



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
1520 ROYAL PALM SQUARE BLVD., SUITE 310
FORT MYERS, FLORIDA 33919

January 6, 2020

Regulatory Division
West Permits Branch
Fort Myers Permits Section

PUBLIC NOTICE

Permit Application Number SAJ-2019-00929 (SP-MLB)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANTS: Collier County Transportation Engineering Division
C/o Jay Ahmad
2885 S. Horseshoe Drive
Naples, FL 34104

Rookery Bay National Estuarine Research Reserve (RBNERR)
C/o Keith Laakkonen
300 Tower Road
Naples, FL 34113

WATERWAY AND LOCATION: The project would affect waters of the United States associated with the Big Cypress Swamp Watershed, Rookery Bay, Goodland Bay and the Gulf of Mexico. The project site is located on Goodland Drive near the intersection of County Road (CR) 92, in Section 13, Township 52 South, Range 26 East, Goodland, Collier County, Florida.

Directions to the site are as follows: From I-75 take exit 101 and head south on CR 951 towards Naples and Marco Island; Keep right at the fork and continue on CR 951 for about 7 miles; Make a left onto US-41 and head south for about 8 miles; Make a right onto San Marco Road and continue on for about 6 ½ miles; Make a left onto Goodland Drive (CR 892); The project will begin at this intersection.

APPROXIMATE CENTRAL COORDINATES: Latitude 25.92888°N
Longitude -81.65350°W

PROJECT PURPOSE:

Basic: Roadway rehabilitation

Overall: Raise a roadway to prevent flooding and increase the flushing beneath the roadway, two bays and a tidal mangrove forest.

EXISTING CONDITIONS: Goodland Drive is a public road that is owned and maintained by Collier County that is located on the southeast portion of Marco Island. Goodland Drive is the only egress and ingress and hurricane evacuation route for the residents of Goodland providing access to Cities of Marco Island and Naples. Goodland Drive intermittently floods during storm and tidal events, restricting access of residents to and from the community of Goodland. In addition, Goodland Drive limits the tidal flow from Goodland Bay to the mangrove forest west of Goodland Drive.

PROPOSED WORK: Collier County is proposing to rehabilitate Goodland Drive by elevating the road from SR 92A/San Marco to Harbor Place to reduce potential flooding. As part of the rehabilitation, Collier County is also proposing to install pipes beneath Goodland Drive to improve ebb and flow of tidal waters between the Goodland Bay and the mangrove forest and the Fruit Farm Creek Restoration Area to the west of Goodland Drive. Two canals will also be constructed to improve the tidal flushing from Goodland Bay to the mangrove forest. The canals will extend from the pipes within Collier County Right-of-Way (ROW) and cross onto RBNERR property to reach Goodland Bay. The proposed work would directly impact 1.24 acres of tidal wetlands and indirectly impact 3.85 acres of tidal wetlands by dredging and placing fill in the wetlands along the majority of the project corridor and installing five (5) pipes beneath Goodland Drive.

AVOIDANCE AND MINIMIZATION INFORMATION: The applicant has provided the following information in support of efforts to avoid and/or minimize impacts to the aquatic environment:

The full range of avoidance and minimization measures were considered in developing this project to avoid long-term and short-term impacts to wetland resources and to avoid new construction in wetlands wherever practicable. The proposed project will require work within wetlands to accomplish project objectives however the impacts to wetlands will be minimized through appropriate design and utilization of Best Management Practices (BMPs) for erosion control during construction. All dredging and filling impacts of 1.24 acres will be mitigated through the purchase of wetland mitigation from an USACE approved bank.

COMPENSATORY MITIGATION: The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

Wetland mitigation is proposed for the direct impacts of 1.24 acres. Based on the Unified Mitigation Assessment Method (UMAM), it is anticipated the proposed project will require 0.80 wetland mitigation credits to offset the direct wetland impacts. Collier County is proposing to purchase the forested saltwater wetland mitigation credits from Little Pine Island Mitigation Bank 45 days prior to construction. The secondary impacts

are calculated a distance of 25 feet from the direct impact areas, and these impacts typically require compensatory mitigation. It is anticipated that the proposed project will result in 3.85 acres of secondary wetland impacts. The installation of the pipes is not necessary to raise Goodland Drive. However, the Engineering Report for Restoration of Mangroves at Fruit Farm Creek indicated that placing pipes under Goodland Drive would have a net benefit to the adjacent mangrove forest. After coordination with RBNERR and the Conservancy of Southwest Florida, Collier County agreed to install the pipes under Goodland Drive to enhance the previous permitted (SFWMD Permit Number 170111-11) Fruit Farm Creek Mangrove Restoration area. Therefore, Collier County is proposing no compensatory mitigation for the secondary impacts associated with the proposed project. To demonstrate the proposed project will not negatively affect the adjacent mangrove forest, Collier County has agreed to conduct the Conservancy of Southwest Florida Monitoring Plan.

CULTURAL RESOURCES:

The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES:

The Corps has determined the proposal may affect, but is not likely to adversely affect the West Indian manatee (*Trichechus manatus*) and/or its designated critical habitat. The Corps has determined that the proposed project may affect the Smalltooth sawfish (*Pristis pectinata*) and its designated critical habitat. The Corps will initiate by separate letter, an informal consultation with the Fish and Wildlife Service and formal consultation with the National Marine Fisheries Service, pursuant to Section 7 of the Endangered Species Act.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would directly impact approximately 1.24 acres and indirectly impact 3.85 acres of mangrove tidal wetlands utilized by various life stages of saltwater species and their habitat. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with

laws and regulation governing the regulatory program. The jurisdictional line has not been verified by Corps personnel.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification is required from the Florida Department of Environmental Protection and/or one of the other state Water Management Districts.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Fort Myers Permits Section within 21 days from the date of this notice. For electronic mail (preferred) submit comments to michelle.l.bartley@usace.army.mil. For standard mail submit comments to 1520 Royal Palm Square Blvd., Suite 310, Fort Myers, Florida 33919, or by telephone at (239) 334-1975 ext. 0006. Please reference this permit number, SAJ- 2019-00929 (SP-MLB), on all submittals.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, Michelle Bartley, in writing at the Fort Myers Permits Section, 1520 Royal Palm Square Blvd., Suite 310, Fort Myers, Florida 33919, by e-mail at michelle.l.bartley@usace.army.mil, or by telephone at (239) 334-1975 ext. 0006.

IMPACT ON NATURAL RESOURCES: Preliminary review of this application indicates that an Environmental Impact Statement will not be required. Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area. By means of this notice, we are soliciting comments on the potential effects of the project on threatened or endangered species or their habitat

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food,

and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act of the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board, in the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

CONTRACT PLANS COMPONENTS

ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS

COLLIER COUNTY
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION ENGINEERING DIVISION

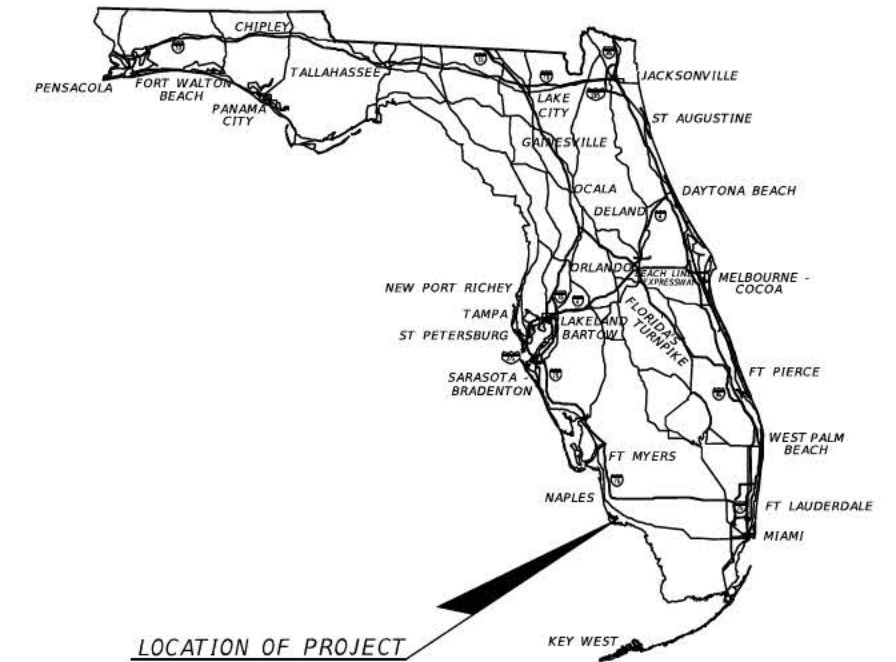
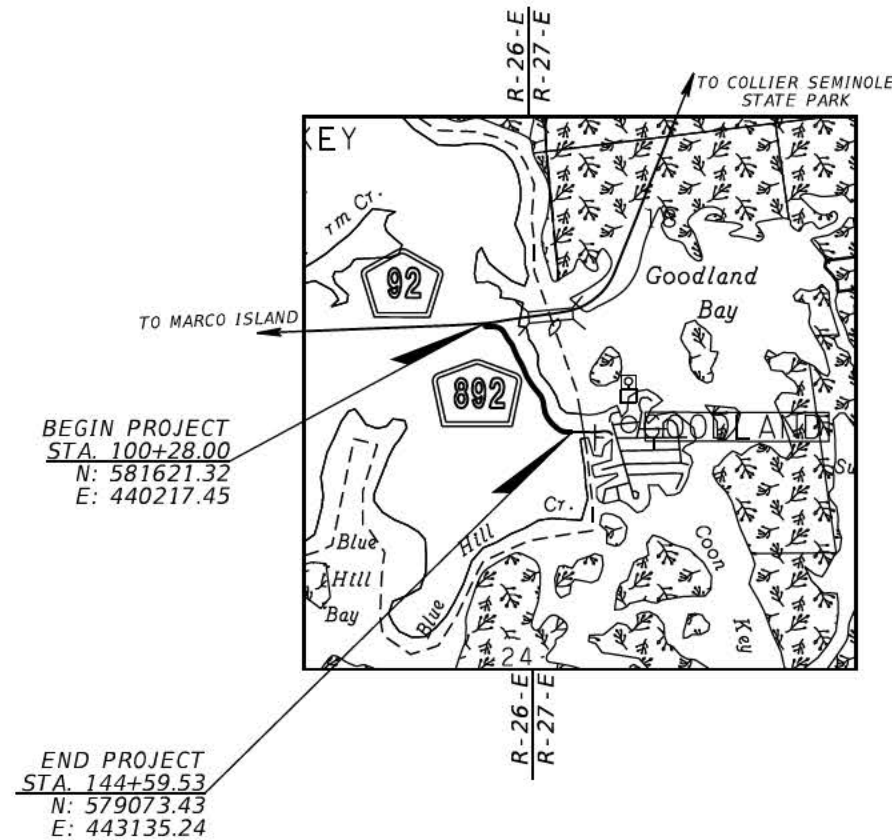
GOODLAND DRIVE
REHABILITATION PROJECT
CONSTRUCTION PLANS
PROJECT NO. 60200.2.1
GOODLAND DRIVE / CR 892
FROM SAN MARCO ROAD / CR 92 TO JUST SOUTH OF HARBOR PLACE

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	TYPICAL SECTION
3	DRAINAGE DETAILS
4	GENERAL NOTES
5-12	PLAN AND PROFILE
13	DRAINAGE STRUCTURES
14-45	CROSS SECTIONS
46-47	STORMWATER POLLUTION PREVENTION PLAN
TTC-1 - TTC-2	TEMPORARY TRAFFIC CONTROL PLAN

INDEX OF S&PM PLANS

SHEET NO.	SHEET DESCRIPTION
S-1 - S-8	SIGNING AND PAVEMENT MARKING PLAN SHEET



LOCATION OF PROJECT

PERMIT SUBMITTAL
JULY 2019

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2018-2019 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways, (Florida Greenbook, 2016)

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, January 2019 Standard Specifications for Road and Bridge Construction at the following website: <http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

