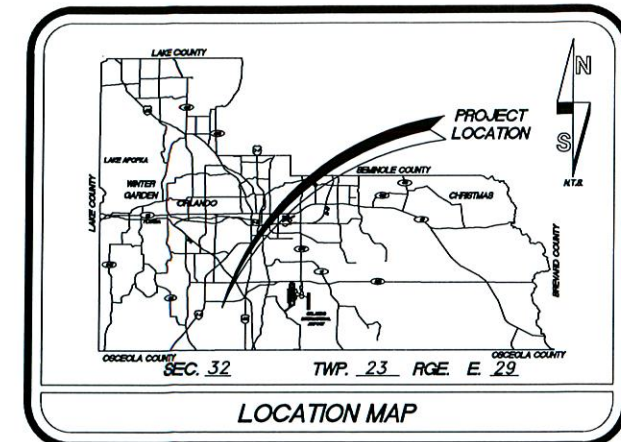




CONSTRUCTION PLANS FOR SHINGLE CREEK REGIONAL TRAIL PHASE 1 SEGMENT 1

FINANCIAL PROJECT ID: 430225-6-58-01
CONTRACT NO.: Y12-819-CH
FAN - 8886-951-A

DISTRICT NO: 6 ORANGE COUNTY, FLORIDA



INDEX OF SHEETS	
SHEET	DESCRIPTION
1	COVER SHEET
2	SUMMARY OF PAY ITEMS
3-4	DRAINAGE MAPS
5	TYPICAL SECTIONS
6	SPECIAL DETAILS
7	SUMMARY OF QUANTITIES
8	PROJECT LAYOUT
9-10	GENERAL NOTES
11-12	TABULATION OF QUANTITIES
13-24	PLAN & PROFILE SHEETS
25-28	SURVEY CONTROL SHEETS
29-35	SOILS SURVEY
36-69	CROSS SECTIONS
G01	SITE AMENITIES SHEET LAYOUT
A-101	TRAIL AMENITIES PLAN SHEET
A-501 - A-508	TRAIL AMENITIES DETAILS

UTILITIES ENCOUNTERED

POWER: DUKE ENERGY DIST. & TRANSMISSION 800-700-8744
 CATV : COMCAST CABLE COMMUNICATIONS 352-315-8528
 FIBER: FPL FIBERNET 305-552-2931
 WATER: ORANGE COUNTY UTILITIES 407-254-9700
 SEWER: ORANGE COUNTY UTILITIES 407-254-9700
 TELEPHONE: ORLANDO TELEPHONE COMPANY 727-235-4362

DEREK B. BOYKIN
 LICENSE No. 40898
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

WBQ INC.
 Design & Engineering
 201 N. MAGNOLIA AVENUE - SUITE 200 - ORLANDO FL 32801
 PHONE (407) 839-4300 FAX (407) 839-1621

REVISIONS	DATE	BY

DESIGNED BY: TWV	DATE: 9/2016
DRAWN BY: ESS	DATE: 9/2016
CHECKED BY: GLW	DATE: 9/2016
APPROVED BY: DCB	DATE: 9/2016
CONTRACT NO: Y12-819-CH	

SHEET 1
OF 79

SOURCE OF BENCHMARK DATUM

BENCHMARKS

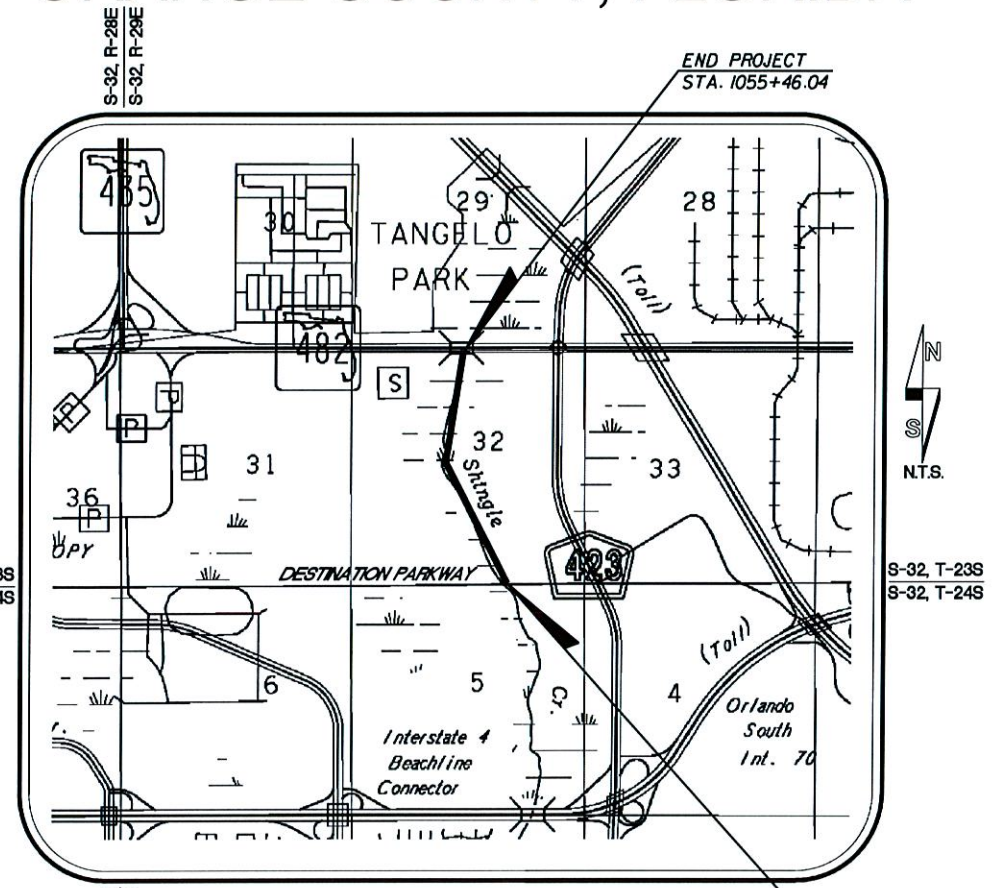
L 715 008 - SET 2-INCH ORANGE COUNTY CONTROL DISK (BRASS) IN EAST CORNER OF TOWER FOOT PAD (ROUND), 65 FT (19.8 M) SOUTH OF BARB WIRE FENCE LINE, 70 FT (21.3 M) EAST OF BARB WIRE FENCE LINE (NOTE, POWER LINES START WITH TOWER RUNNING NORTH AND EAST, 3.6 MI (5.8 KM) EAST OF SR 535, AND 1.5 WEST OF JOHN YOUNG). IN SECTION 30, TOWNSHIP 24 SOUTH, RANGE 29 EAST.

L-715-017 - SET ORANGE COUNTY CONTROL DISC IN A CATCH BASIN ON THE EAST SIDE OF SR 441 SOUTH OF WATER BRIDGE BLVD.

(SOURCE OF BENCHMARK DATUM CONTINUED IN GENERAL NOTES SHEETS)

ELEVATIONS ARE DERIVED FROM ORANGE COUNTY BENCHMARKS, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

PROJECT LENGTH:	FEET	MILES
ROADWAY:	5,356	1.014
BRIDGES:	N/A	N/A
TOTAL LENGTH:	5,356	1.014



VICINITY MAP

NOTE

PLANS WERE PREPARED ACCORDING TO AVAILABLE INFORMATION TO ADEQUATELY ADDRESS CONDITIONS AS THEY EXISTED AT THE TIME OF PLANS PREPARATION. NEEDS, CONDITIONS AND OWNERSHIP OF PROPERTIES MAY HAVE CHANGED SINCE PROJECT DESIGN. THE COUNTY'S REPRESENTATIVE WILL ADDRESS CHANGES AND NEEDS WITH THE PROPERTY OWNER OR THEIR REPRESENTATIVES. CONTRACTOR SHALL WORK WITH THE COUNTY'S REPRESENTATIVE IN ADDRESSING AND MEETING NEEDS AND CONDITIONS THAT MAY HAVE CHANGED SINCE PLANS PREPARATION.

CERTIFICATION TO PLANS

I HEREBY CERTIFY THAT THE DESIGN FOR THIS PROJECT AND THE ATTACHED CONSTRUCTION PLANS COMPLY WITH THE REQUIREMENTS OF SECTION 336.045 OF THE FLORIDA STATUTES AND ARE IN SUBSTANTIAL CONFORMANCE WITH THE STANDARDS CONTAINED IN THE EDITION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS" IN EFFECT ON THIS DATE AS ADOPTED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION PURSUANT TO SUBSECTION 336.045(1) OF THE FLORIDA STATUTES.

DATE: _____ ENGINEER: _____

LEGEND

@	BASELINE
CCR	CERTIFIED CORNER RECORD
CONC	CONCRETE
COR.	CORNER
E	EAST/EASTING
EL	ELEVATION
EP	EDGE OF PAVEMENT
INV	INVERT (ELEVATION)
IR(C)	IRON ROD (WITH CAP)
IRRIG	IRRIGATION LINE
LT.	LEFT
MES	MITERED END SECTION
N	NORTH/NORTHING
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PIP	POURED-IN-PLACE
POC	POINT ON CURVE
POT	POINT ON TANGENT
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
R	RANGE
RCP	REINFORCED CONCRETE PIPE
RT.	RIGHT
R/W	RIGHT-OF-WAY
S	SOUTH
SEC.	SECTION
STA.	STATION
T	TOWNSHIP
TEL	TELEPHONE
UTIL	UTILITY
WH/TH	TEST HOLE (UTILITY)
W	WEST
°	DEGREES
SHWE	SEASONAL HIGH WATER EL.
- - - - -	TRAFFIC MARKINGS
- - - - -	ASPHALT
- - - - -	ASPHALT C/L
- - - - -	CURB
- - - - -	BARRIER WALL
□ E - -	OVERHEAD POWER LINES
- - - - -	SECTION LINE
- x - - -	FENCE
- - - - -	CONCRETE
- - - - -	RIGHT OF WAY LINE
■	BRICK WALL
- - - - -	ALUMINUM HAND RAIL
○	POWER POLES
○	WATER VALVE
△	STATION POINT
○	FIRE HYDRANT
☼	PALM TREES
☼	OAK TREES
☼	HEDGES
☼	SIGNS
□	MISCELLANEOUS BOXES
○	POWER POLE WITH LAMP
○	WATER METER
⊙	BENCHMARK
□	MONUMENT
⊙	SANITARY SEWER
P.P.	POWER POLE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
W	WETLANDS

**BID SUBMITTAL
APRIL 2017**

GOVERNING STANDARDS AND SPECIFICATIONS:
 FLORIDA DEPARTMENT OF TRANSPORTATION
 DESIGN STANDARDS FOR DESIGN, CONSTRUCTION,
 MAINTENANCE AND UTILITY OPERATIONS
 ON THE STATE HIGHWAY SYSTEM, DATED JUL. 2016 AND
 STANDARD SPECIFICATIONS FOR ROAD AND
 BRIDGE CONSTRUCTION, DATED 2016
 AS AMENDED BY CONTRACT DOCUMENTS.

