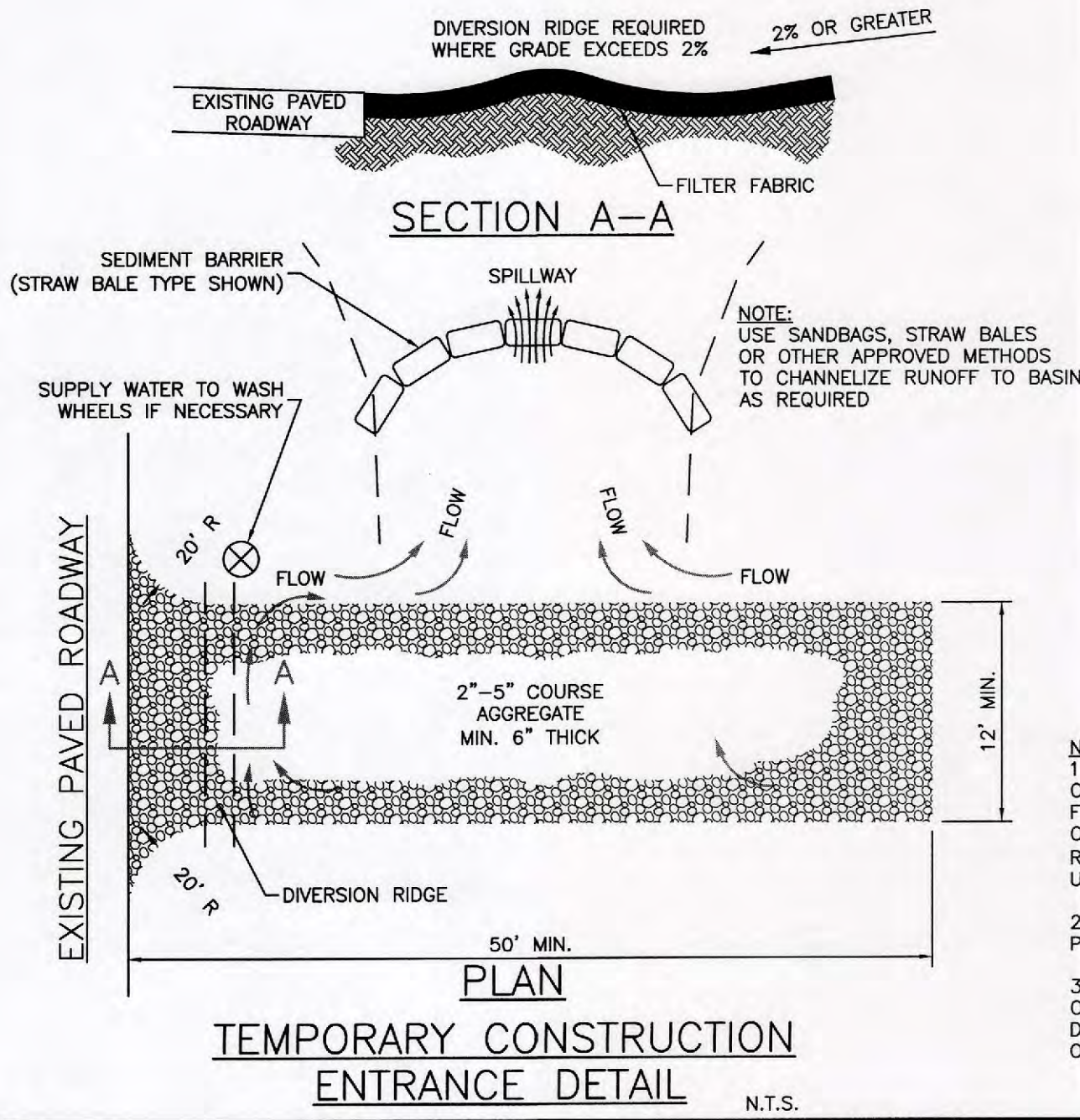


FIGURE 8



NOTE:
1. 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 TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