ROADWAY PLANS

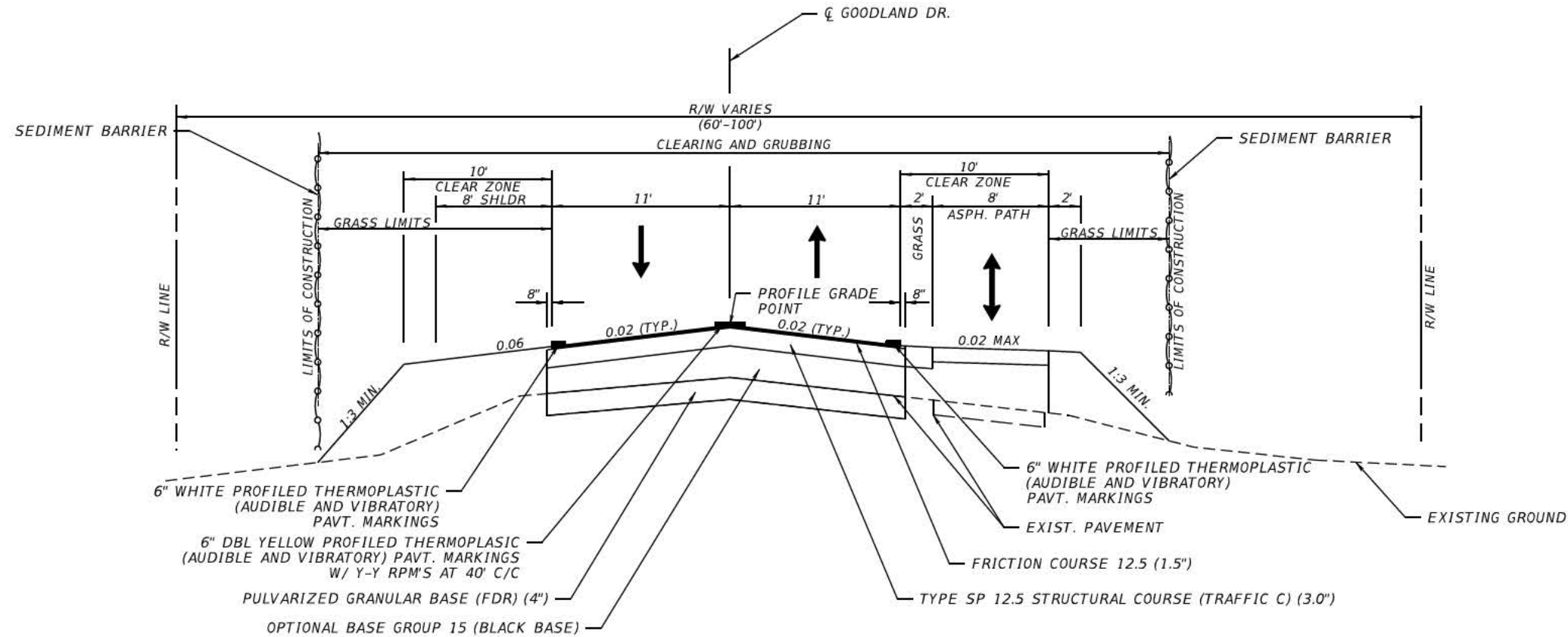
ENGINEER OF RECORD:

STEVEN L. WALLACE, P.E. NO.: 59537
DRMP INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647
(813) 265-9800
CONTRACT NO.: C9X02
VENDOR NO.: VF591791174001
CERTIFICATE OF AUTHORIZATION NO.: 2648

COUNTY PROJECT MANAGER:

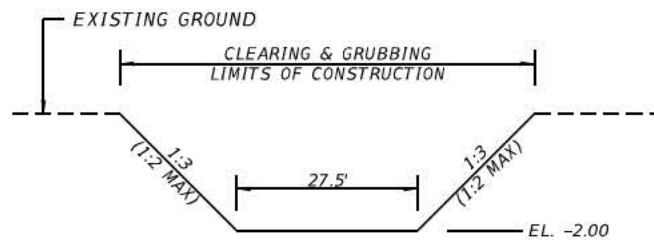
ANDREW MILLER, P.E.

FISCAL YEAR	SHEET NO.
21	1



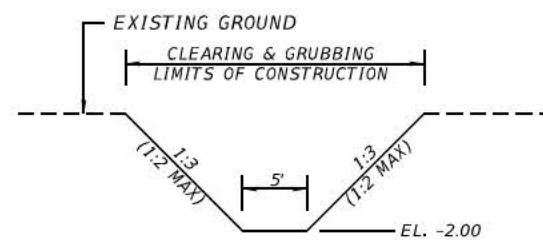
TYPICAL SECTION
GOODLAND DR
STA. 100+28.00 TO STA. 144+59.53

PAVEMENT RECONSTRUCTION
 FRICTION COURSE 12.5 (TRAFFIC C) - (1.5")
 SUPERPAVE TYPE SP 12.5 (TRAFFIC C) - (3.0")
 OPTIONAL BASE GROUP 15 (BLACK BASE-TYPE B-12.5) (DEPTH VARIES, SEE CROSS SECTIONS)
 PULVARIZED GRANULAR BASE (FDR) - (4")



DITCH TYPICAL SECTION A

STA. 10+23.50 TO STA. 10+48.50
STA. 20+25.93 TO STA. 21+50.93

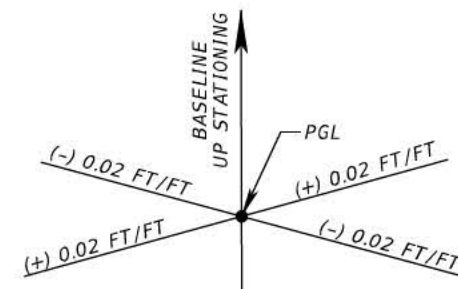


DITCH TYPICAL SECTION B

STA. 10+62.25 TO STA. 11+00.00
STA. 20+64.68 TO STA. 21+50.00

NOTE:

SIGN CONVENTION FOR ROADWAY CROSS SLOPE. AS DETAILED IN ROADWAY PLANS, IS AS FOLLOWS:



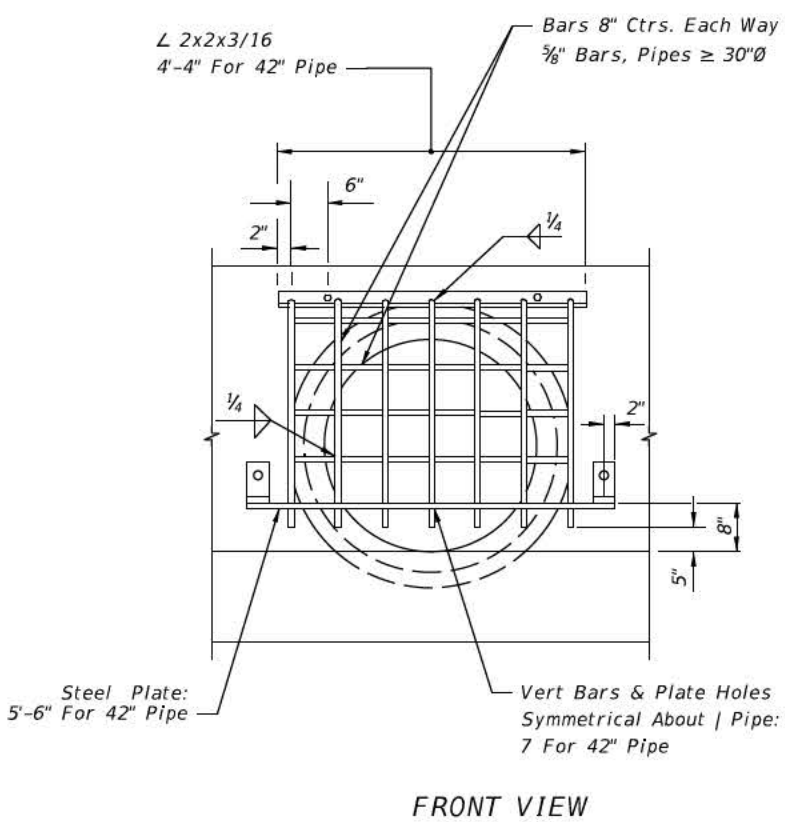
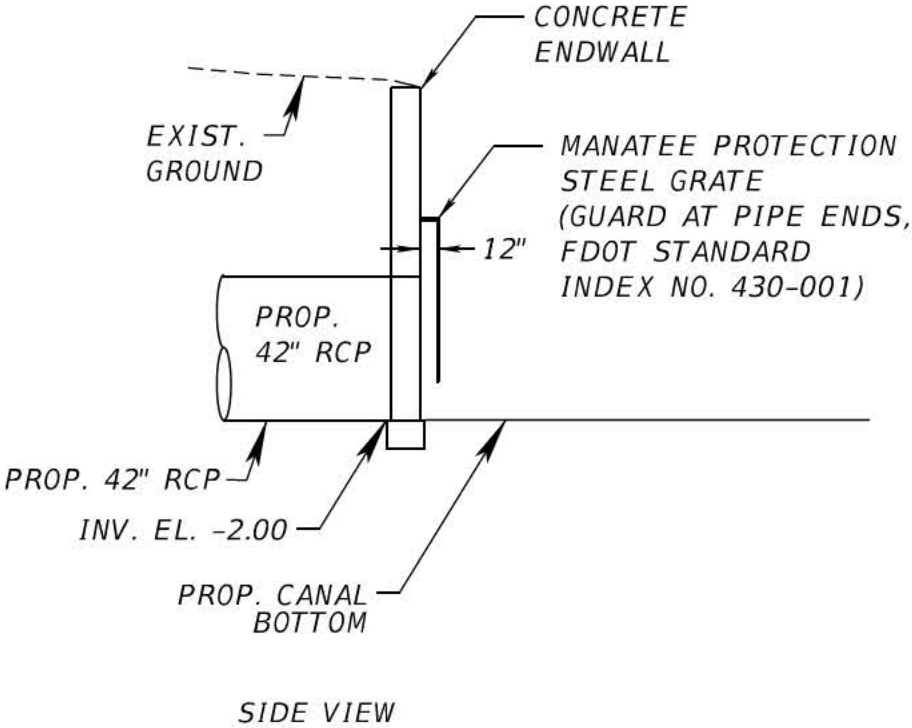
ANY CROSS SLOPE WHICH EXTENDS ABOVE AND TO THE LEFT OR BELOW AND TO THE RIGHT OF THE PGL IS CONSIDERED A NEGATIVE (-) CROSS SLOPE.

ANY CROSS SLOPE WHICH EXTENDS BELOW AND TO THE LEFT OR ABOVE AND TO THE RIGHT OF THE PGL IS CONSIDERED A POSITIVE (+) CROSS SLOPE.

POSTED SPEED: 30 MPH
DESIGN SPEED: 35 MPH

REVISIONS				DRMP, INC. 15310 AMBERLY DRIVE, SUITE 200 TAMPA, FLORIDA 33647 PHONE: (813) 265-9800 CERTIFICATE OF AUTHORIZATION No. 2648 STEVEN L. WALLACE, P.E. LICENSE NO.: 59537	COLLIER COUNTY		TYPICAL SECTION	SHEET NO. 2
DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY PROJECT No.		
					GOODLAND DR.	60200.21		

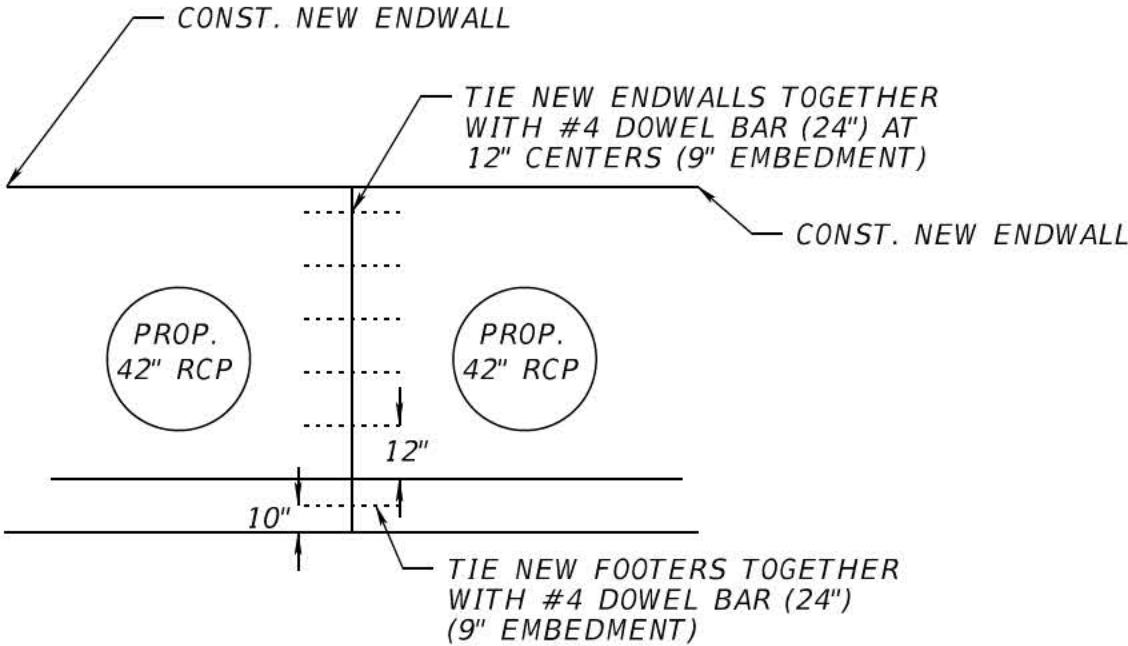
NOTE: FOR ADDITIONAL OUTFALL
DETAILS SEE FDOT INDEX NO. 430-001.