TERESA JACOBS, COUNTY MAYOR

BOARD OF COUNTY COMMISSIONERS

S. SCOTT BOYD	DISTRICT 1
BRYAN NELSON	DISTRICT 2
PETE CLARKE	DISTRICT 3
JENNIFER THOMPSON	DISTRICT 4
TED EDWARDS	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6
MARK MASSARO, P.E.	PUBLIC WORKS DIRECTOR

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

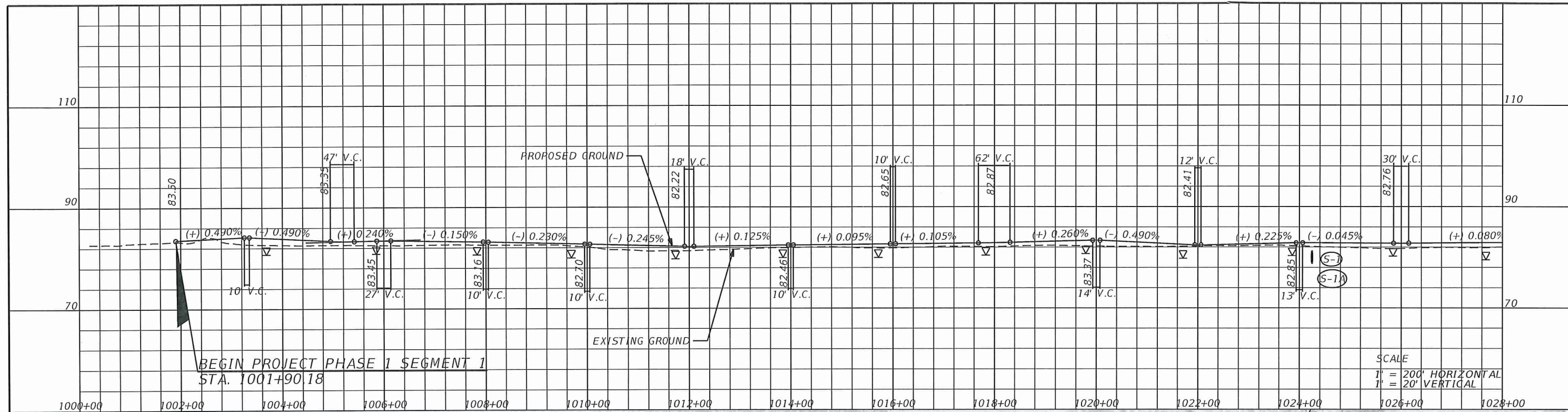
PAY ITEM NO.	ITEM DESCRIPTION	UNITS	QUANTITY
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
104-14	PREVENTION CONTROL & ABATEMENT OF EROSION & WATER POLLUTION	LS	1
109-71-16	FIELD OFFICE	DA	360
110-1-1	CLEARING & GRUBBING	LS	1
120-9	EXCAVATION, EMBANKMENT & GRADING	LS	1
145-2	GEOTEXTILE FABRIC	SY	1,112
160-4	STABILIZATION TYPE B (MIN LBR 40)	SY	9,584
270-10	10" SOIL CEMENT (MIN 300 PSI)	SY	7,141
334-1-13	SUPERPAVE ASPHALTIC CONCRETE, TRAFFIC C	SY	7,141
430-175-118	STEEL REINFORCED CONCRETE PIPE, 18"	LF	33
430-175-130	STEEL REINFORCED CONCRETE PIPE, 30"	LF	62
430-982-125	MITERED END SECTION ROUND, 1:2 SLOPE, 18"	EA	2
430-982-133	MITERED END SECTION ROUND, 1:2 SLOPE, 30"	EA	4
515-2-211	PEDESTRIAN/BICYCLE RAILING, STEEL, 42", TYPE 1, PER FDOT INDEX 852	LF	754
520-2-5	CONCRETE RIBBON CURB	LF	10,712
522-1	CONCRETE SIDEWALK (4" THICK) (INCLUDES COMPACTION)	SY	390
522-4	REST AREA SHELTER & TRASH RECEPTACLE PAD - CONCRETE (6" THICK)	SY	20
527-2	DETECTABLE WARNING	SF	58
536-6	PIPE RAIL FOR GUARDRAIL PER FDOT INDEX 400	LF	234
550-10-222	FENCING, TYPE B, 5.1-6.0', W/ BLACK VINYL COAT	LF	130
550-60-224	FENCE GATE, TYPE B, 20', OPENING, BLACK VINYL COAT	EA	1
570-1-2	PERFORMANCE TURF (SOD, BAHIA, OR MATCH EXISTING)	SY	10,500
700-1-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS	11
710-11-160	PAVEMENT MESSAGE (PAINT)	EA	14
710-11-170	DIRECTIONAL ARROW (PAINT)	EA	6
710-11-211	PAINTED PAVEMENT MARKING, STANDARD, YELLOW, SOLID, 6"	NM	0.109
751-36-11	BICYCLE PARKING RACK	EA	1
751-37	TRASH RECEPTACLE, PRE-FABRICATED	EA	1
751-38-19	BENCHES, PRE-FABRICATED	EA	1
751-39	REST AREA SHELTER (PEDESTRIAN PLAZA)	EA	1
900-1	AS-BUILT PLANS	LS	1
900-2	INDEMNIFICATION	LS	1
900-3	GROUNDWATER TREATMENT & DISPOSAL	DA	240

PAY ITEM NOTES

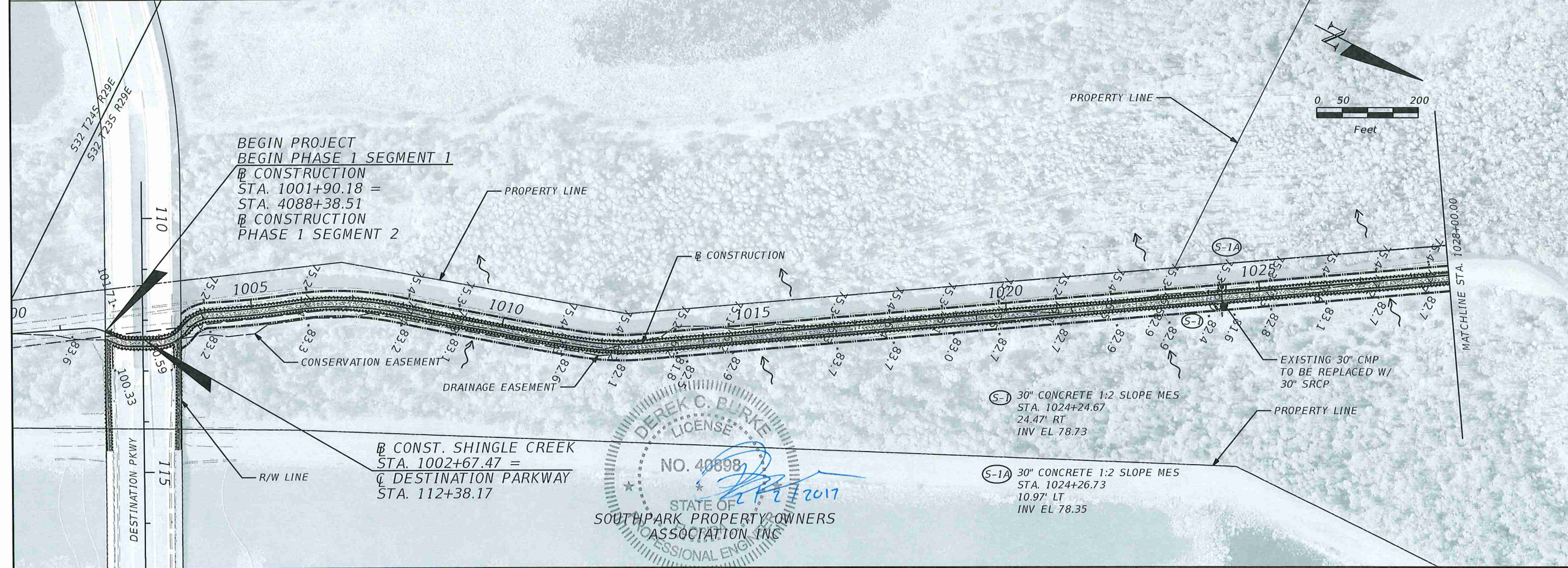
- 102-1 INCLUDES THE COST OF ALL ITEMS NECESSARY FOR TRAFFIC CONTROL THAT ARE NOT SPECIFICALLY INCLUDED IN THE ROADWAY SUMMARY OF PAY ITEMS, I.E. SIGNS, BARRICADES, FLAGMAN, ETC. IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS AND PROCEDURES, MUTCD & DESIGN STANDARD 600 SERIES. THE CONTRACTOR SHALL MAINTAIN VEHICULAR ACCESS TO RESIDENCES AND BUSINESSES AT ALL TIMES.
- 109-71-16 INCLUDES COST OF FURNITURE, COMPUTERS, AND ALL OTHER EQUIPMENT/FURNISHING NEEDED.
- 110-1-1 REMOVAL OF EXISTING CONCRETE, ASPHALT PAVEMENT, FENCE, TREES/PLANTS, RIP RAP, AND ANY BACKFILL NECESSARY TO BE INCLUDED IN CLEARING AND GRUBBING.
- 520-2-5 INCLUDES COST OF ADDITIONAL CONCRETE FOR HANDRAIL.
- 522-4 INCLUDES THE COST OF ALL #5 REBAR & 6X6 / WI. 4 X WI. 1.4 WWC. INCLUDES COST TO LOCATE AND INSTALL 6" CONCRETE PAVEMENT FOR REST AREA AND TRASH RECEPTACLE PAD AS DEPICTED IN AMENITIES SHEETS, AND CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- 550-XX- INCLUDES THE COST OF ASSOCIATED FENCE HARDWARE TO BE BLACK VINYL COATED.
- 570-1-2 INCLUDES THE COST OF TOPSOIL TREATMENT FOR SOD.
- 700-1-11 INCLUDES COST OF SIGN PANEL MATERIALS. INCLUDES THE COST OF BACKING FOR PLASTIC COMPOSITE TRAIL SIGNS. INCLUDES COST TO LOCATE AND INSTALL DIRECTIONAL SIGN AND TRAIL RULES SIGN DEPICTED IN AMENITIES SHEETS, CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- 751-36-11 INCLUDES COST OF BIKE RACK MATERIALS. INCLUDES COST TO LOCATE AND INSTALL BIKE RACK DEPICTED IN AMENITIES SHEETS, AND CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.
- 751-37 INCLUDES THE COST OF MATERIALS AND INSTALLATION OF PET WASTE STATION AS SHOWN IN PLANS. INCLUDES COST OF TRASH RECEPTACLE MATERIALS. INCLUDES COST TO LOCATE AND INSTALL TRASH RECEPTACLE AND PET WASTE STATION DEPICTED IN THE AMENITIES SHEETS, AND CONSTRUCTION DOCUMENTS AND MANUFACTURER SPECIFICATIONS.
- 751-38-19 INCLUDES COST OF BENCH MATERIALS. INCLUDES COST TO LOCATE AND INSTALL BENCH DEPICTED IN AMENITIES SHEETS, AND CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. SELECTED BENCH AND TRASH RECEPTACLE TO BE FROM THE SAME MANUFACTURER.
- 751-39 INCLUDES COST OF REST AREA SHELTER MATERIALS. INCLUDES COST TO LOCATE AND INSTALL REST AREA SHELTER DEPICTED IN AMENITIES SHEETS, AND CONSTRUCTION DOCUMENTS AND SPECIFICATIONS.



<p>DEREK C. BURKE, P.E. LICENSE NO. 40898</p> <p>201 N. Magnolia Ave. Suite 200 Orlando Fl. 32801 Phone 407.839.4300 Fax 407.839.1621</p> <p>WBQ Design & Engineering CERTIFICATE OF AUTHORIZATION NO. 6796</p>		<p>ORANGE COUNTY GOVERNMENT</p> <p>ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS</p> <p>ENGINEERING DIVISION 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839 (407) 836-7900</p>	<p><i>SUMMARY OF PAY ITEMS</i></p>	<p>SHEET NO.</p> <p>2</p>
--	--	---	------------------------------------	---------------------------



SCALE
 1" = 200' HORIZONTAL
 1" = 20' VERTICAL



BEGIN PROJECT
 BEGIN PHASE 1 SEGMENT 1
 B CONSTRUCTION
 STA. 1001+90.18 =
 STA. 4088+38.51
 B CONSTRUCTION
 PHASE 1 SEGMENT 2