- NOTES:
1. THE CONTRACTOR SHALL ABIDE ALL APPLICABLE CONDITIONS OF THE REGULATORY AGENCY PERMITS AND HAVE COPIES OF THE PERMITS ON SITE. 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 SWFWMD AND FDEP 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 SWEEPED AS REQUIRED TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SHALL BE COVERED WITH A TARPULIN.
 4. ALL EXCAVATION, AND ACCESS TO AND FROM CONSTRUCTION AREAS SHALL BE WITHIN THE LIMITS OF THE PROJECT AREA.
 5. THE CONTRACTOR SHALL CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT AND SHALL USE WATER, STRAW MULCH, OR OTHER SUITABLE MATERIAL AS REQUIRED.
 6. AT A MINIMUM, SILT FENCES, OR EQUIVALENT SEDIMENT CONTROLS ARE REQUIRED FOR ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES OF THE CONSTRUCTION AREA.
 7. ALL CONSTRUCTION DEWATERING (IF NECESSARY) SHALL BE CONTAINED ONSITE AND ALLOWED TO INFILTRATE THE SOIL, UNLESS FDEP PERMITTING IS OBTAINED FOR OFFSITE DISCHARGE. ALL DEWATERING GROUNDWATER DISCHARGE SHALL BE ROUTED THROUGH A TEMPORARY SEDIMENT SUMP PRIOR TO DISCHARGE TO WETLANDS, OTHER SURFACE WATER, OR OFFSITE. THE GENERAL PROCESS OF THE DEWATERING SYSTEM, AS DEPICTED HEREIN, SHALL BE ADHERED TO DURING CONSTRUCTION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL APPLICABLE APPROVALS FOR ANY MODIFICATIONS HE PROPOSES.
 8. THE DEWATERING SYSTEM SHALL USE A PUMP AND PIPING THAT IS LESS THAN 6 INCHES IN DIAMETER AND OPERATE LESS THAN A TOTAL OF SIX MONTHS. ANY DEVIATION FROM THIS REQUIREMENT SHALL REQUIRE A WATER USE PERMIT. THE COST OF A WATER USE PERMIT AND ASSOCIATED MATERIALS SHALL BE BORNE BY THE CONTRACTOR.
 9. THE CONTRACTOR SHALL ERECT SILT FENCE, STAKED HAY BALES, STAKED TURBIDITY BARRIERS, AND FLOATING TURBIDITY BARRIERS PRIOR TO COMMENCEMENT OF EXCAVATION/GRADING ACTIVITY.
 10. REQUIRED EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSTALLED AND MAINTAINED AS REQUIRED THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.
 11. EROSION AND SEDIMENT CONTROL DEVICES (SILT FENCE, TURBIDITY BARRIERS, ETC.) ARE DEPICTED IN APPROXIMATE LOCATIONS AND SHALL BE ADJUSTED AS NECESSARY WITH THE DIRECTION OF THE PROJECT ECOLOGIST.
 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND PROPER DISPOSAL OF ALL EROSION, SEDIMENT AND TURBIDITY CONTROL DEVICES AT THE COMPLETION OF THE PROJECT.
 13. ALL ACTIVE IN-WATER WORK SHALL BE ENCLOSED WITH FLOATING TURBIDITY BARRIERS.
 14. TURBIDITY CONTROL DEVICES SHALL BE MAINTAINED AND SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION TO ENSURE THAT TURBIDITY LEVELS OUTSIDE THE ACTIVE IN WATER WORK AREA DO NOT EXCEED ALLOWABLE LEVELS.
 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT TURBIDITY CONTROL DEVICES ARE INSPECTED DAILY AND MAINTAINED IN GOOD WORKING ORDER SO THAT THE TURBIDITY LEVELS OUTSIDE THE ACTIVE IN WATER WORK AREA DO NOT EXCEED ALLOWABLE LEVELS.
 16. THE CONTRACTOR SHALL TAKE MEASURES TO ENSURE THAT TURBIDITY LEVELS WITHIN WATERS OF THE STATE SURROUNDING THE PROJECT AREA DO NOT EXCEED ALLOWABLE LEVELS. SUCH MEASURES INCLUDE BUT ARE NOT LIMITED TO, WORKING DURING SLACK TIDE, WORKING AT A TIME WHEN THE TIDAL RANGES ARE MINIMAL/LESS FREQUENT, AND WORKING WHEN CURRENTS WITHIN THE PROJECT AREA ARE AT MINIMAL INTENSITY.
 17. 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.
 18. ALL EROSION AND TURBIDITY CONTROL PROTECTION SHALL BE MAINTAINED BY THE CONTRACTOR IN COMPLIANCE WITH SWFWMD, MANATEE COUNTY, 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.

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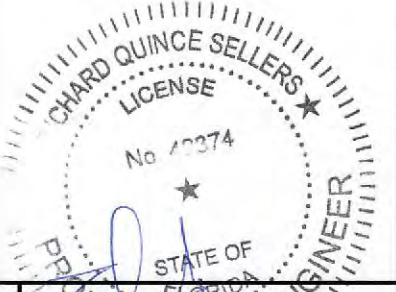
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						DRAWN BY:	KG/101511	9/2018
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CLIENT:	MANATEE BOARD OF COUNTY COMISSIONERS
PROJECT:	ROBINSON PRESERVE EXPANSION PHASE IIB RESTORATION
DATE:	SEPT. 2018
HORIZONTAL SCALE:	23
VERTICAL SCALE:	
SEC:	TWP: RGE: & 26 34S 16E

TITLE:	BEST MANAGEMENT PRACTICES DETAILS
CROSS REFERENCE FILE NO.:	
PROJECT NUMBER:	177310789



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REGISTERED PROFESSIONAL ENGINEER
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