OUTFALL DETAIL @ PIPE CROSSINGS

N.T.S.

STA. 120+00.00 (LT)
STA. 130+00.00 (LT)



ENDWALL DETAIL
N.T.S.

- NOTES:
- 1) FIELD BEND DOWEL BARS AS NECESSARY TO AVOID CONFLICTS WITH PIPES
 - 2) USE AN ADHESIVE BONDING MATERIAL IN ACCORDANCE WITH SPECIFICATIONS SECTION 416 & 937 TO CONNECT DOWEL BARS TO EXISTING ENDWALL

REVISIONS				COLLIER COUNTY	DRAINAGE DETAILS	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			
				ROAD NO.	COUNTY PROJECT No.	
				GOODLAND DR.	60200.2.1	3

DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
SCOTT A. GARTH, P.E.
LICENSE NO.: 54018

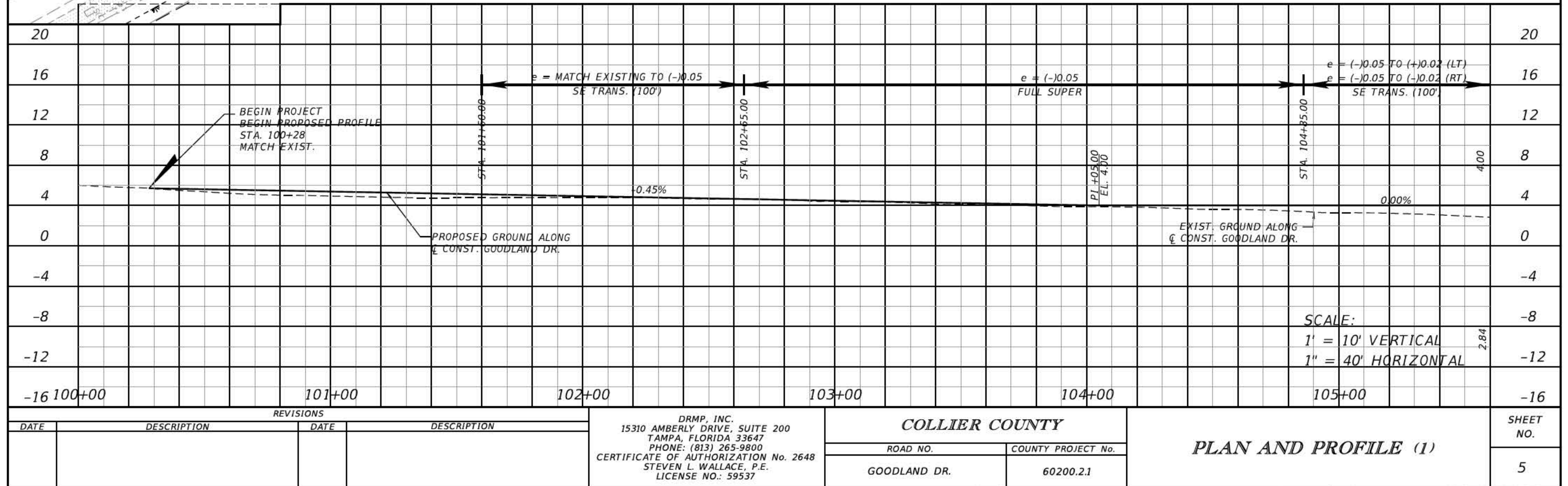
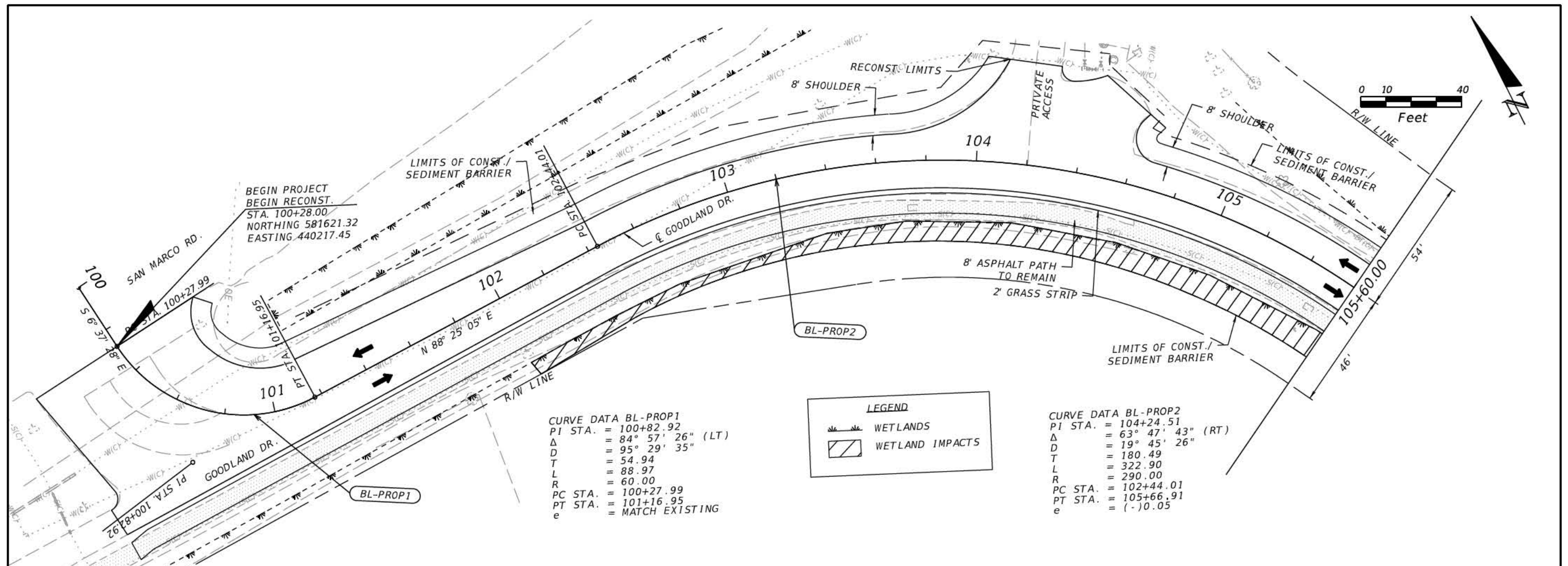
GENERAL NOTES

- 1. STRICT ADHERENCE TO SECTION 104 OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION WILL BE USED IN CONJUNCTION WITH THIS APPLICATION TO PROVIDE REASONABLE ASSURANCE THAT STATE WATER WUALITY STANDARDS WILL NOT BE VIOLATED.
- 2. TYPES OF EQUIPMENT IN THE CONSTRUCTION WILL INCLUDE: GRADEALL, DUMP TRUCKS, BULLDOZER, FRONT END LOADER, AND PUMPS.
- 3. EXCAVATED MATERIAL THAT IS SUITABLE WILL BE USED IN CONSTRUCTION OF SIDE ROAD SHOULDERS. UNSUITABLE MATERIAL WILL BE DISPOSED OF AND CONTAINED AT SITES PROVIDED BY THE CONTRACTOR.
- 4. FILL MATERIAL SHALL BE OF SATISFACTORY MATERIAL THAT IS CLEAN AND COMPACTIBLE INTO A SUITABLE AND ENDURING POND AND MAINTENANCE BERM.
- 5. ALL ELEVATIONS SHOWN IN THIS PERMIT APPLICATION ARE REFERENCED TO USGS NAVD 1988.
- 6. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND STORAGE OF ALL ORGANIC MATERIAL. ONSITE STORAGE LOCATIONS MUST BE PRE-APPROVED BY COLLIER COUNTY.
- 7. THE FOLLOWING ARE IMPACTED JURISDICTIONAL AREAS DUE TO THE PROPOSED ROADWAY.

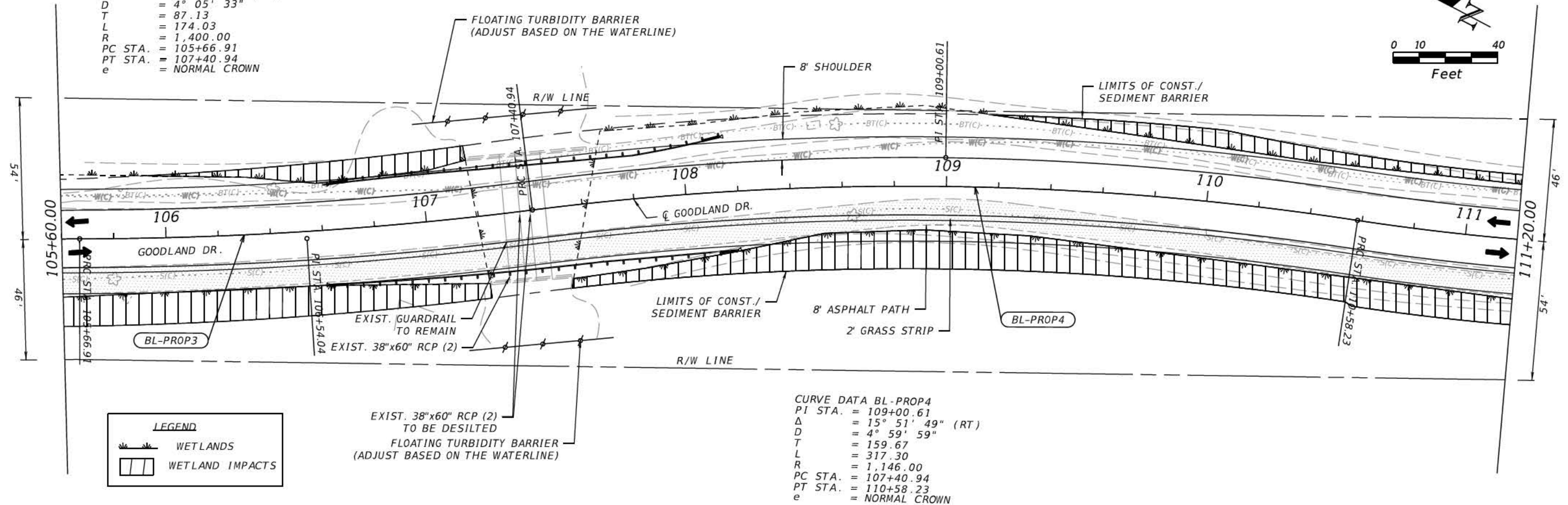
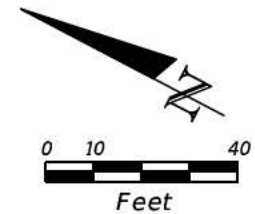
WETLAND ID	DIRECT WETLAND IMPACT IN ACRES	DREDGE VOLUME (CY)	FILL VOLUME (CY)
A	1.24	646	1007

REVISIONS				COLLIER COUNTY	GENERAL NOTES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			
				ROAD NO.	COUNTY PROJECT No.	
				GOODLAND DR.	60200.21	4

DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
STEVEN L. WALLACE, P.E.
LICENSE NO.: 59537



CURVE DATA BL-PROP3
PI STA. = 106+54.04
 Δ = 7° 07' 20" (LT)
D = 4° 05' 33"
T = 87.13
L = 174.03
R = 1,400.00
PC STA. = 105+66.91
PT STA. = 107+40.94
e = NORMAL CROWN



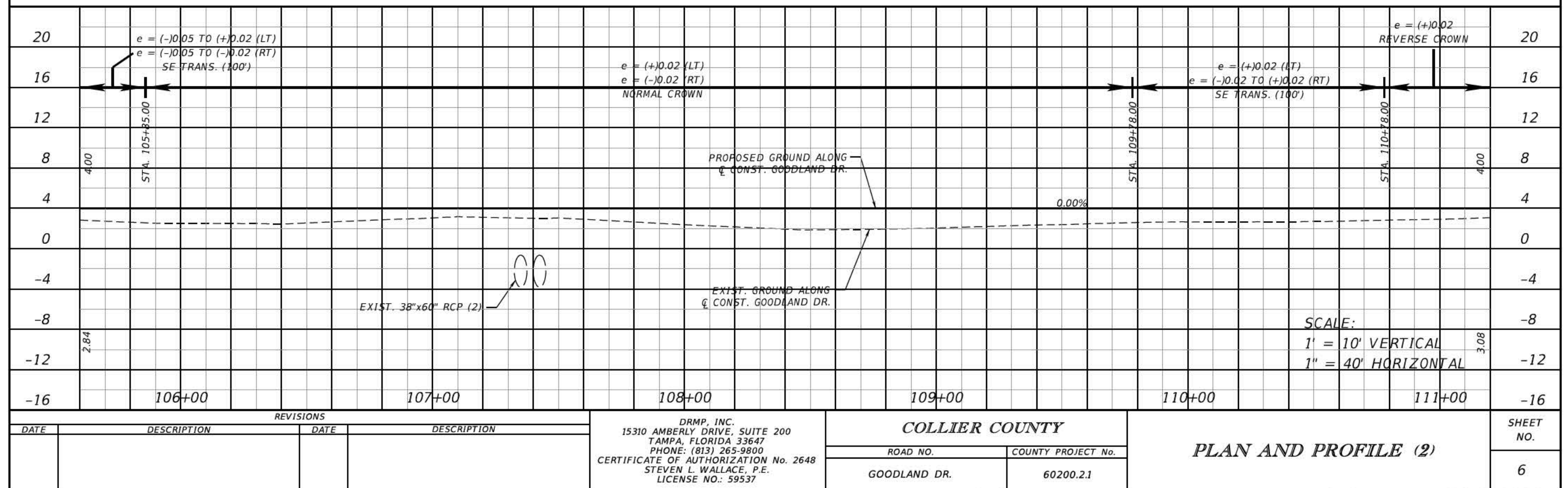
LEGEND

WETLANDS

WETLAND IMPACTS

EXIST. 38"x60" RCP (2)
TO BE DESILTED
FLOATING TURBIDITY BARRIER
(ADJUST BASED ON THE WATERLINE)