B CONST. SHINGLE CREEK
 STA. 1002+67.47 =
 C DESTINATION PARKWAY
 STA. 112+38.17

(S) 30" CONCRETE 1:2 SLOPE MES
 STA. 1024+24.67
 24.47' RT
 INV EL 78.73

(S-1A) 30" CONCRETE 1:2 SLOPE MES
 STA. 1024+26.73
 10.97' LT
 INV EL 78.35

DEREK C. BURKE
 LICENSE
 NO. 40898
 STATE OF
 SOUTH PARK PROPERTY OWNERS
 ASSOCIATION, INC.
 PROFESSIONAL ENGINEER
 2017

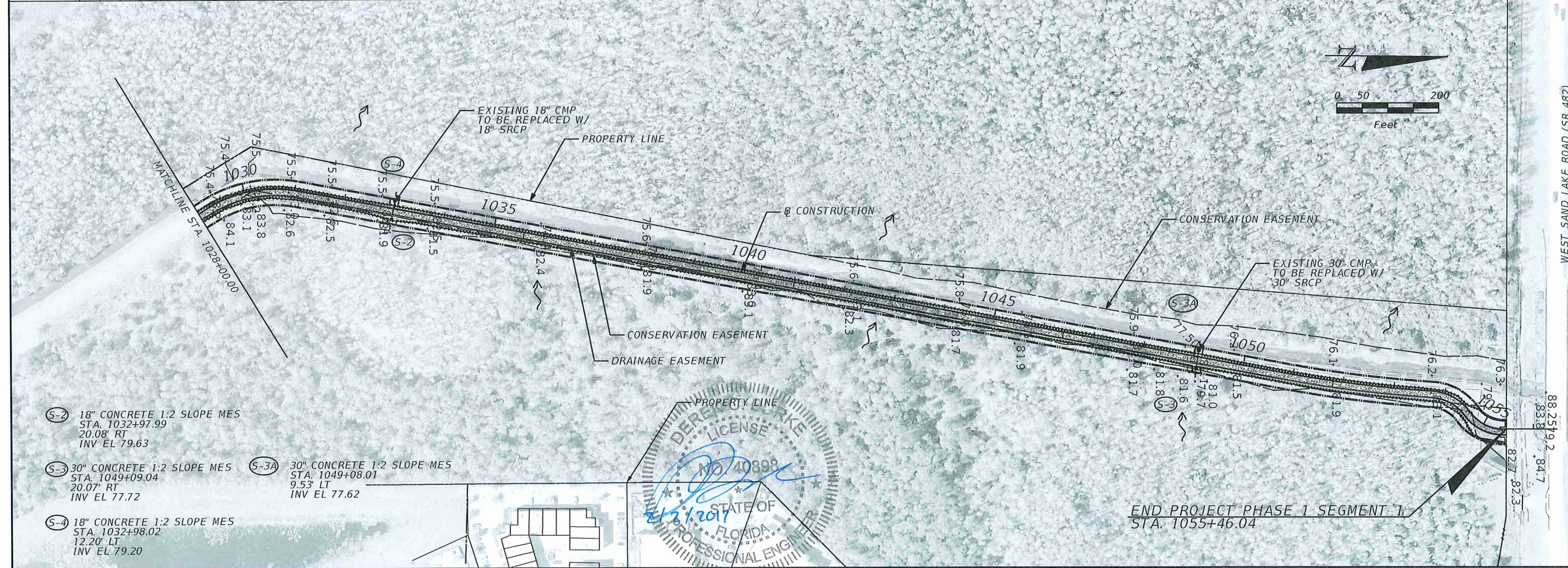
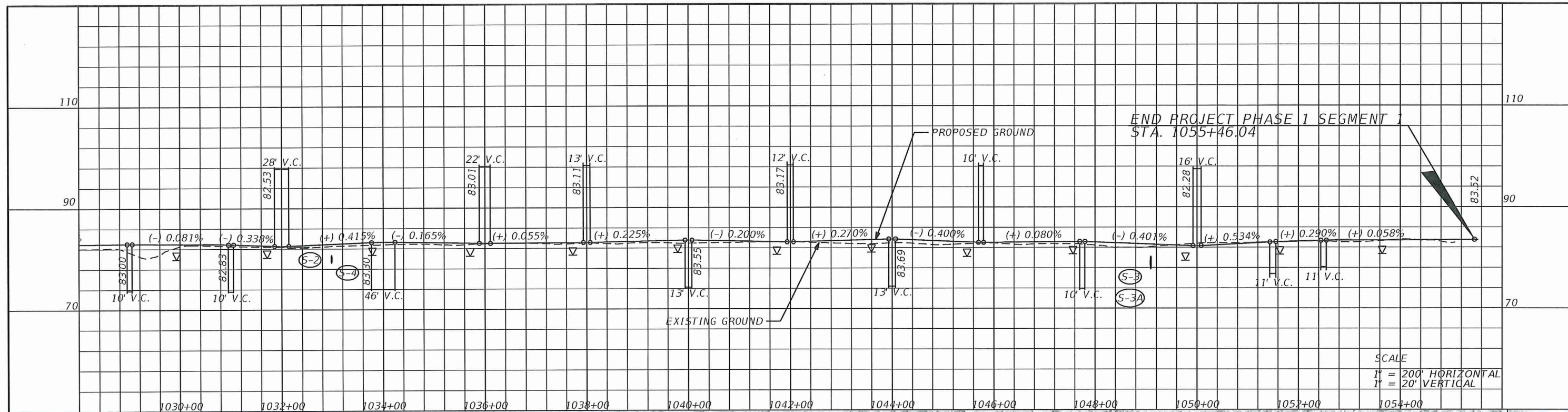
REVISIONS	
DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

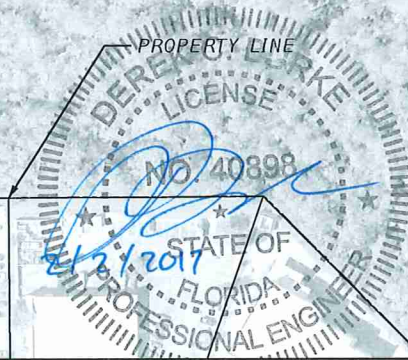
ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

DRAINAGE MAP

SHEET NO.
 3



- (S-2) 18" CONCRETE 1:2 SLOPE MES
STA. 1032+97.99
20.08' RT
INV EL 79.63
- (S-3) 30" CONCRETE 1:2 SLOPE MES
STA. 1049+09.04
20.07' RT
INV EL 77.72
- (S-4) 18" CONCRETE 1:2 SLOPE MES
STA. 1032+98.02
12.20' LT
INV EL 79.20
- (S-3A) 30" CONCRETE 1:2 SLOPE MES
STA. 1049+08.01
9.53' LT
INV EL 77.62



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898

WBQ
Design & Engineering
CERTIFICATE OF AUTHORIZATION NO. 6796

201 N. Magnolia Ave.
Suite 200
Orlando FL 32801
Phone 407.839.4300
Fax 407.839.1621

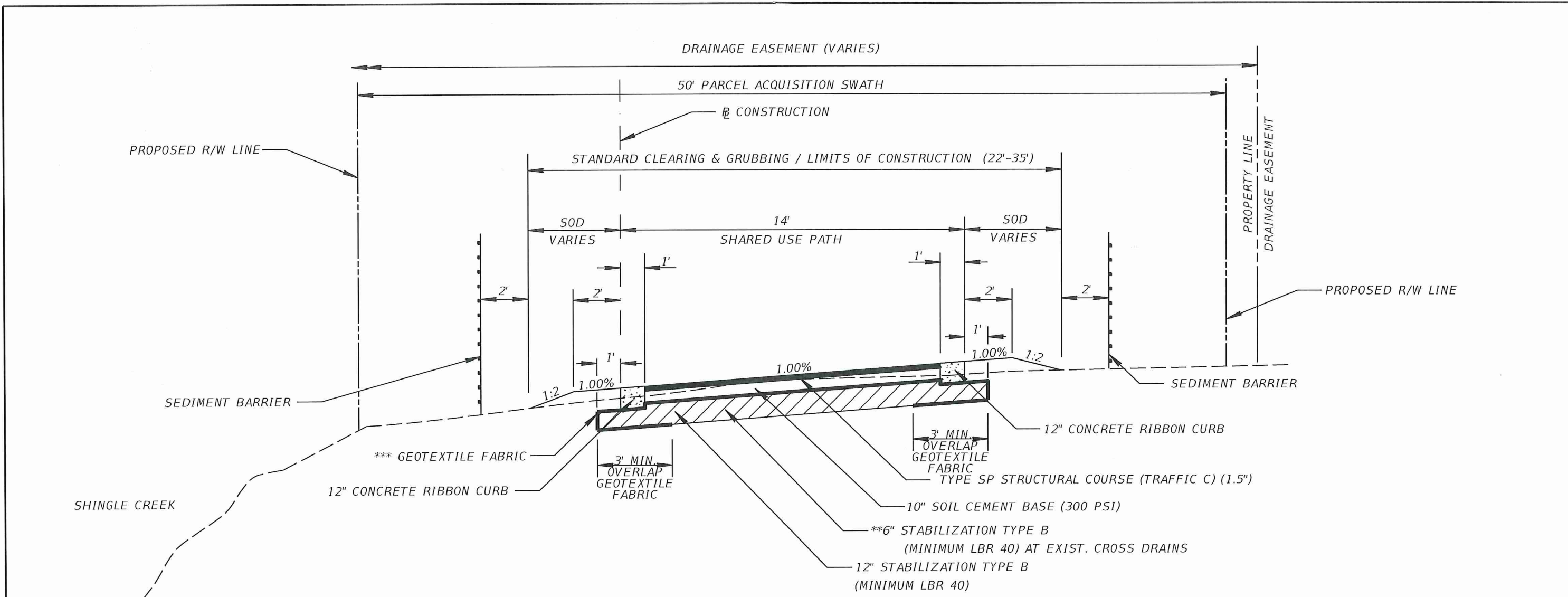
ORANGE COUNTY GOVERNMENT

ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS

ENGINEERING DIVISION
4200 SOUTH JOHN YOUNG PARKWAY
ORLANDO, FLORIDA 32839
(407) 836-7900

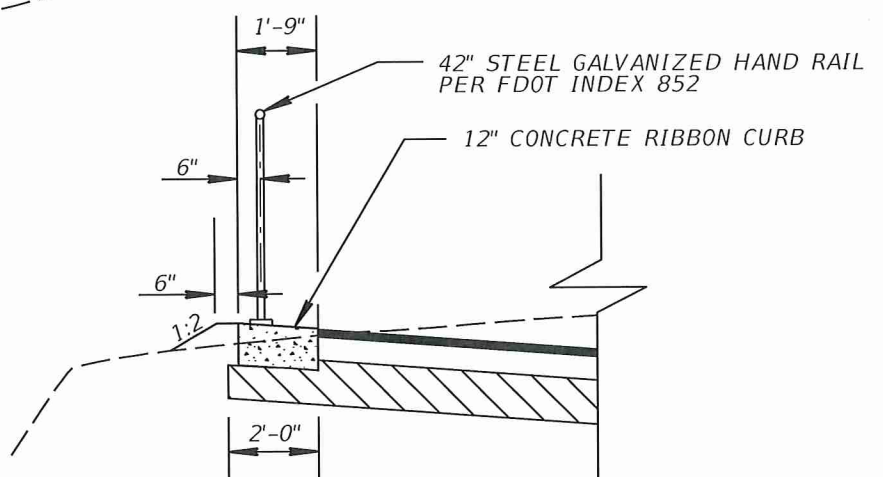
DRAINAGE MAP

SHEET NO.
4

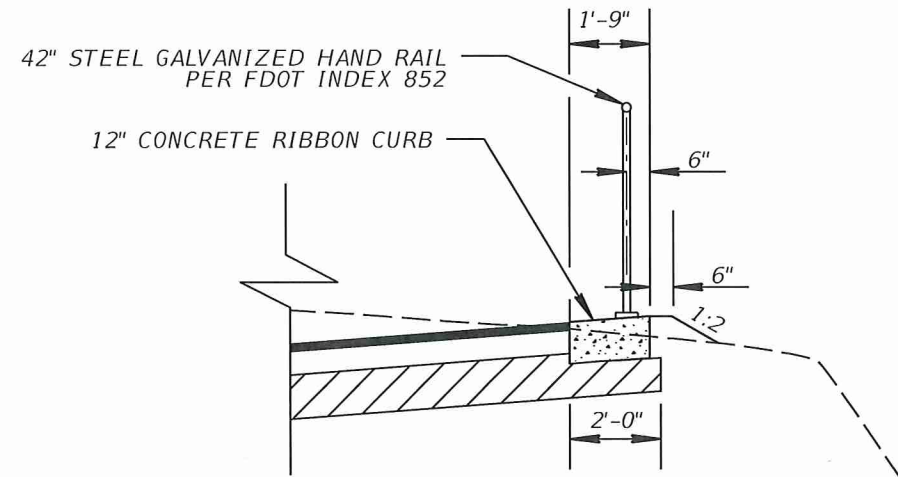


**PHASE 1 SEGMENT 1
TYPICAL SECTION NO. 1**

- STA. 1001+90.18 TO STA. 1055+46.04
- *** STA. 1011+50.00 TO 1015+50.00 (GEOTEXTILE FABRIC)
- ** STA. 1024+00.00 TO 1024+40.00 (6" STABILIZATION)
- ** STA. 1032+80.00 TO 1033+20.00 (6" STABILIZATION)
- ** STA. 1048+90.00 TO 1049+30.00 (6" STABILIZATION)