CURVE DATA BL-PROP4
PI STA. = 109+00.61
 Δ = 15° 51' 49" (RT)
D = 4° 59' 59"
T = 159.67
L = 317.30
R = 1,146.00
PC STA. = 107+40.94
PT STA. = 110+58.23
e = NORMAL CROWN



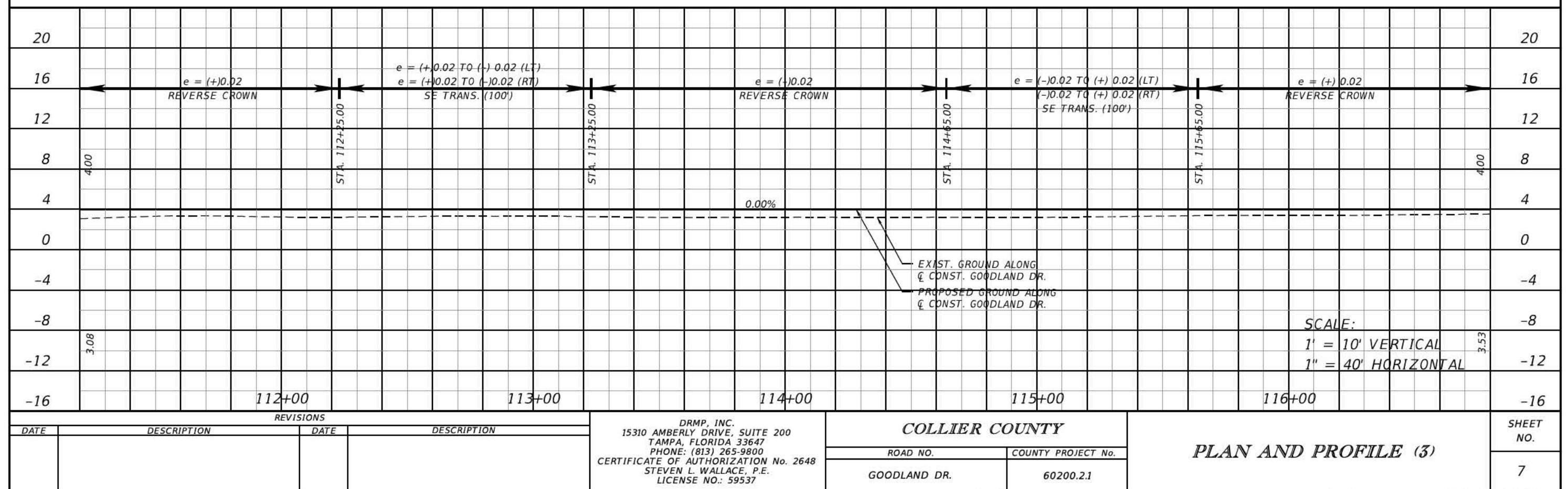
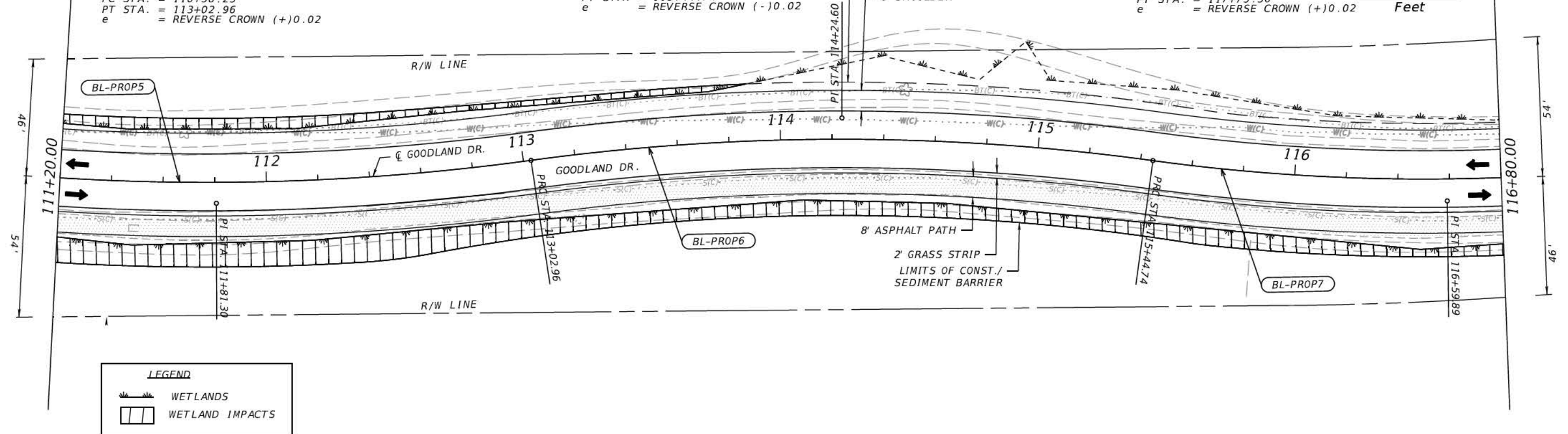
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

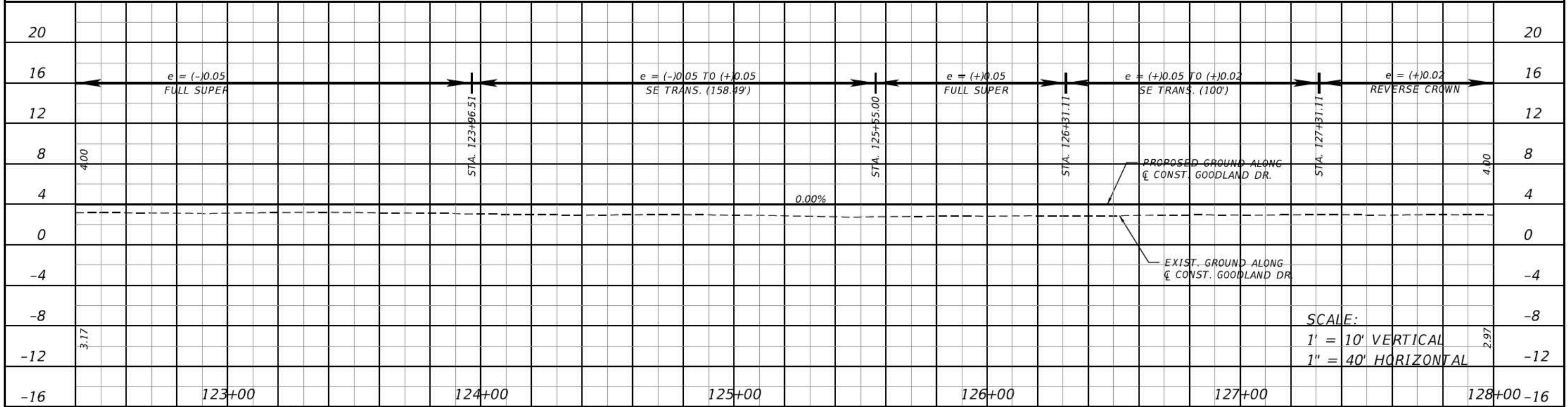
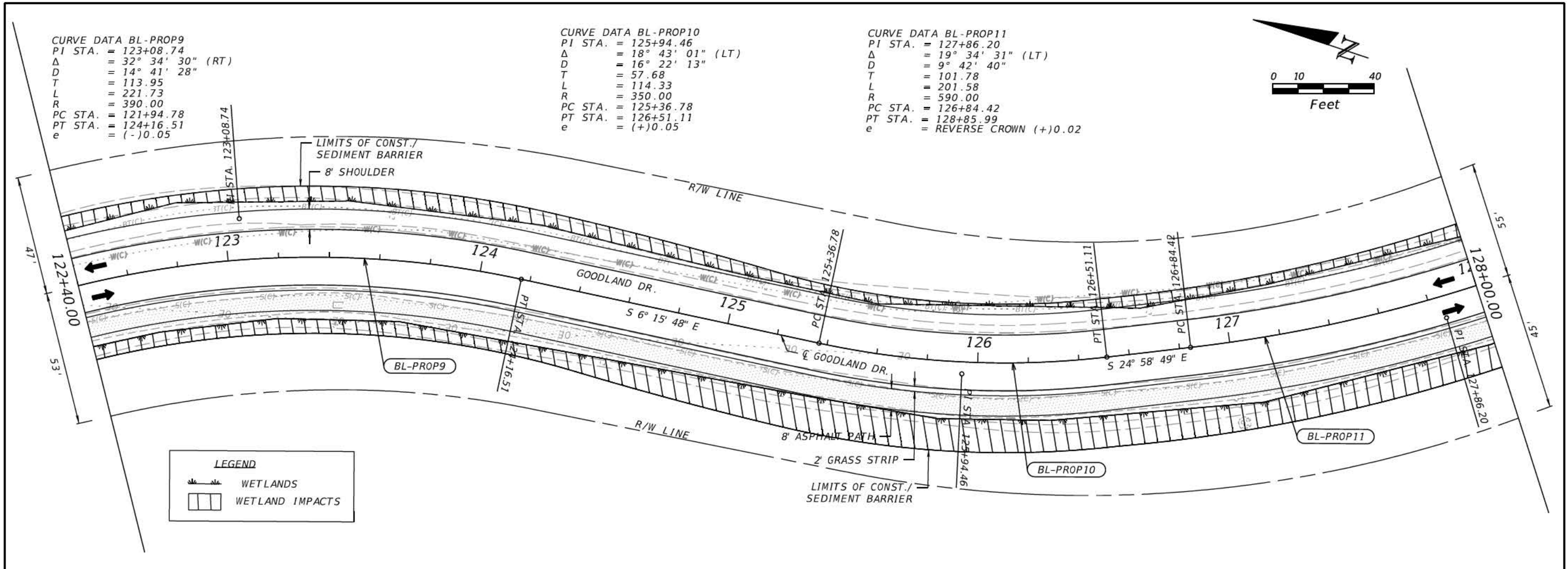
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
STEVEN L. WALLACE, P.E.
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COLLIER COUNTY	
ROAD NO.	COUNTY PROJECT No.
GOODLAND DR.	60200.21

PLAN AND PROFILE (2)	
SHEET NO.	6

CURVE DATA BL-PROP7
 PI STA. = 116+59.89
 Δ = 16° 54' 08" (LT)
 D = 7° 23' 35"
 T = 115.15
 L = 228.63
 R = 775.00
 PC STA. = 115+44.74
 PT STA. = 117+73.36
 e = REVERSE CROWN (+)0.02