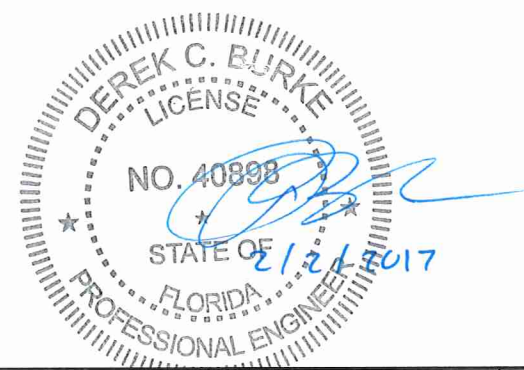


STA. 1001+90.18 TO STA. 1004+17.56
STA. 1029+23.04 TO STA. 1032+00.00



STA. 1024+00.00 TO STA. 1024+50.00
STA. 1032+50.00 TO STA. 1033+50.00
STA. 1048+50.00 TO STA. 1049+50.00

DESIGN SPEED = 18 MPH



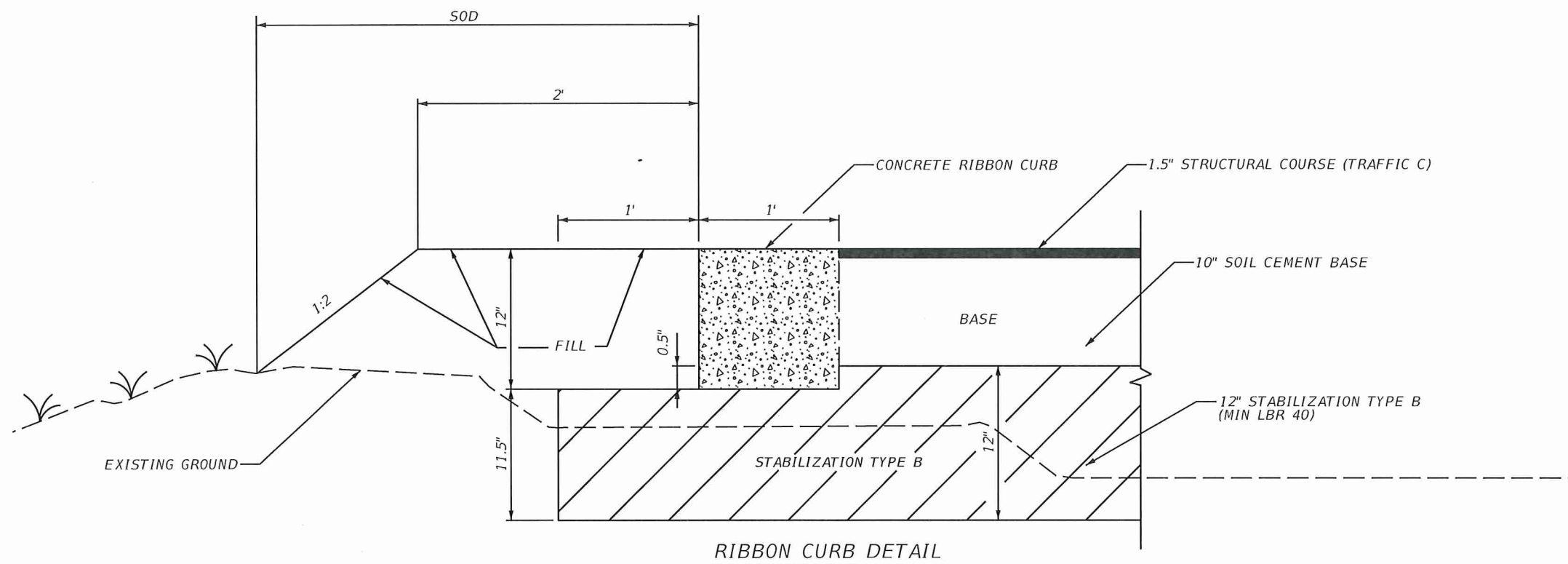
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave. Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

TYPICAL SECTION

SHEET NO. 5



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
WBQ Design & Engineering
 201 N. Magnolia Ave. Suite 200
 Orlando Fl. 32801
 Phone 407.839.4300 Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

SPECIAL DETAIL

SHEET NO.
6

SUMMARY OF EARTHWORK		
DESCRIPTION	CY	
	P	F
REGULAR EXCAVATION	1360.0	
EMBANKMENT	760.0	

SUMMARY OF DRAINAGE STRUCTURES							
STR. NO.	STATION/OFFSET	SIDE	PIPE LENGTH		1:2 MES		REMARKS
			LF		EA		
			18"	30"	18"	30"	
S-1	1024+24.67, 24.67'	RT		32		1	STEEL REINFORCED CONCRETE PIPE
S-1A	1024+26.73, 10.97'	LT				1	
S-2	1032+97.99, 29.05'	RT	33		1		STEEL REINFORCED CONCRETE PIPE
S-3	1049+09.04, 20.07'	RT		30		1	STEEL REINFORCED CONCRETE PIPE
S-3A	1049+08.01, 9.53'	LT				1	
S-4	1032+98.08, 12.20'	LT			1		
TOTAL			33	62	2	4	

SUMMARY OF DETECTABLE WARNING				
STA. TO STA.	SIDE	SF		REMARKS
		P	F	
117+86.65 TO 118+10.47	RT	58		
TOTAL		58		

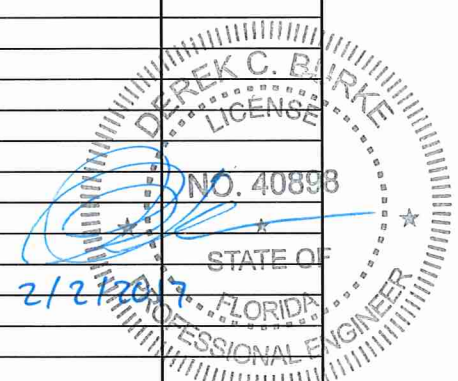
SUMMARY OF EROSION CONTROL AND SEDIMENT CONTROL DEVICES							
LOCATION STA. TO STA.	SIDE	SEDIMENT BARRIER		FLOATING TURBIDITY BARRIER		REMARKS	FIELD BOOK REFERENCE
		LF		LF			
		P	F	P	F		
1001+90.18 TO 1055+46.04	LT	5,357					
1001+90.18 TO 1055+46.04	RT	5,324					
112+38.17 TO 114+56.37	RT	220					
112+38.17 TO 114+56.37	RT	208					
117+67.73 TO 118+10.47	RT	43					
112+38.17 TO 114+56.12	LT	207					
112+38.17 TO 114+56.12	LT	206					
117+69.51 TO 119+50.43	LT	182					
1024+08.31 TO 1024+36.11	RT	42			42		
1024+18.98 TO 1024+35.08	LT	41			41		
1032+91.28 TO 1033+08.16	RT	33			33		
1032+89.06 TO 1033+05.75	LT	44			44		
1049+01.75 TO 1049+17.11	RT	40			40		
1049+00.30 TO 1049+17.35	LT	41			41		
TOTAL		11,988			241		

SUMMARY OF FENCING					
LOCATION STA. TO STA.	SIDE	TYPE B FENCE	TYPE B GATE	REMARKS	FIELD BOOK REFERENCE
		LF	EA		
		6.0' TALL	20' OPENING		
1055+06.57 TO 1055+43.20	RT	72.0		BLACK VINYL	
1054+72.11 TO 1055+43.60	LT	58.0		BLACK VINYL	
1055+43.20 TO 1055+43.60	LT/RT		1	BLACK VINYL	
TOTAL		130.0	1		

SUMMARY OF PERFORMANCE TURF-SOD								
LOCATION STA. TO STA.	SIDE	P			F			FIELD BOOK REFERENCE
		W	L	SY	L	W	SY	
1001+90.18 TO 1055+46.04	RT	4	5356	2381				
1001+90.18 TO 1055+46.04	LT	4	5356	2381				
112+38.17 TO 114+56.37	RT	3	219	73				
112+38.17 TO 114+56.37	RT	3	219	73				
117+67.73 TO 118+10.47	RT	4	43	19				
117+67.73 TO 118+10.47	RT	4	43	19				
112+38.17 TO 114+56.12	LT	3	218	73				
112+38.17 TO 114+56.12	LT	3	218	73				
117+69.51 TO 119+50.43	LT	12	181	241				
117+69.51 TO 119+50.43	LT	3	181	60				
1024+24.67	RT	10	9	10				
1024+26.73	LT	10	9	10				
1032+97.99	RT	10	9	10				
1049+09.04	RT	10	9	10				
1049+08.01	LT	10	9	10				
1032+98.08	LT	10	9	10				
TOTAL:				5453				

SUMMARY OF HANDRAIL PER FDOT INDEX 852				
STA. TO STA.	SIDE	LF		REMARKS
		P	F	
1001+90.18 TO 1004+17.56	LT	227.4		
1024+00.00 TO 1024+50.00	RT	50.0		
1029+23.04 TO 1032+00.00	LT	277.0		
1032+50.00 TO 1033+50.00	RT	100.0		
1048+50.00 TO 1049+50.00	RT	100.0		
TOTAL		754.4		

SUMMARY OF PIPE RAIL FOR GUARDRAIL PER FDOT INDEX 400				
STA. TO STA.	SIDE	LF		REMARKS
		P	F	
117+70.00 TO 119+40.09	LT	171		DESTINATION PKWY.
TOTAL		171		