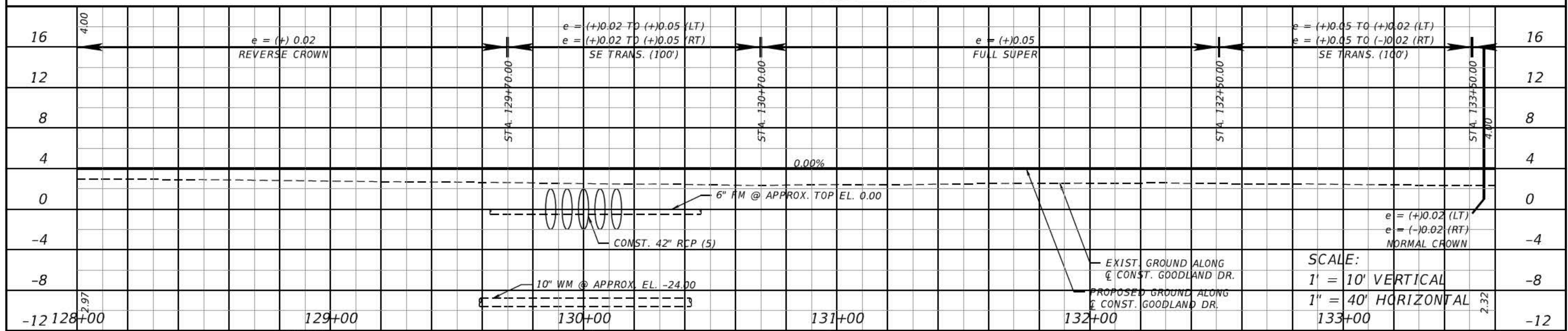
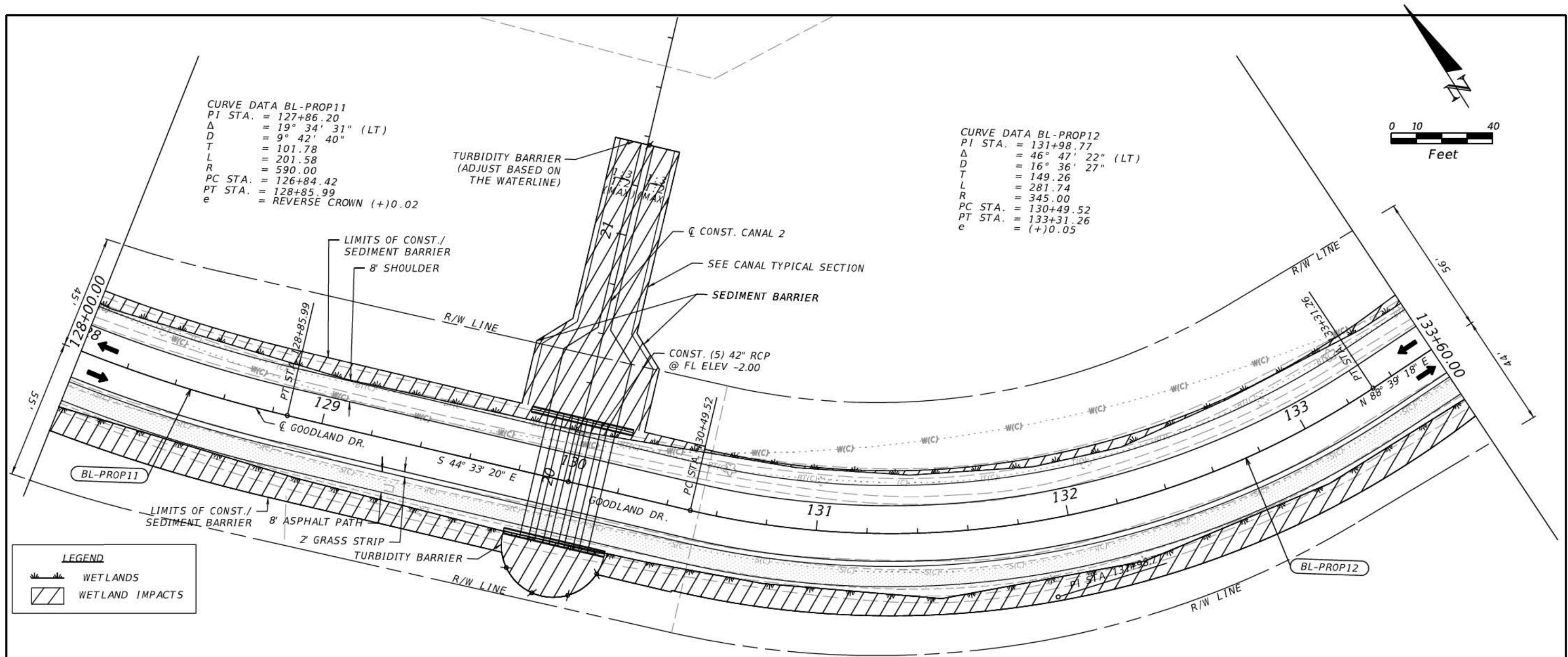
REVISIONS				COLLIER COUNTY	ROAD NO.	COUNTY PROJECT No.	PLAN AND PROFILE (5)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION					

DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
STEVEN L. WALLACE, P.E.
LICENSE NO.: 59537

GOODLAND DR.

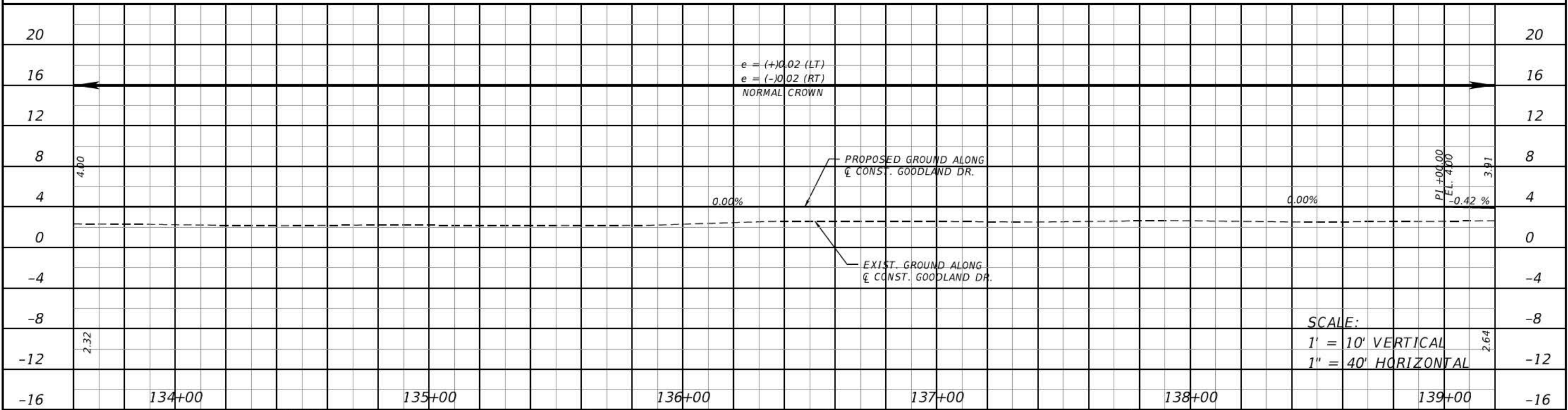
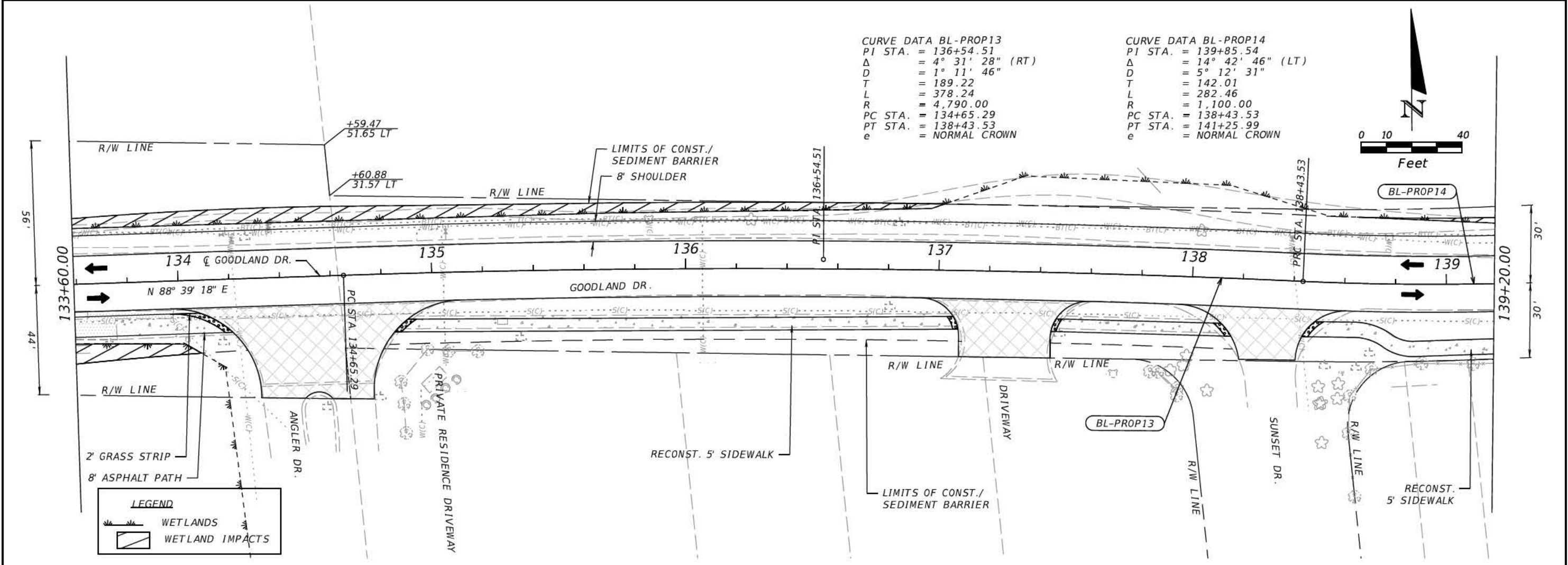
60200.21

9



REVISIONS				COLLIER COUNTY	ROAD NO. GOODLAND DR.	COUNTY PROJECT No. 60200.21	PLAN AND PROFILE (6)	SHEET NO. 10
DATE	DESCRIPTION	DATE	DESCRIPTION					

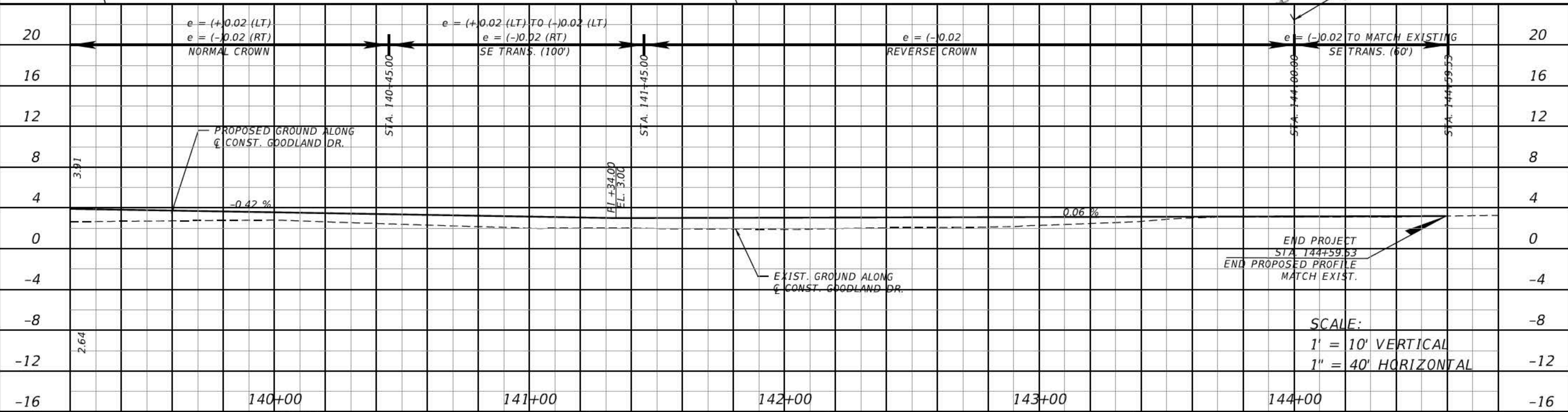
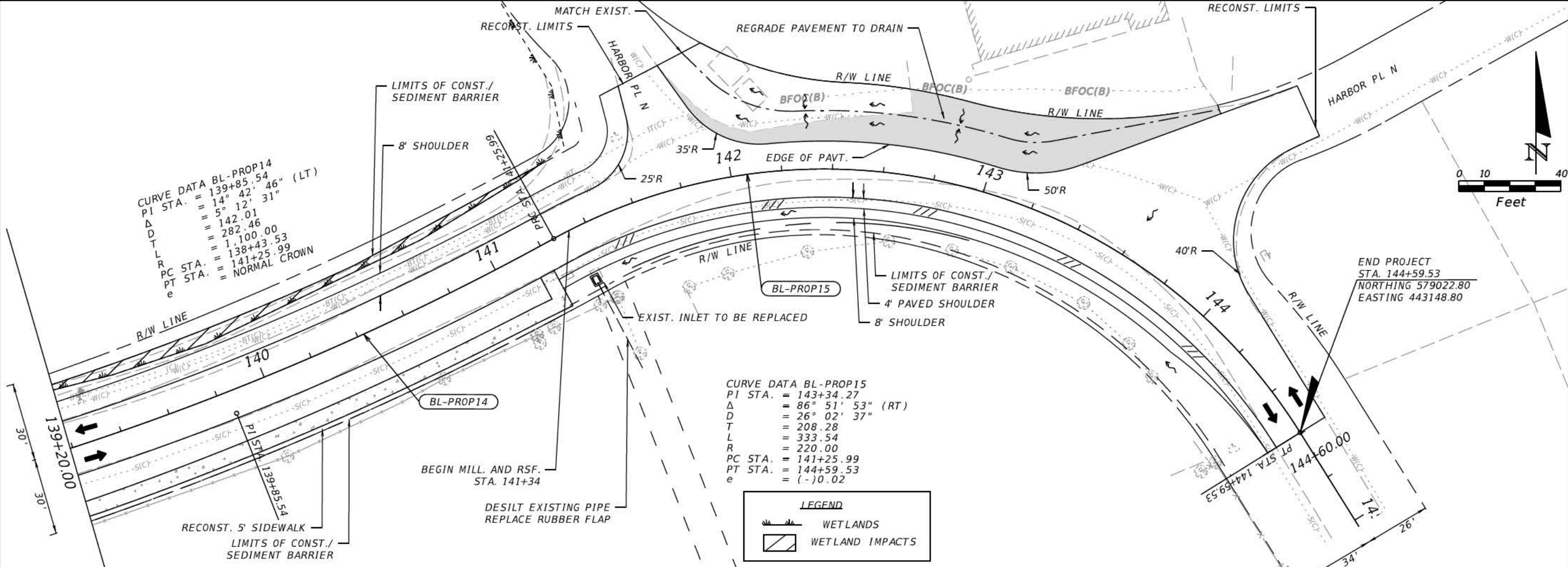
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
STEVEN L. WALLACE, P.E.
LICENSE NO.: 59537



REVISIONS				COLLIER COUNTY	ROAD NO. GOODLAND DR.	COUNTY PROJECT No. 60200.21	SHEET NO. 11
DATE	DESCRIPTION	DATE	DESCRIPTION				

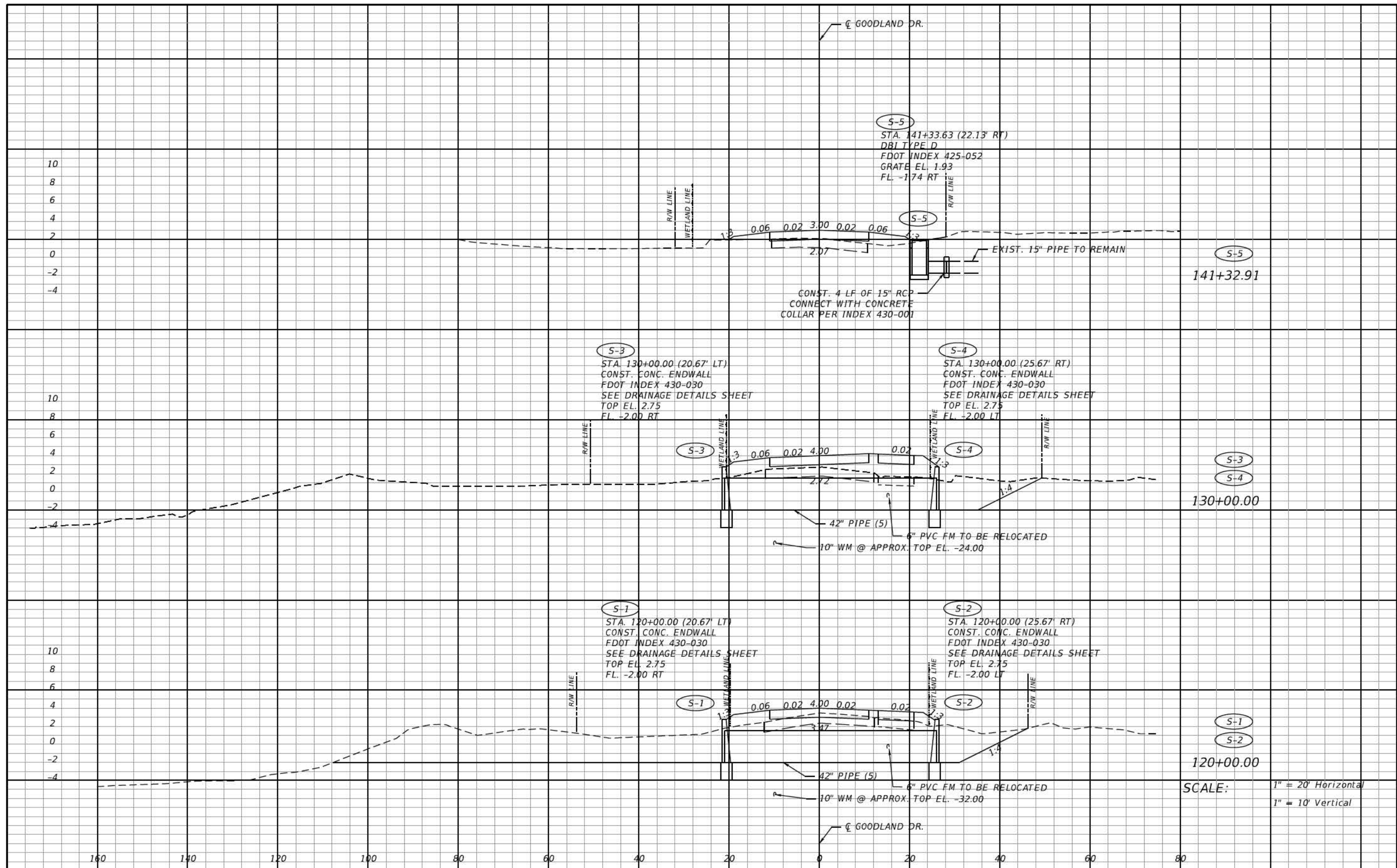
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
STEVEN L. WALLACE, P.E.
LICENSE NO.: 59537

PLAN AND PROFILE (7)



REVISIONS				COLLIER COUNTY	ROAD NO. GOODLAND DR.	COUNTY PROJECT No. 60200.21	PLAN AND PROFILE (8)	SHEET NO. 12
DATE	DESCRIPTION	DATE	DESCRIPTION					

DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
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LICENSE NO.: 59537

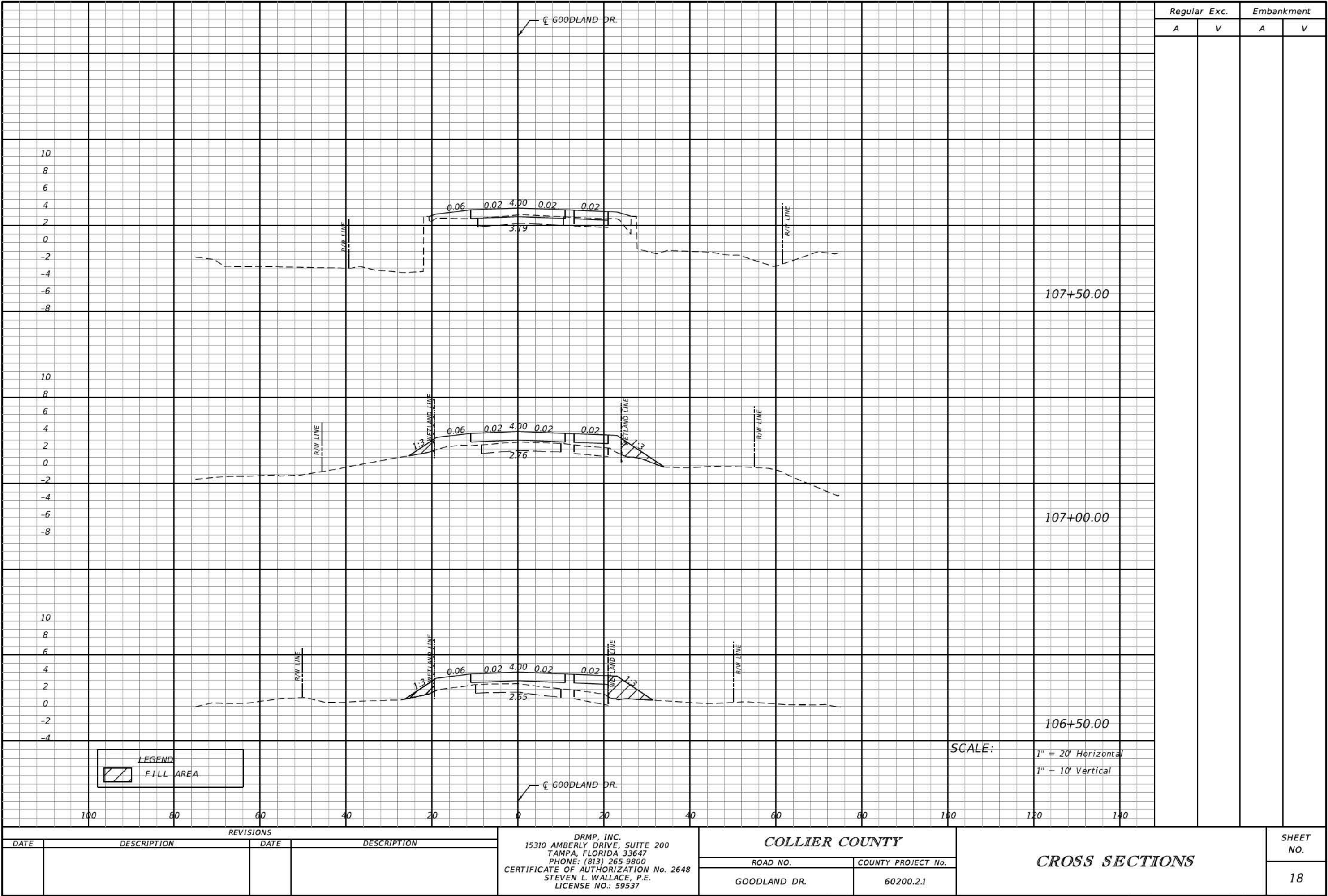


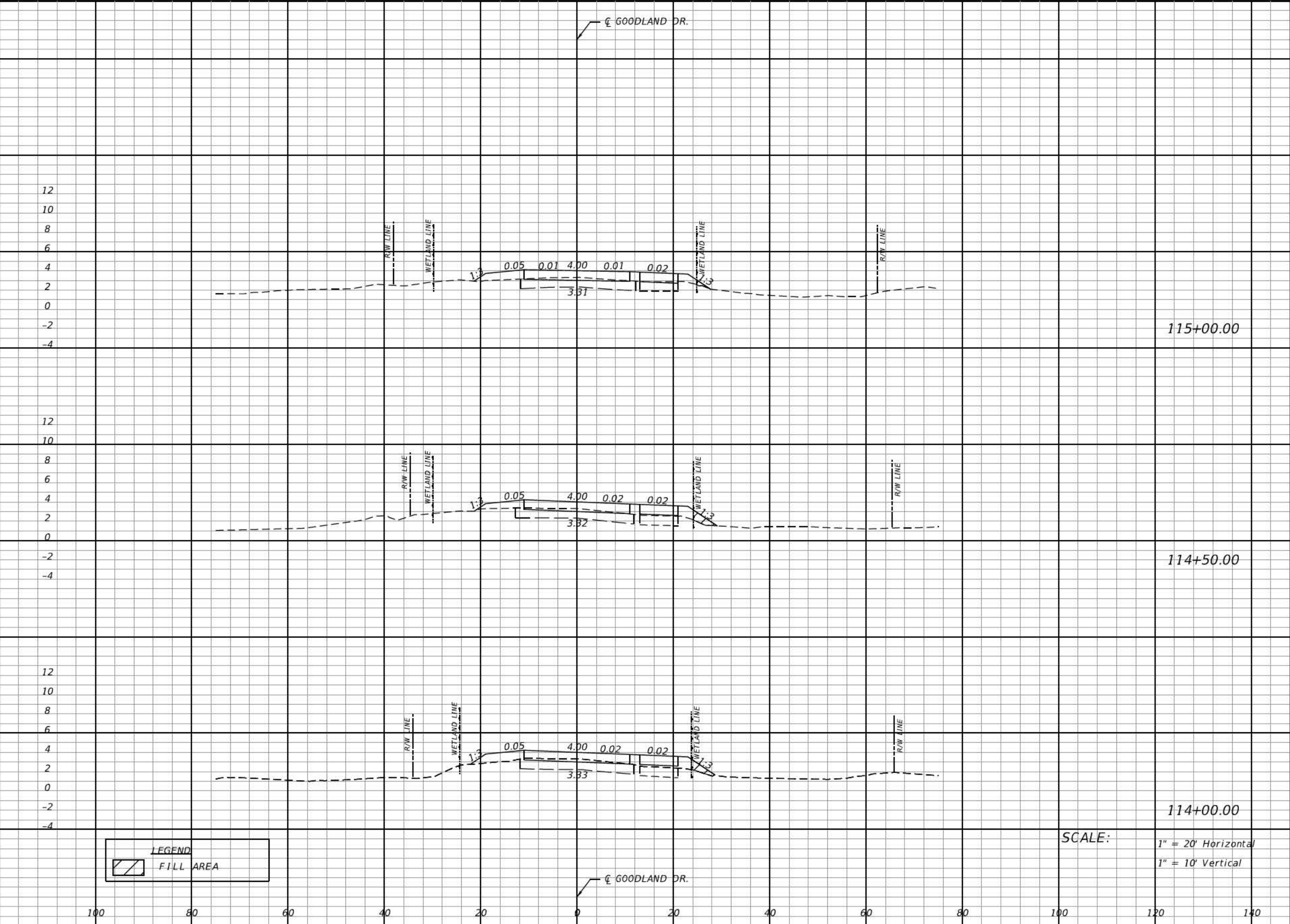
SCALE: 1" = 20' Horizontal
1" = 10' Vertical