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

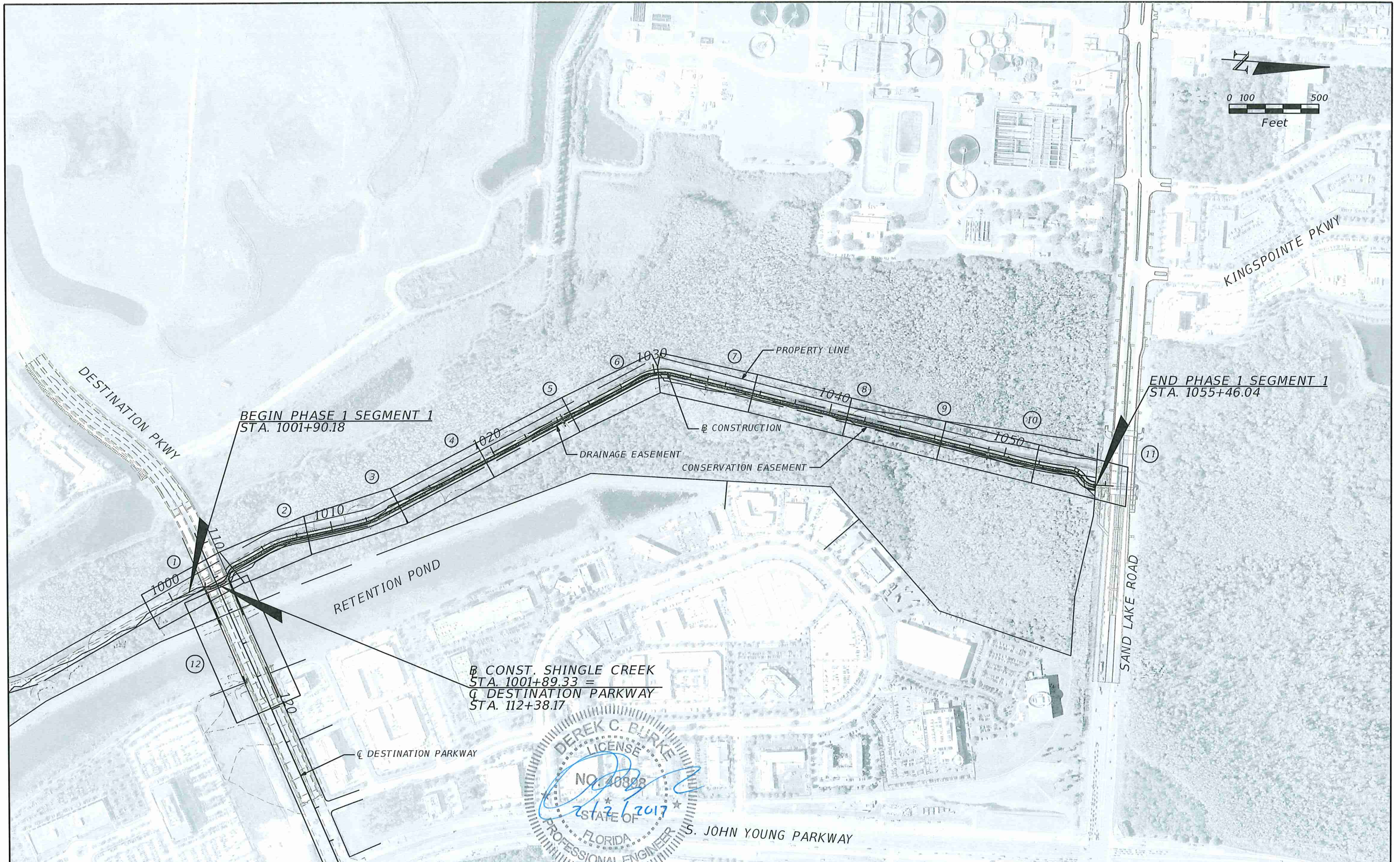
DEREK C. BURKE, P.E. LICENSE NO. 40898

 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

SUMMARY OF QUANTITIES

SHEET NO.
7



BEGIN PHASE 1 SEGMENT 1
STA. 1001+90.18

END PHASE 1 SEGMENT 1
STA. 1055+46.04

B CONST. SHINGLE CREEK
STA. 1001+89.33 =
C DESTINATION PARKWAY
STA. 112+38.17



REVISIONS	
DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898

 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PROJECT LAYOUT SHEET

SHEET NO.
8

GENERAL NOTES

EROSION AND SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AND CONFORM TO THE MOST STRINGENT REQUIREMENT OF THE PROJECT SPECIFICATION, THE 2016 FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (FDOT), AND SUPPLEMENTS THERETO, AND ORANGE COUNTY ROAD CONSTRUCTION SPECIFICATIONS.
2. SUBSURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
3. THE DISPOSAL OF DEBRIS, EXCESS EARTHWORK, AND WASTE MATERIALS GENERATED BY CLEARING AND GRUBBING, DEMOLITION, OR SUBSEQUENT CONSTRUCTION ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. APPROVALS OF DISPOSAL SITES SHALL BE OBTAINED FROM ORANGE COUNTY PRIOR TO DISPOSAL. ALL EXCESS MATERIAL IS THE PROPERTY OF THE CONTRACTOR.
4. TOPSOIL TREATMENT ON ALL PERMANENT GRASS AREAS. COST TO BE INCLUDED IN CONTRACT UNIT PRICE FOR SOD.
5. SOD AND PEG ALL SLOPES 1:3 OR STEEPER.
6. THE CONTRACTOR SHALL PERFORM HIS WORK IN ACCORDANCE WITH REQUIREMENTS OF THE VARIOUS PERMITS INCLUDED IN THE BID SPECIFICATIONS. PAYMENT IS INCLUDED IN THE BID PRICE FOR SECTION 104; "PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION", EXCLUDING ITEMS SPECIFIED ELSEWHERE. ENVIRONMENTAL CONTROLS SHALL BE USED AT LOCATIONS DESIGNATED IN THE PLANS AND/OR DESIGNATED BY THE ENGINEER.
7. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH PROJECT CONSTRUCTION. PRIOR TO ORDERING DRAINAGE STRUCTURES, THE CONTRACTOR SHALL DETERMINE IF DRAINAGE/UTILITY CONFLICTS EXIST. INFORMATION ON CONFLICTS IS TO BE SUBMITTED TO THE ENGINEER AS SOON AS POSSIBLE AFTER DISCOVERY FOR RESOLUTION.
8. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY THE VARIOUS UTILITY COMPANIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATION OF THESE UTILITIES THAT CONFLICT WITH THE PROPOSED DESIGN. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY
9. UTILITIES ARE TO BE ADJUSTED BY OTHERS OR AS DIRECTED BY THE ENGINEER.
10. THE CONTRACTOR SHALL NOTIFY ALL GAS UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION AS REQUIRED BY CHAPTER 77-153 OF THE FLORIDA STATUTES.
11. ALL EXISTING DRAINAGE STRUCTURES AND PIPES SHALL REMAIN, UNLESS OTHERWISE SHOWN IN THE PLANS OR DIRECTED BY THE ENGINEER.
12. ALL (P.R.M.'s) IRONS AND MONUMENTS SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
13. ANY U.S.C. AND G.S. MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER, ORANGE COUNTY SURVEY SECTION 407-836-7940 AND BOTH SHALL NOTIFY:
STATE GEODETIC ADVISOR
3900 COMMONWEALTH BOULEVARD, SUITE 309,
TALLAHASSEE, FL
850-245-2606
14. PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND THE COUNTY SURVEYOR, WITHOUT DELAY, BY TELEPHONE 407-836-7940). THE CONTRACTOR SHALL PROVIDE WRITTEN FOLLOW UP CONFIRMATION WITHIN 48 HOURS OF TELEPHONE NOTIFICATION.
ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.
15. PRIOR TO BEGINNING ANY CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO ORANGE COUNTY HIGHWAY CONSTRUCTION DEPARTMENT A SET OF FIELD NOTES VERIFYING THE BENCHMARK ELEVATIONS AND THE REFERENCE POINT TIES SHOWN ON THE TITLE SHEET AND PLAN AND PROFILE SHEETS, AND/OR A SET OF FIELD NOTES FOR ALL ADDITIONAL BENCHMARK AND REFERENCE POINT TIES PROPOSED TO BE USED IN CONSTRUCTING THE PROJECT WITH THEIR LOCATION, DESCRIPTION AND ELEVATION, BASED ON ORANGE COUNTY DATUM. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA.
16. WITHIN 21 CALENDAR DAYS AFTER NOTICE TO PROCEED, THE CONTRACTOR SHALL STAKE THE RIGHT-OF-WAY AT 100' INTERVALS AND AT RIGHT-OF-WAY BREAKS WITH STATIONING SHOWN ON THE STAKES. NO INVOICE FOR PAYMENT WILL BE PROCESSED UNTIL THE RIGHT-OF-WAY HAS BEEN STAKED TO THE SATISFACTION OF THE ENGINEER. PAYMENT IS INCLUDED IN THE PRICE BID FOR ITEM NO. 101-1 "MOBILIZATION" (LS).
17. THE CONTRACTOR SHALL STAKE ALL IMPROVEMENTS USING GEOMETRIC DATA PROVIDED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL, PRIOR TO THE INSTALLATION OF ANY IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN WRITING IF ANY APPARENT DISCREPANCIES ARE FOUND.
18. TO MEET ADA REQUIREMENTS, ALL SIDEWALK CONSTRUCTION SHALL COMPLY WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
19. FOR PEDESTRIAN CURB CUT RAMPS DETAILS, REFER TO FDOT STANDARD INDEX 304. NOMENCLATURE SHOWN IN THE PLANS REFERS TO THE RAMP TYPES IDENTIFIED IN INDEX 304.
20. ALL EXCAVATIONS SHALL BE REQUIRED TO CONFORM TO THE PROVISION OF PART IV OF CHAPTER 553.60, F.S., ALSO KNOWN AS THE "TRENCH SAFETY ACT". TO PROTECT EXISTING PAVEMENT, STRUCTURES, FOUNDATIONS, AND CONSTRUCTION PERSONNEL DURING CONSTRUCTION OF THE PROJECT.
21. CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AND SIDE STREETS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTING CONSTRUCTION.
22. THE CONTRACTOR SHALL FIELD VERIFY THE EXISTING PAVEMENT ELEVATIONS OF ALL DRIVEWAYS AND SIDEWALKS PRIOR TO THE START OF CONSTRUCTION TO MATCH THE PROPOSED PAVEMENT TO THE EXISTING.
23. EXISTING RIGHT-OF-WAY IS BASED ON FIELD MONUMENTATION.

SOURCE OF BENCHMARK DATUM

BENCHMARKS (CONTINUED FROM SHEET 1)

NGS MONUMENT - PID D19171
ELEVATION = 101.76'
BENCHMARK IS SURVEY DISC STAMPED "C-1384-039" IN CURB INLET ON THE EAST SIDE OF SR 535 WEST OF THE INTERSECTION WITH APOPKA VINELAND RD.

NGS MONUMENT - PID AA6757
ELEVATION = 92.90'
BENCHMARK IS ORANGE COUNTY DISC STAMPED "L-715-017" SET IN A CATCH BASIN ON THE EAST SIDE OF SR 441 SOUTH OF WATER BRIDGE BLVD.

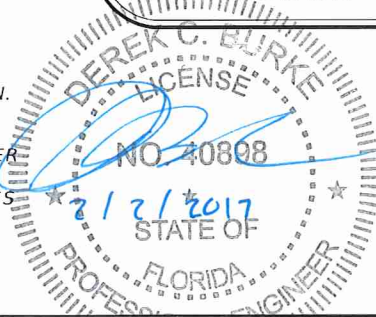
NGS MONUMENT - PID AA6655
ELEVATION = 110.95'
BENCHMARK IS A SURVEY DISC STAMPED "ORA 30 FLDNR" SET IN A HEADWALL ON THE EAST SIDE OF KIRKMAN RD., JUST NORTH OF WESTGATE DR.

NGS MONUMENT - PID AA6748
ELEVATION = 78.32'
BENCHMARK IS A ORANGE COUNTY DISC STAMPED "L-715-008" SET IN THE FOOTING OF AN ELECTRIC TRANSMISSION TOWER IN THE O.U.C. EASEMENT RUNNING NORTH FROM HUNTER'S CREEK SUB-DIVISION AND NORTH OF TARRAGONA DR.

NGS MONUMENT - PID D19128
ELEVATION = 108.09'
BENCHMARK IS A SURVEY DISC STAMPED "D 628 2005" SET IN THE LEDGE OF A BRIDGE ABUTMENT OF AN OVERPASS FOR THE CENTRAL FLORIDA GREENE WAY ACROSS APOPKA VINELAND RD. JUST SOUTHEAST OF INTERNATIONAL DR. SOUTH.

ELEVATIONS ARE DERIVED FROM ORANGE COUNTY BENCHMARKS, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)

24. THE CONTRACTOR SHALL PERFORM EROSION CONTROL MEASURE IN ACCORDANCE WITH SECTION 104 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2016. DETAILS CONTAINED IN THE PLANS, AS DIRECTED BY THE ENGINEER AND BY ORANGE COUNTY.
25. THE CONTRACTOR SHALL SUBMIT AN EROSION CONTROL PLAN TO BE APPROVED BY THE ENGINEER PRIOR TO SCHEDULING THE PRE- CONSTRUCTION MEETING.
26. ALL DISTURBED AREAS SHALL BE SODDED AFTER GRADING IS COMPLETE.
27. SOD ON EACH SIDE OF PROPOSED TRAIL UP TO THE EXISTING AND PROPOSED PROPERTY LINE ARE THE MAXIMUM ALLOWED FOR COMPENSATION AND WILL BE RE-SODDED TO MATCH THE EXISTING TYPE OF SOD. CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE BEYOND THE SOD PAY LIMITS DISTURBANCE ALLOWED.
28. DURING CONSTRUCTION THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE POLLUTING, SILTING, OR DISTURBING DOES NOT EXCEED THE LIMITS ALLOWED BY THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION TO THE EXISTING WATER BODIES. SUCH MEASURES INCLUDE, BUT ARE NOT LIMITED TO THE CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS OR SILT BARRIERS. THE MEASURES DELINEATED ABOVE ARE THE MINIMUM REQUIRED, WITH ADDITIONAL CONTROLS TO BE UTILIZED AS NEEDED, DEPENDENT UPON ACTUAL SITE CONDITIONS AND CONSTRUCTION OPERATIONS.
29. IN THE EVENT THAT THE EROSION PREVENTION AND CONTROL DEVICES SHOWN IN THE EROSION CONTROL PLAN PROVE INEFFECTIVE, ALTERNATE METHODS FOR MAINTAINING STATE WATER QUALITY STANDARDS FOR DISCHARGE FROM THE CONSTRUCTION SITE WILL BE REQUIRED. ALL ALTERNATE EROSION PREVENTION AND CONTROL DEVICES MUST BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
30. ALL SURFACE WATER DISCHARGE FROM THE CONSTRUCTION SITE, INCLUDING DEWATERING DISCHARGE, SHALL MEET STATE WATER QUALITY STANDARDS PRIOR TO REACHING ANY WATER OF THE STATE INCLUDING WETLANDS.



REVISIONS				DEREK C. BURKE, P.E. LICENSE NO. 40898 201 N. Magnolia Ave. Suite 200 Orlando FL 32801 Phone 407.839.4300 Fax 407.839.1621 CERTIFICATE OF AUTHORIZATION NO. 6796			ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839 (407) 836-7900	SHEET NO. 9
DATE	DESCRIPTION	DATE	DESCRIPTION					

GENERAL NOTES

31. THE CONTRACTOR SHALL ENSURE THAT RIGHT- OF-WAY UTILIZATION PERMIT, NPDES PERMIT, AND ALL OTHER NECESSARY PERMITS ARE OBTAINED PRIOR TO STARTING WORK. THE CONTRACTOR SHALL REMOVE THE TRUNK & STUMP OF ALL TREES TO BE DEMOLISHED COMPLETELY TO CONSTRUCT THE PROPOSED TRAIL.
32. PRIOR TO BEGINNING ANY CLEARING ACTIVITIES, THE CONTRACTOR SHALL CLEARLY MARK WITH FLAGGING TAPE OR OTHER APPROVED METHOD, ALL EXISTING TREES TO REMAIN ON THE PROJECT SITE. ALL TREES TO BE REMOVED SHALL BE MARKED WITH SPRAY PAINT OR OTHER APPROVED METHOD SO THAT DURING CLEARING, THERE ARE NO MISUNDERSTANDINGS AS TO WHICH TREES ARE TO BE REMOVED AND WHICH ARE TO REMAIN. ALL TREES WITHIN 2' OF EDGE OF TRAIL SHALL BE REMOVED UNLESS OTHERWISE NOTED.
33. WHEN ANY ROOTS OR BRANCHES OF EXISTING TREES ARE ENCOUNTERED DURING CLEARING, GRUBBING OR GRADING OF THE SITE, THE ROOTS MUST BE CUT OFF CLEANLY WITH SHARP PRUNING TOOL.
34. ALL LANDSCAPING, IRRIGATION SYSTEMS, EXISTING WALLS, OR ANY OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED BY CONSTRUCTION SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION. THE COST FOR SUCH RESTORATION SHALL BE INCIDENTAL TO CONSTRUCTION AND NO EXTRA COMPENSATION WILL BE ALLOWED.
35. THE CONTRACTOR SHALL HAVE REFERENCES AND RESTORE ALL PROPERTY CORNERS, TBMS AND LAND MARKERS DISTURBED DURING DEMOLITION. THE CONTRACTOR SHALL COMPLY WITH THE COUNTY REQUIREMENTS ON HOW SURVEY MARKERS ARE REPLACED.
36. THE CONTRACTOR IS RESPONSIBLE FOR ALL DEMOLITION AND REMOVAL OF ALL TREES AND CONCRETE SIDEWALKS IN THE WORK AREA, NECESSARY TO COMPLETE THE WORK, INCLUDING TREE STUMPS.

TREE PROTECTION NOTES:

37. PROTECT EXISTING TREES AGAINST:
 - UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS.
 - SKINNING AND BRUISING OF BARK
 - EXCESS FOOT OR VEHICULAR TRAFFIC OVER ROOTS.
 - PARKING VEHICLE WITHIN DRIP LINE
 - SMOTHERING OF TREES BY STOCKPILING SOIL OR MATERIALS WITHIN THE DRIP LINE.
38. TEMPORARY TREE PROTECTION MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE CLEARING, GRUBBING OR GRADING AS SHOWN ON THIS SHEET. FENCE TO BE 4' HIGH MINIMUM WITH 4"x4" POST AND 2-2"x4" RAILS AT 2' AND 4' ABOVE GRADE AND SHALL BE SET DEEP ENOUGH IN THE GROUND TO BE STABLE WITHOUT ADDITIONAL SUPPORT. ALL FENCING SHOULD BE A MINIMUM OF 10' CLEAR DISTANCE FROM THE FACE OF ANY TREES AND SHALL FULLY ENCLOSE ALL TREES SCHEDULED TO REMAIN. NOTHING SHALL BE PLACED INSIDE OF PROTECTIVE BARRICADES, INCLUDING BUT NOT LIMITED TO CONSTRUCTION MATERIALS, MACHINERY, CHEMICALS, OR TEMPORARY SOIL DEPOSITS. ON LARGER THAN 20" DBH, BARRICADE SHALL BE NO CLOSER THAN 15' FROM FACE OF TREE. WHEN PAVING, EXCAVATION OF LANDSCAPE MUST BE DONE WITHIN BARRICADES, BARRICADES SHALL BE MOVED BACK TO A SECONDARY LOCATION AT EDGE OF WORK. EXTRA CARE MUST BE TAKEN AT THIS TIME BY THE CONTRACTOR TO ENSURE THAT NO DAMAGE TO THE TREE OCCURS. PROTECTION SHALL BE REMOVED UPON COMPLETION OF WORK.
39. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL BE OPERATED OR STORED WITHIN THE ROOT PROTECTION ZONE. NO CLEAN-OUT AREAS WILL BE CONSTRUCTED SO THAT THE MATERIAL WILL BE IN OR MIGRATE TO THE ROOT PROTECTION ZONE.

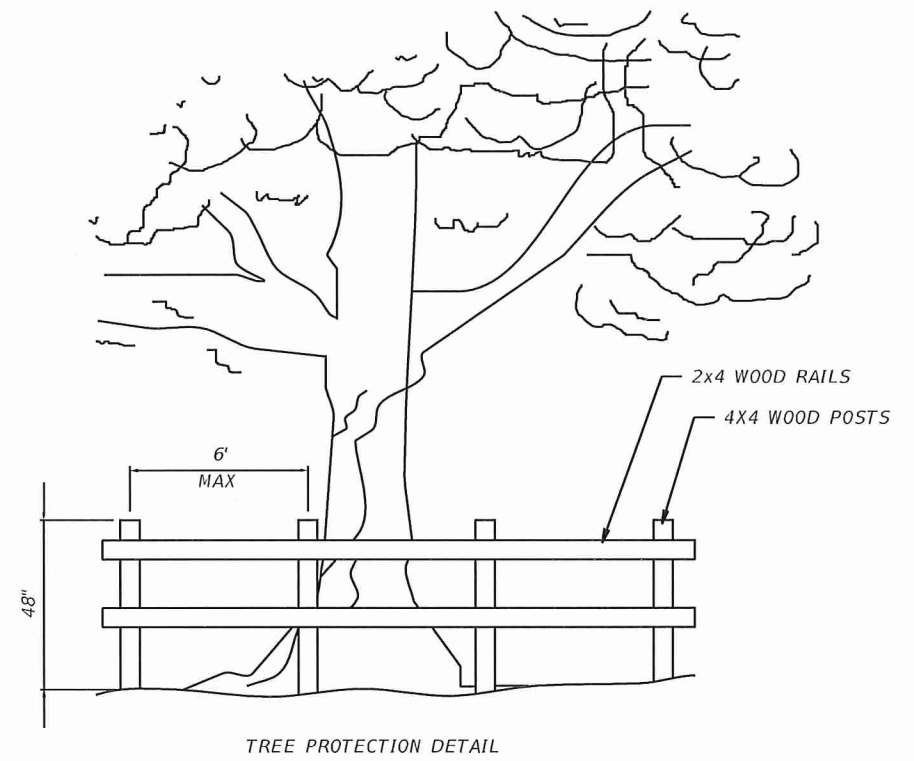
40. A ROOT PROTECTION ZONE WILL BE ESTABLISHED AROUND EACH TREE OR ANY VEGETATION TO BE PRESERVED. THE ROOT PROTECTION ZONE SHALL BE AN AREA DEFINED BY THE RADIUS EXTENDING OUTWARD FROM THE TRUNK OF THE TREE. A DISTANCE OF 6 INCHES FOR EACH INCH DIAMETER AT A HEIGHT 4.5 FEET.
41. WHEN NECESSARY TO CUT A ROOT OVER 1-5/8" DIAMETER, CUT MUST BE A CLEAN CUT. COAT CUT FACES OF ROOTS WITH EMULSIFIED ASPHALT OR OTHER ACCEPTABLE COATING FORMULATED FOR USE ON DAMAGED PLANT TISSUE. TEMPORARILY COVER EXPOSED ROOTS WITH WET BURLAP TO PREVENT DRYING AND COVER WITH EARTH AS SOON AS POSSIBLE.
42. NO GRADE CHANGES ARE TO BE MADE WITHIN THE ROOT PROTECTION AREA WITHOUT PRIOR APPROVAL OF THE OWNER.
43. REPAIR OR REPLACE TREES INDICATED TO REMAIN, WHICH ARE DAMAGED IN THE CONSTRUCTION OPERATIONS, IN A MANNER ACCEPTABLE TO THE OWNER. EMPLOY A QUALIFIED TREE SURGEON TO REPAIR MAJOR DAMAGE TO TREES AND SHRUBS, PROMPTLY, TO PREVENT PROGRESSIVE DETERIORATION CAUSED BY THE DAMAGE.
44. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF TREES DAMAGED BEYOND REPAIR WITH THREE (3) TREES OF SIMILAR QUALITY AND SPECIES, SIZE TO BE DETERMINED BY THE OWNER OR HIS REPRESENTATIVE. IF TREES ARE HARMED THROUGH LACK OF PROTECTION OR THROUGH NEGLIGENCE ON THE PART OF THE CONTRACTOR, THE CONTRACTOR SHALL BEAR THE BURDEN OF THE COST OF REPAIR OR REPLACEMENT.
45. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED PER THE DIRECTION OF THE OWNER.
46. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE WATERING THE ROOT PROTECTION ZONE AND OR WASHING FOLIAGE
47. NO WIRES, NAILS OR OTHER MATERIALS MAY BE ATTACHED TO PROTECTED TREES.
48. IF ANY TREE LOCATED WITHIN THE CONSERVATION EASEMENT IS REMOVED DURING CONSTRUCTION ACTIVITIES, THE TREE MUST BE REPLACED. THE TREE SHALL BE REPLACED LIKE FOR LIKE. IN THE EVENT THAT THE TREE SPECIES REMOVED IS AN EXOTIC SPECIES, IT WILL BE REPLACED WITH A NATIVE SPECIES THAT EXISTS WITHIN THE CONSERVATION EASEMENT.

CONSTRUCTION NOTES:

49. EXCAVATION AND COMPACTION FOR THE NEW TRAIL SHALL BE PER SECTION 120 OF THE TECHNICAL PROVISIONS, WITH AN EVEN SURFACE AT THE REQUIRED GRADE. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF EXCESS MATERIAL.
50. MAINTAIN ALL WORK AREAS CLEAN DURING AND AFTER CONSTRUCTION. ALL DEBRIS SHALL BE REMOVED FROM THE SITE ON THE SAME DAY.
51. THE CONTRACTOR SHALL SUBMIT AS-BUILT SURVEY WITH EACH PAY REQUEST FOR PARTIAL APPROVAL, AS SPECIFIED IN SECTION 01050. NOT MEETING THIS REQUIREMENT WILL BE REASON TO REJECT FUTURE PAY REQUESTS UNTIL APPROVAL IS OBTAINED.
52. THE LOCATIONS OF THE UTILITIES SHOWN IN THE PLANS ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATIONS/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATIONS BETWEEN THESE POINTS HAVE NOT BEEN VERIFIED.

53. EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
54. THE CONTRACTOR SHALL NOTIFY UTILITY OWNERS LISTED BELOW THROUGH SUNSHINE ONE CALL OF FLORIDA INC. BY DIALING 811 SEVEN DAYS IN ADVANCE OF SCHEDULED EXCAVATION FOR THE JOB SITE. ALL UTILITY OWNERS MAY NOT BE A MEMBER, REQUIRING DIRECT CONTACT.

POWER: DUKE ENERGY DIST. & TRANSMISSION _ _ _ _ _ 800-700-8744
 CATV : COMCAST CABLE COMMUNICATIONS _ _ _ _ _ 352-315-8528
 FIBER: FPL FIBERNET _ _ _ _ _ 305-552-2931
 WATER: ORANGE COUNTY UTILITIES _ _ _ _ _ 407-254-9700
 SEWER: ORANGE COUNTY UTILITIES _ _ _ _ _ 407-254-9700
 TELEPHONE: ORLANDO TELEPHONE COMPANY _ _ _ _ _ 727-235-4362



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

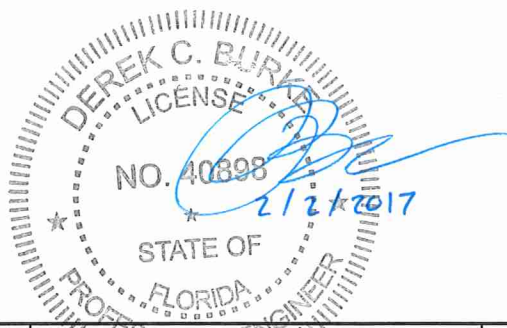
ORANGE COUNTY GOVERNMENT
ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

GENERAL NOTES

SHEET NO.
10

Tabulations of Quantities

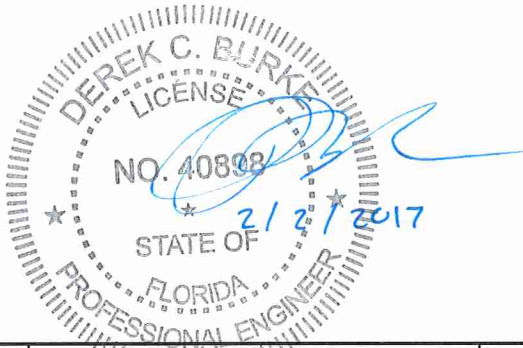
PAY ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL			
			1		2		3		4		5		6		7		8		9		10		PLAN	FINAL	PLAN	FINAL		
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL		
700-1-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS	4																						6			
710-11-160	PAVEMENT MESSAGE (PAINT)	EA																										
	(TURN)																											
	(SHARP)																											
	(SLOW)																											
710-11-170	DIRECTIONAL ARROW (PAINT)	EA																										
710-11-211	PAINTED PAVEMENT MARKING, STANDARD, YELLOW, SOLID, 6"	NM	0.040		0.003																							



REVISIONS				DEREK C. BURKE, P.E. LICENSE NO. 40898 201 N. Magnolia Ave. Suite 200 Orlando FL 32801 Phone 407.839.4300 Fax 407.839.1621 CERTIFICATE OF AUTHORIZATION NO. 6796		ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 4200 SOUTH JOHN YOUNG PARKWAY ORLANDO, FLORIDA 32839 (407) 836-7900		TABULATION OF QUANTITIES		SHEET NO. //
DATE	DESCRIPTION	DATE	DESCRIPTION							

Tabulations of Quantities

PAY ITEM NUMBER	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL			
			11		12																		PLAN	FINAL	PLAN	FINAL		
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL		
700-1-11	SINGLE POST SIGN, F&I, LESS THAN 12 SF	AS	5																						5		11	
710-11-160	PAVEMENT MESSAGE (PAINT)	EA																										
	(TURN)		2																						2			
	(SHARP)		2																						2		14	
	(SLOW)		2																						2			
710-11-170	DIRECTIONAL ARROW (PAINT)	EA	2																						2		6	
710-11-211	PAINTED PAVEMENT MARKING, STANDARD, YELLOW, SOLID, 6"	NM	0.032																						0.032		0.109	



REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
WBQ Design & Engineering
 201 N. Magnolia Ave. Suite 200
 Orlando FL 32801
 Phone 407.839.4300 Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