REVISIONS				COLLIER COUNTY	DRAINAGE STRUCTURES	SHEET NO. 13
DATE	DESCRIPTION	DATE	DESCRIPTION			
				ROAD NO. GOODLAND DR.	COUNTY PROJECT No. 60200.21	

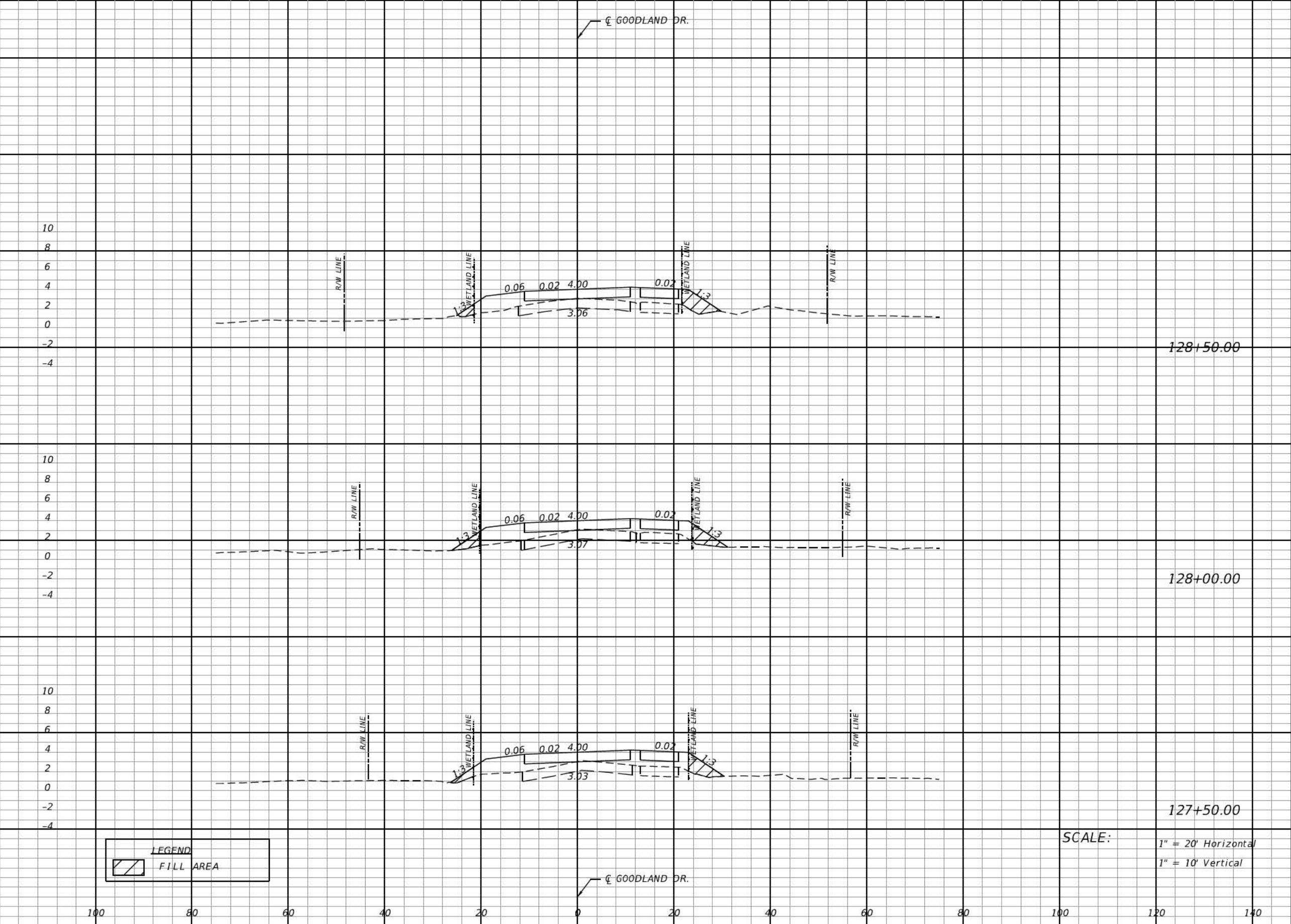
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
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PHONE: (813) 265-9800
CERTIFICATE OF AUTHORIZATION No. 2648
SCOTT A. GARTH, P.E.
LICENSE NO.: 54018

9/3/2019 11:31:48 AM \\drmp1.com\prj\Projects17\17-0572.000_Goodland_Drive_Rehabilitation_Project\Drainage





Regular		Exc.	Embankment			
A	V		A	V		
				115+00.00		
				114+50.00		
				114+00.00		
SCALE:						
REVISIONS						
DATE	DESCRIPTION	DATE	DESCRIPTION	SHEET NO.		
DRMP, INC. 15310 AMBERLY DRIVE, SUITE 200 TAMPA, FLORIDA 33647 PHONE: (813) 265-9800 CERTIFICATE OF AUTHORIZATION No. 2648 STEVEN L. WALLACE, P.E. LICENSE NO.: 59537				23		
COLLIER COUNTY						
ROAD NO. COUNTY PROJECT No.				CROSS SECTIONS		
GOODLAND DR. 60200.21						



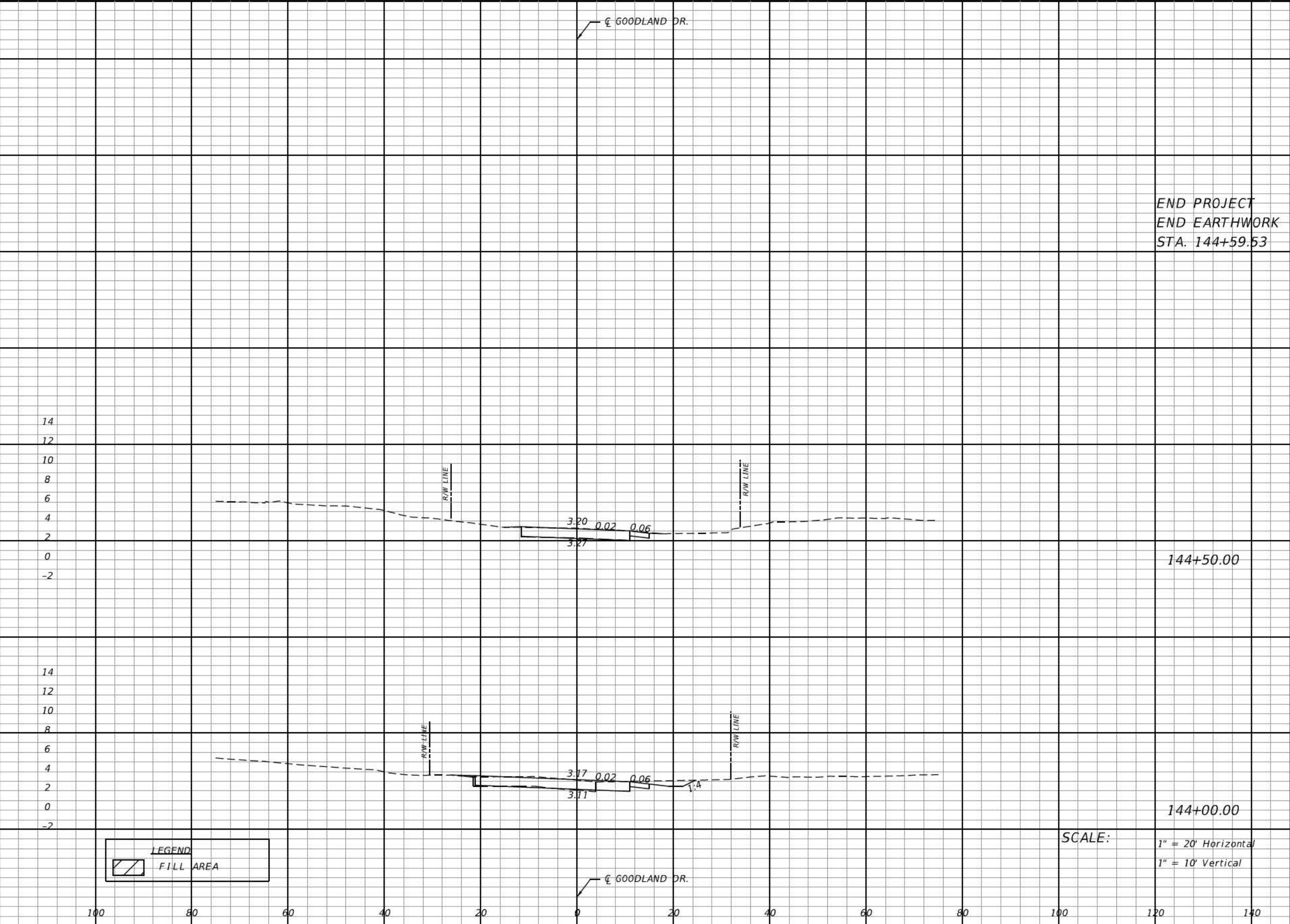
Regular		Exc.	Embankment	
A	V	A	V	
				128+50.00
				128+00.00
				127+50.00

LEGEND

FILL AREA

SCALE: 1" = 20' Horizontal
1" = 10' Vertical

REVISIONS				COLLIER COUNTY		CROSS SECTIONS		SHEET NO.
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Regular		Exc.	Embankment	
A	V	A	V	
END PROJECT END EARTHWORK STA. 144+59.53				
144+50.00				
144+00.00				
SCALE: 1" = 20' Horizontal 1" = 10' Vertical				

REVISIONS				COLLIER COUNTY		CROSS SECTIONS		SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION					
				ROAD NO. GOODLAND DR.		COUNTY PROJECT No. 60200.2.1		43

DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FLORIDA 33647
PHONE: (813) 265-9800
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STEVEN L. WALLACE, P.E.
LICENSE NO.: 59537

STORMWATER POLLUTION PREVENTION PLAN
GOODLAND DRIVE REHABILITATION
FINANCIAL PROJECT ID.: 60200.2.1

THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS PROVIDED TO ASSIST THE CONTRACTOR IN DEVELOPING THE REQUIRED SITE SPECIFIC EROSION CONTROL PLAN AND OTHER ITEMS NECESSARY TO OBTAIN COVERAGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERIC PERMIT (CGP). REFER TO THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL FOR ADDITIONAL REQUIREMENTS.

1.0 SITE DESCRIPTION:

(1.A.) NATURE OF CONSTRUCTION ACTIVITY:

THE PROPOSED IMPROVEMENTS TO GOODLAND DR. ARE TO BE PERFORMED FROM SAN MARCO RD. TO HARBOR PL. N. THE COUNTY PROPOSES ROADWAY RECONSTRUCTION TO RAISE THE ROADWAY AND PROVIDING CONVEYANCE OF WATER BENEATH THE ROADWAY FOR ENVIRONMENTAL PURPOSES.

(1.B.) INTENDED SEQUENCE OF MAJOR SOIL DISTURBING ACTIVITIES:

IN THE CONTRACTOR'S SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN, PREPARE A DETAILED CONSTRUCTION SCHEDULE TO INDICATE DATES OF MAJOR GRADING ACTIVITIES AND SEQUENCES OF TEMPORARY AND PERMANENT SOIL DISTURBING ACTIVITIES ON ALL PORTIONS OF THE PROJECT. FOR ADDITIONAL INFORMATION, REFER TO SECTION 4.7 OF THE NPDES CGP.

LIST OF INTENDED ACTIVITIES:

(1.B.1.) FOR EACH CONSTRUCTION PHASE, INSTALL PERIMETER CONTROLS PRIOR TO CLEARING AND GRUBBING OR ANY OTHER CONSTRUCTION ACTIVITIES. REMOVE PERIMETER CONTROLS ONLY AFTER ALL UPSTREAM AREAS ARE STABILIZED AND PERMANENT VEGETATION IS ESTABLISHED.

(1.B.2.) TIME CONSTRUCTION ACTIVITIES TO LIMIT IMPACT FROM SEASONAL CHANGES OR WEATHER EVENTS.

(1.B.3.) PROVIDE POLLUTION CONTROL BY IMPLEMENTING DUST CONTROL DURING ALL PHASES OF CONSTRUCTION.

(1.B.4.) OFFSITE RUNOFF SHOULD BE DIVERTED AWAY OR THROUGH THE CONSTRUCTION AREA, IF POSSIBLE. THIS ADDITIONAL FLOW, IF NOT DIVERTED, CAN ADD VOLUME AND SIZE TO STRUCTURAL PRACTICES, REQUIRING MORE FREQUENT MAINTENANCE AND LIMITING EFFECTIVENESS OF EROSION AND SEDIMENT CONTROLS.

(1.C.) PROJECT AREA ESTIMATES:

TOTAL SITE AREA: 7.3 ACRES.
TOTAL AREA TO BE DISTURBED: 6.9 ACRES.

(1.D.) RUNOFF DATA:

RUNOFF COEFFICIENTS BEFORE Cw (B), DURING Cw (D) AND AFTER Cw (A) CONSTRUCTION.

RUNOFF COEFFICIENTS FOR:
GRASSED SHOULDERS ADJACENT TO ROADWAY: C=0.35
IMPERVIOUS ROADWAYS AND PAVED SHOULDER: C=0.95
DISTURBED AREAS, EXPOSED SOIL, ETC., DURING CONSTRUCTION: C=0.40

WEIGHTED RUN-OFF COEFFICIENT:
BEFORE: Cw (B) = 0.67 DURING: Cw (D) = 0.71 AFTER: Cw (A) = 0.73

THE RUN-OFF COEFFICIENT Cw (D), IS CALCULATED ASSUMING THAT THE MAXIMUM ALLOWABLE AREA OF SOIL IS DISTURBED DURING CONSTRUCTION AND THE REMAINING AMOUNT IS THE EXISTING IMPERVIOUS AND GRASSED SHOULDER AREAS.

OUTFALL INFORMATION:

THERE ARE NO OUTFALLS ON THIS PROJECT, AS THE AREA DOES NOT BELONG TO A BASIN.

THE OUTFALLS DISCHARGE INTO THE FOLLOWING BASINS:

BASIN		WBID	PARAMETER(S) OF CONCERN FOR 303(d) LISTING		
N/A		N/A	N/A		
OUTFALL LOCATIONS: (TEMPORARY AND PERMANENT)					
DESCRIPTION		DRAINAGE AREA	LATITUDE	LONGITUDE	RECEIVING WATERBODY
(a)	N/A	N/A	N/A	N/A	N/A

THIS FACILITY DOES NOT DISCHARGE TO WATERS LISTED ON THE ADOPTED FDEP VERIFIED LIST OR ADOPTED TMDL FOR IMPAIRMENT DUE TO TOTAL SUSPENDED SOLID, TURBIDITY, NUTRIENTS, DISSOLVED OXYGEN, OR FECAL COLIFORM.

WETLAND AND/OR SURFACE WATER IMPACTS SHALL BE LIMITED TO THE AREAS DESCRIBED IN THE APPROVED PERMITS FOR THE PROJECT.

(1.E.) SITE MAP:

THE SITE MAP SHALL BE COMPRISED OF THE CONSTRUCTION PLANS AND THE CONTRACTOR'S SITE-SPECIFIC EROSION AND SEDIMENT CONTROL PLAN.

(1.F.) STORMWATER MANAGEMENT (EXISTING/PROPOSED)

(1.F.1.) EXISTING DRAINAGE FLOWS TOWARDS EXISTING PIPES THAT CARRY WATER TO THE OUTFALLS. THE CROSS SECTION SHEETS AND PLAN-PROFILE SHEETS PROVIDE THE APPROXIMATE SLOPE, AREAS OF SOIL DISTURBANCE AND AREAS TO BE STABILIZED. UNLESS OTHERWISE APPROVED BY THE PERMITS, THE CONSTRUCTION ACTIVITIES SHALL NOT MODIFY OR AFFECT THE EXISTING OFFSITE FLOW PATTERNS.

(1.F.2.) THE PROPOSED SEDIMENT BASINS, CONTAINMENT SYSTEMS AND/OR STORMWATER MANAGEMENT FACILITIES SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND USED DURING CONSTRUCTION OF THE ROADWAY. THE OUTFALL STRUCTURES ARE TO BE PROTECTED WHEN TEMPORARY SEDIMENT BASINS, CONTAINMENT SYSTEMS OR PERMANENT STORMWATER MANAGEMENT FACILITIES ARE USED FOR EROSION AND SEDIMENT CONTROL TO PREVENT DOWNSTREAM SEDIMENTATION.

2. CONTROLS:

(2.A.) SEDIMENT AND EROSION CONTROLS

(2.A.1.) PER SECTION 5.4 OF THE NPDES CGP, STABILIZATION SHALL TAKE PLACE AS SOON AS PRACTICAL IN PORTIONS OF THE PROJECT WHERE CONSTRUCTION ACTIVITIES HAVE CEASED, BUT NO LATER THAN 7 DAYS AFTER ANY CONSTRUCTION ACTIVITY CEASES EITHER TEMPORARILY OR PERMANENTLY.

(2.A.2.) SEDIMENT BARRIERS SHALL BE USED AROUND THE PERIMETER OF STOCKPILE AREAS.

REVISIONS				COLLIER COUNTY	STORMWATER POLLUTION PREVENTION PLAN	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION			
				ROAD NO.	COUNTY PROJECT No.	
				GOODLAND DR.	60200.2.1	46

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(2.A.3.) STRUCTURAL PRACTICES

IN THE CONTRACTOR'S SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN, DESCRIBE THE PROPOSED STRUCTURAL PRACTICES TO CONTROL OR TRAP SEDIMENT AND OTHERWISE PREVENT THE DISCHARGE OF POLLUTANTS FROM EXPOSED AREAS OF THE SITE. SEDIMENT CONTROLS SHALL BE IN PLACE BEFORE DISTURBING SOIL UPSTREAM OF THE CONTROL. THE STRUCTURAL PRACTICES MAY INCLUDE THE FOLLOWING, AS APPROVED BY THE ENGINEER:

TEMPORARY DEVICES:
* SEDIMENT BARRIER

* SOIL TRACKING PREVENTION DEVICES AT CONSTRUCTION ENTRANCES/EXITS

* STAKED TURBIDITY BARRIERS

* FLOATING TURBIDITY BARRIERS

* INLET PROTECTION SYSTEMS INCLUDING SYNTHETIC BALES AND SANDBAGS

PERMANENT:

* SOD (MAY ALSO BE USED FOR TEMPORARY CONTROLS)

(2.B.) WATER QUALITY MONITORING

(2.B.1.) WATER QUALITY MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH THE SPECIAL CONDITIONS OF ANY ENVIRONMENTAL PERMIT, OR BY THE CONTRACTOR UPON THE OBSERVATION THAT WATER QUALITY STANDARDS MAY BE VIOLATED BY THE CONTRACTOR'S ACTIVITIES. MONITORING LOCATIONS MAY BE SPECIFIED IN THE ENVIRONMENTAL PERMIT OR MAY BE DESIGNATED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

(2.B.2.) THE CONTRACTOR WILL BE RESPONSIBLE FOR MONITORING ANY ACTIVITIES FOR VIOLATION OF WATER QUALITY STANDARDS AS THEY RELATE TO TURBIDITY (NO GREATER THAN 29 NEPHELOMETRIC TURBIDITY UNITS (NTUs) ABOVE BACKGROUND OR GREATER THAN 0 NTUs ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OUTSTANDING FLORIDA WATERS (OFWs)).

(2.B.3.) IF WATER QUALITY STANDARDS ARE VIOLATED, CONSTRUCTION SHALL BE STOPPED IMMEDIATELY. THE ENVIROMENTAL PERMIT CONDITIONS FOLLOWED AND EROSION AND SEDIMENT CONTROL DEVICES REEVALUATED AND APPROVED BY THE ENGINEER PRIOR TO ANY CONTINUATION OF ACTIVITY. MONITORING ACTIVITIES AND TURBIDITY READINGS SHALL BE RECORDED ON THE CONSTRUCTION INSPECTION REPORT AND CONTINUED UNTIL TURBIDITY READINGS FALL BELOW AN ACCEPTABLE LEVEL (LESS THAN 29 NTUs ABOVE BACKGROUND OR LESS THAN 0 NTUs ABOVE BACKGROUND FOR DIRECT DISCHARGES TO OFWs).

(2.B.4.) WATER QUALITY MONITORING MAY BE CONDUCTED DURING ANY PHASE OF CONSTRUCTION AS DIRECTED BY THE ENGINEER.

(2.C.) DEWATERING CONTROLS

THE SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN SHALL INCLUDE A DESCRIPTION OF THE BMPs THAT WILL BE USED TO ENSURE THAT DISCHARGES OF NONCONTAMINATED GROUND WATER FROM DEWATERING OPERATIONS DO NOT CAUSE OR CONTRIBUTE TO VIOLATIONS OF STATE WATER QUALITY STANDARDS.

(2.D.) OTHER CONTROLS

(2.D.1.) THE SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN SHALL IDENTIFY CHEMICAL AND FUEL STORAGE AREAS, MEANS OF MINIMIZING EXPOSURE TO STORMWATER, AND SPILL PREVENTION.

(2.D.2.) OFFSITE VEHICLE TRACKING & GENERATION OF DUST

IN THE SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN, DESCRIBE THE PROPOSED METHODS FOR MINIMIZING OFFSITE VEHICLE TRACKING OF SEDIMENTS AND GENERATING DUST. THE PROPOSED METHODS SHALL INCLUDE AT LEAST THE FOLLOWING, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

(2.D.2.a.) LOADED HAUL TRUCKS ARE TO BE COVERED BY A TARPULIN.

(2.D.2.b.) REMOVING EXCESS DIRT FROM ROADS DAILY.

(2.D.2.c.) USING WATER TRUCKS DURING DUST-GENERATING ACTIVITIES.

(2.D.2.d.) SEDIMENT CONTROL MAY BE ACCOMPLISHED BY USING STREET OR VACUUM SWEEPERS.

3. MAINTENANCE

MAINTAIN AND REPAIR ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE EROSION AND SEDIMENT CONTROL DEVICES WHEN NOTICE OF TERMINATION IS MAILED. REMOVE AND PROPERLY DISPOSE OF SEDIMENT BUILDUP THROUGH THE LIFE OF THE INSTALLED EROSION AND SEDIMENT CONTROL DEVICES.

(3.A.) IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF NOTICE.

(3.B.) SEDIMENT BARRIERS SHALL BE REPLACED WHEN IT IS NO LONGER EFFECTIVE OR AS DIRECTED BY THE ENGINEER.

(3.C.) STABILIZED CONSTRUCTION ENTRANCES SHALL BE MAINTAINED TO PREVENT CLOGGING OF ROCK BEDDING WHICH MAY IMPEDE THE USEFULNESS OF THE STRUCTURE.

(3.D.) REMOVE SEDIMENT FROM SEDIMENT BASINS WHEN IT BECOMES MORE THAN HALF THE AVAILABLE VOLUME.

4. INSPECTION, TRACKING, AND REPORTING

INSTALL AND MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD RAINFALL.

(4.A.) SUBMIT A WEEKLY REPORT TO THE DEPARTMENT DOCUMENTING THE DAILY INSPECTIONS AND MAINTENANCE OR REPAIRS TO THE EROSION AND SEDIMENT CONTROL DEVICES. MAINTAIN ALL REQUIRED REPORTS AND COMPLETE ALL SWPPP INSPECTION FORMS.

(4.B.) PREPARATION OF ALL THE CONTRACTOR'S REPORTS OF INSPECTION, MAINTENANCE AND REPAIRS REQUIRED FOR THE CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION, SHALL BE INCLUDED IN THE INDIVIDUAL COSTS OF THE EROSION AND SEDIMENT CONTROL DEVICES.

(4.C.) USE THE SWPPP CONSTRUCTION INSPECTION REPORT FORM # 650-040-03, FOR DAILY INSPECTIONS.

5. NON-STORMWATER DISCHARGES

THE SITE SPECIFIC EROSION AND SEDIMENT CONTROL PLAN SHALL IDENTIFY ALL ANTICIPATED NON-STORMWATER DISCHARGES AND DESCRIBE THE PROPOSED MEASURES TO PREVENT POLLUTION. THE PLAN SHALL INCLUDE PROCEDURES FOR SPILL CONTAINMENT, REPORTING AND RESPONSES. THE PLAN SHALL SPECIFY WHAT MANAGEMENT PRACTICES AND CONTAINMENT METHODS WILL BE USED TO PREVENT POTENTIAL POLLUTANTS (FUEL, LUBRICANTS, HERBICIDES, ETC.) FROM SPILLING ONTO THE SOIL OR INTO THE SURFACE WATERS. IF A SPILL DOES OCCUR OR IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, CONTACT THE DISTRICT OPERATIONS PROGRAM ENGINEER, JESSICA WHITE, AT 239-985-7829 AND THE ENGINEER. IF A RELEASE CONTAINING HAZARDOUS SUBSTANCES OCCURS, CONTACT THE FLORIDA STATE WATCH OFFICE AT 800-320-0519 OR 850-413-9911 PER SECTION 9.2 OF THE CGP.

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DATE	DESCRIPTION	DATE	DESCRIPTION		ROAD NO.	COUNTY PROJECT No.		47
					GOODLAND DR.	60200.2.1		

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