TABULATION OF QUANTITIES

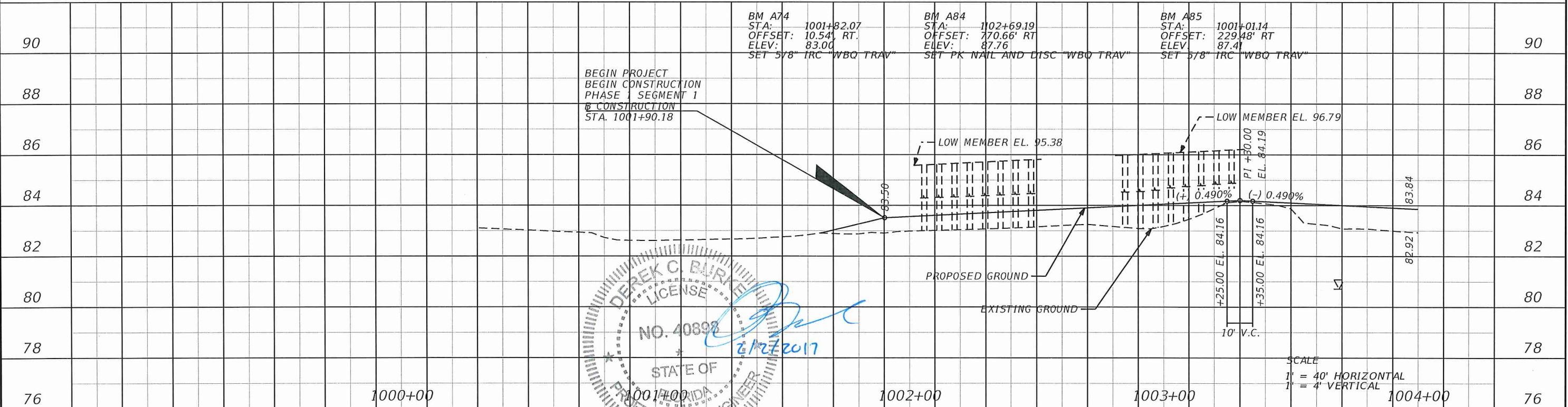
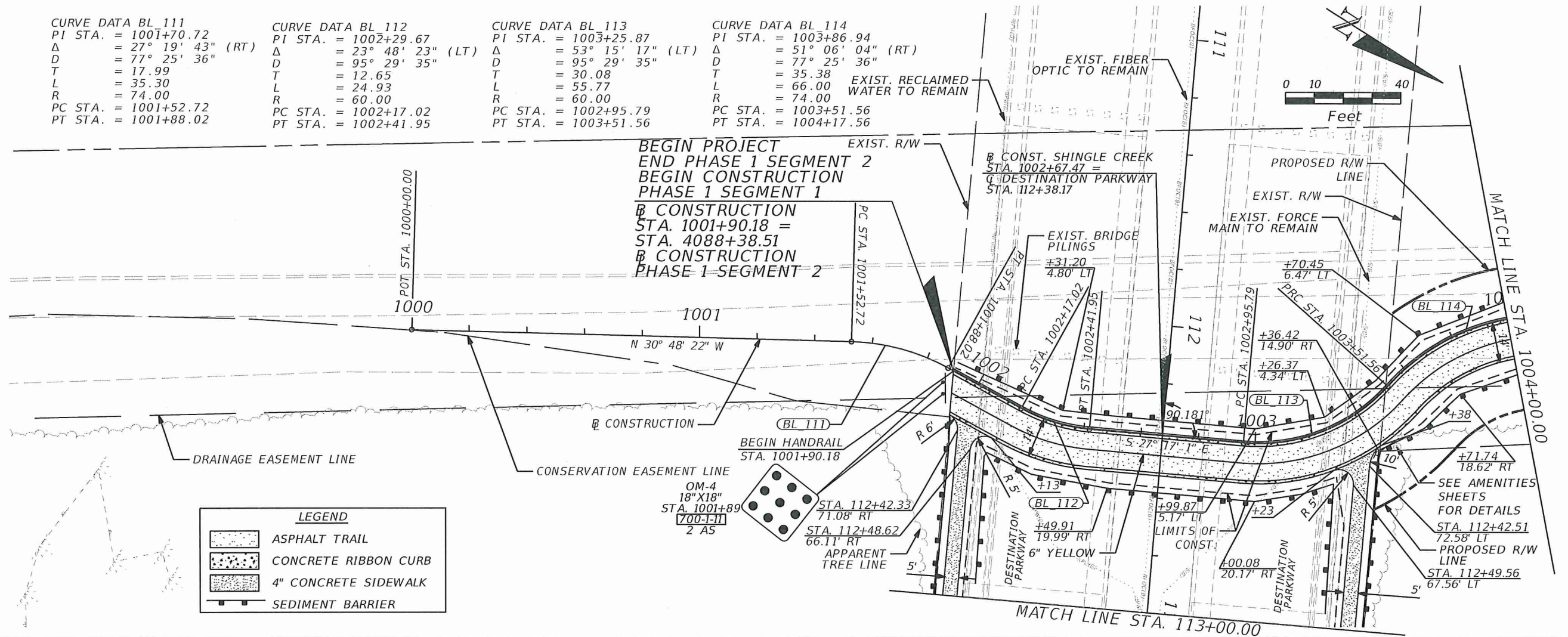
SHEET NO.
12

CURVE DATA BL 111
 PI STA. = 1001+70.72
 Δ = 27° 19' 43" (RT)
 D = 77° 25' 36"
 T = 17.99
 L = 35.30
 R = 74.00
 PC STA. = 1001+52.72
 PT STA. = 1001+88.02

CURVE DATA BL 112
 PI STA. = 1002+29.67
 Δ = 23° 48' 23" (LT)
 D = 95° 29' 35"
 T = 12.65
 L = 24.93
 R = 60.00
 PC STA. = 1002+17.02
 PT STA. = 1002+41.95

CURVE DATA BL 113
 PI STA. = 1003+25.87
 Δ = 53° 15' 17" (LT)
 D = 95° 29' 35"
 T = 30.08
 L = 55.77
 R = 60.00
 PC STA. = 1002+95.79
 PT STA. = 1003+51.56

CURVE DATA BL 114
 PI STA. = 1003+86.94
 Δ = 51° 06' 04" (RT)
 D = 77° 25' 36"
 T = 35.38
 L = 66.00
 R = 74.00
 PC STA. = 1003+51.56
 PT STA. = 1004+17.56

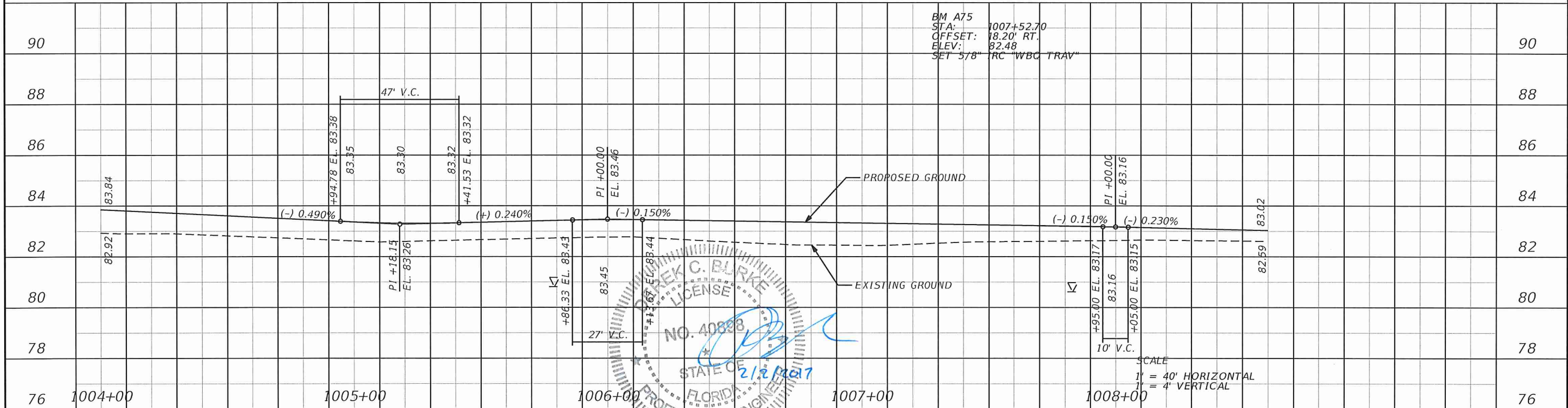
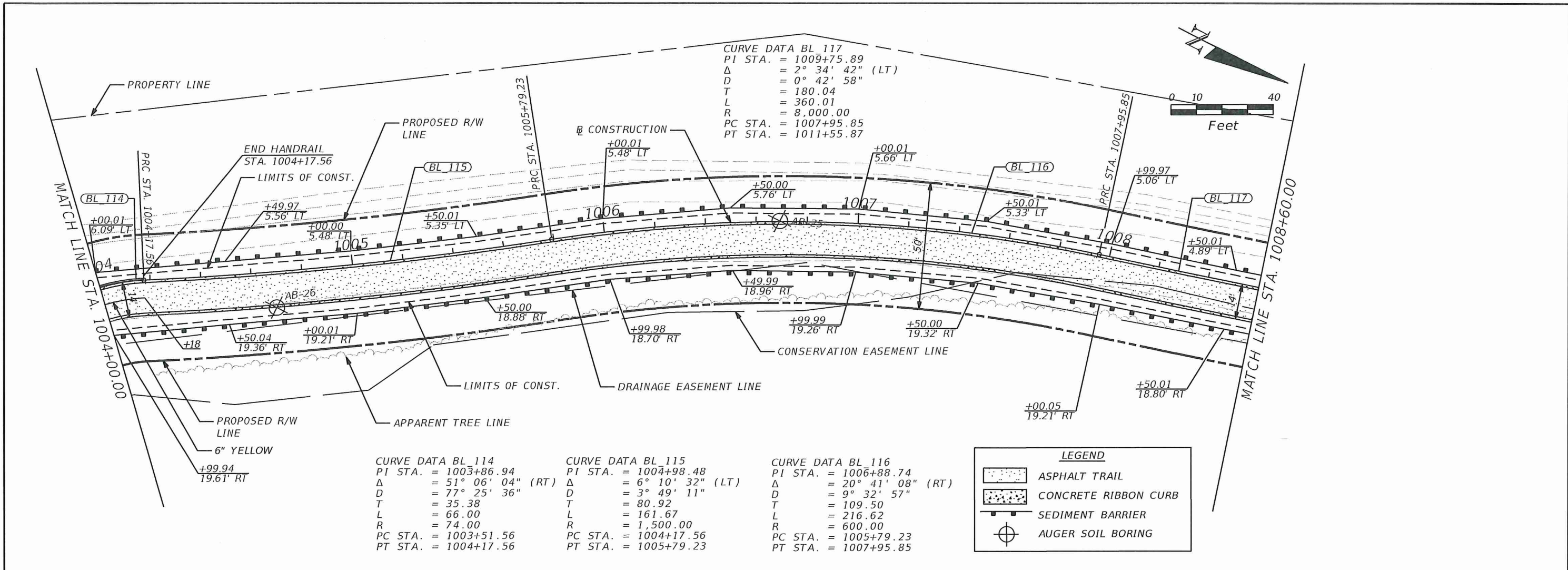


REVISIONS	
DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando, FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (1)
 SHEET NO. 13



REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898

CERTIFICATE OF AUTHORIZATION NO. 6796

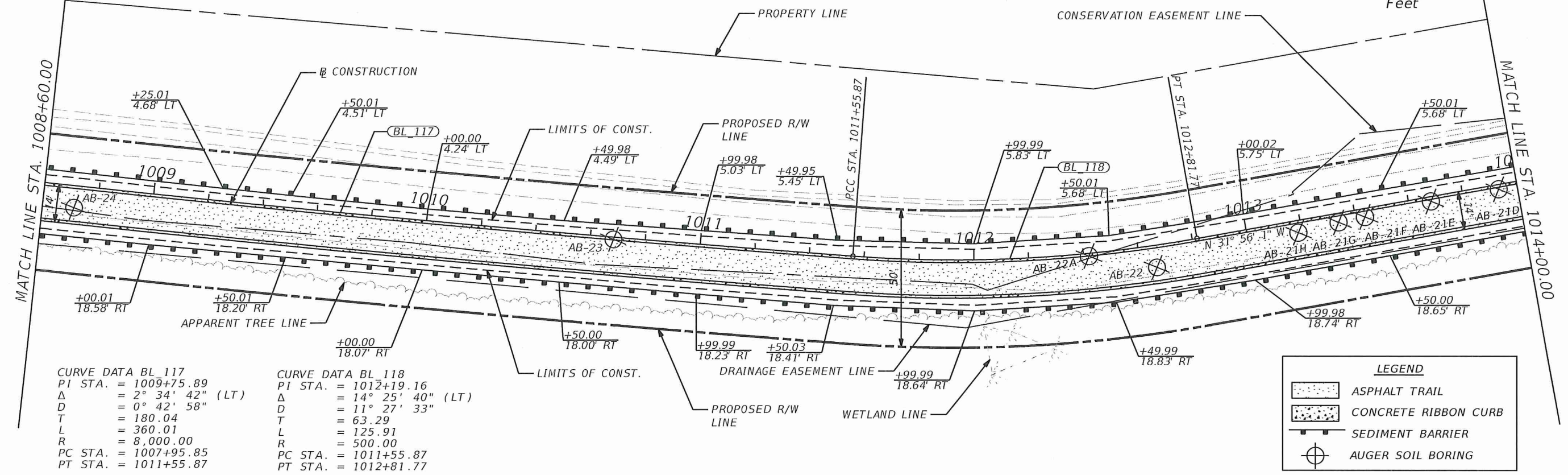
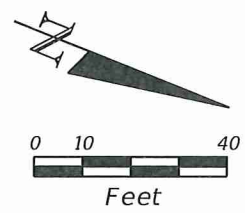
ORANGE COUNTY GOVERNMENT

ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS

ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (2)

SHEET NO. 14

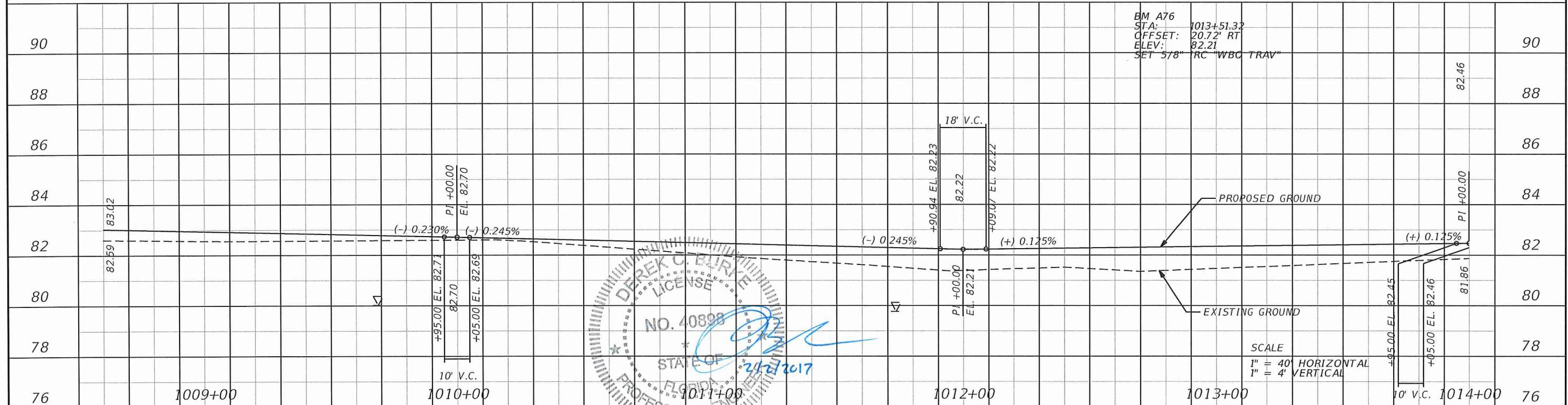


CURVE DATA BL 117
 PI STA. = 1009+75.89
 Δ = 2° 34' 42" (LT)
 D = 0° 42' 58"
 T = 180.04
 L = 360.01
 R = 8,000.00
 PC STA. = 1007+95.85
 PT STA. = 1011+55.87

CURVE DATA BL 118
 PI STA. = 1012+19.16
 Δ = 14° 25' 40" (LT)
 D = 11° 27' 33"
 T = 63.29
 L = 125.91
 R = 500.00
 PC STA. = 1011+55.87
 PT STA. = 1012+81.77

LEGEND

- ASPHALT TRAIL
- CONCRETE RIBBON CURB
- SEDIMENT BARRIER
- AUGER SOIL BORING



DEREK C. BURKE, P.E.
 LICENSE NO. 40898
 STATE OF FLORIDA
 2/2/2017

SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL

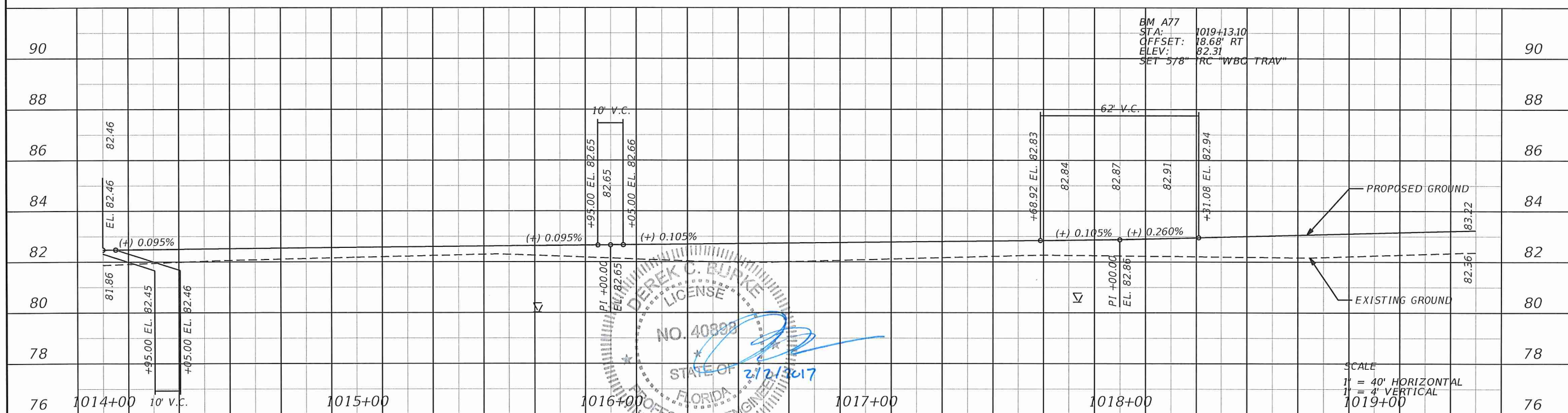
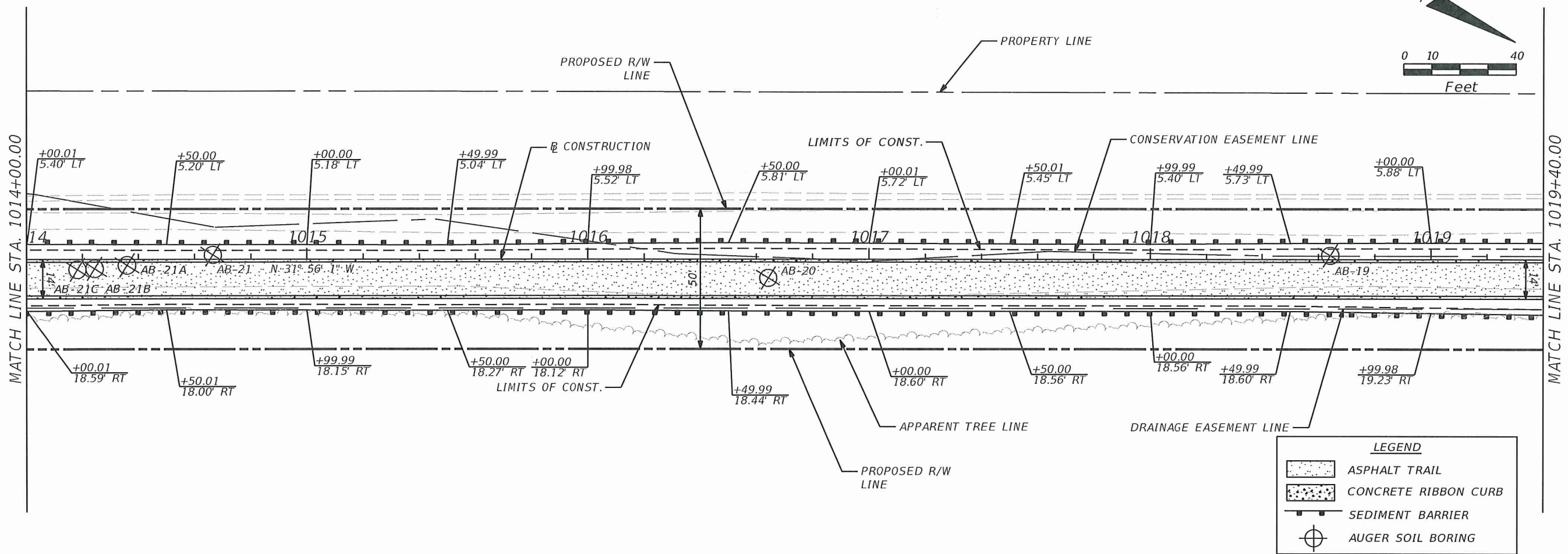
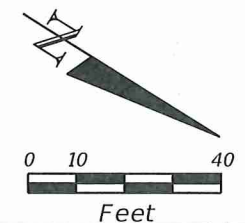
REVISIONS	
DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (3)

SHEET NO. 15



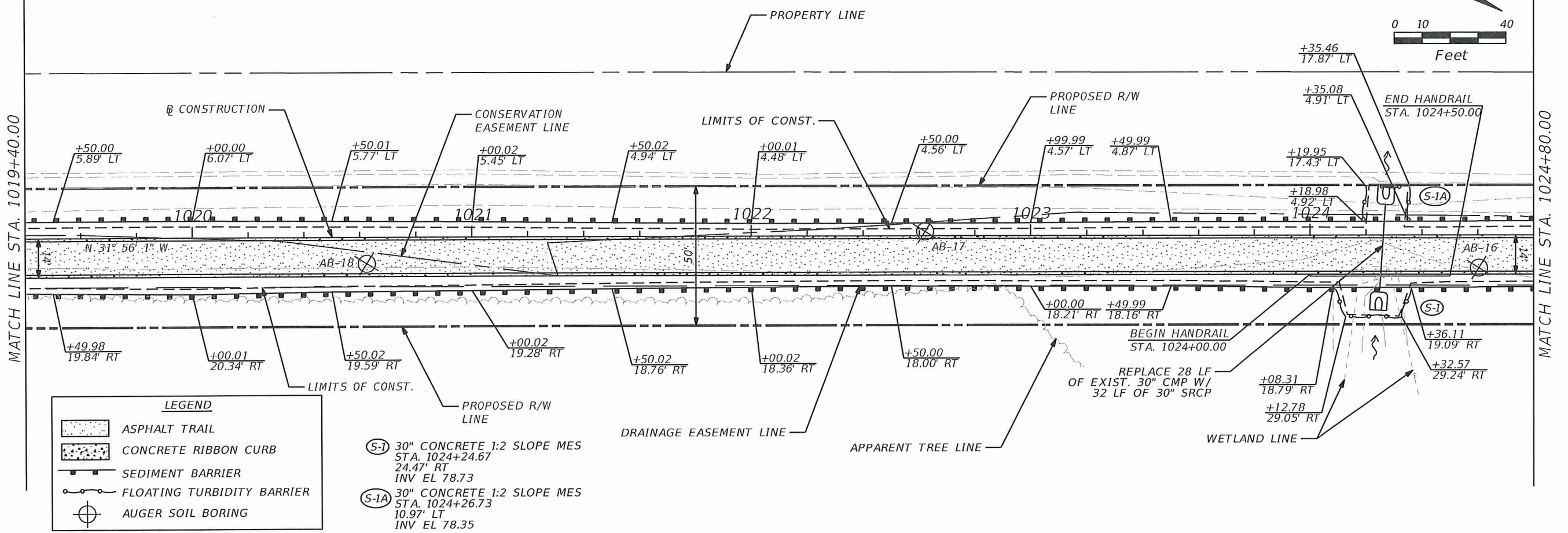
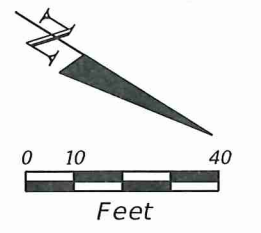
REVISIONS		DESCRIPTION	
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando Fl. 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (4)

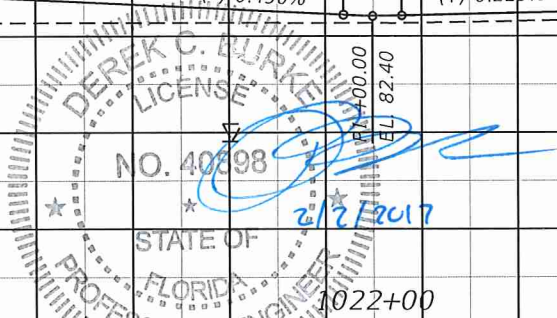
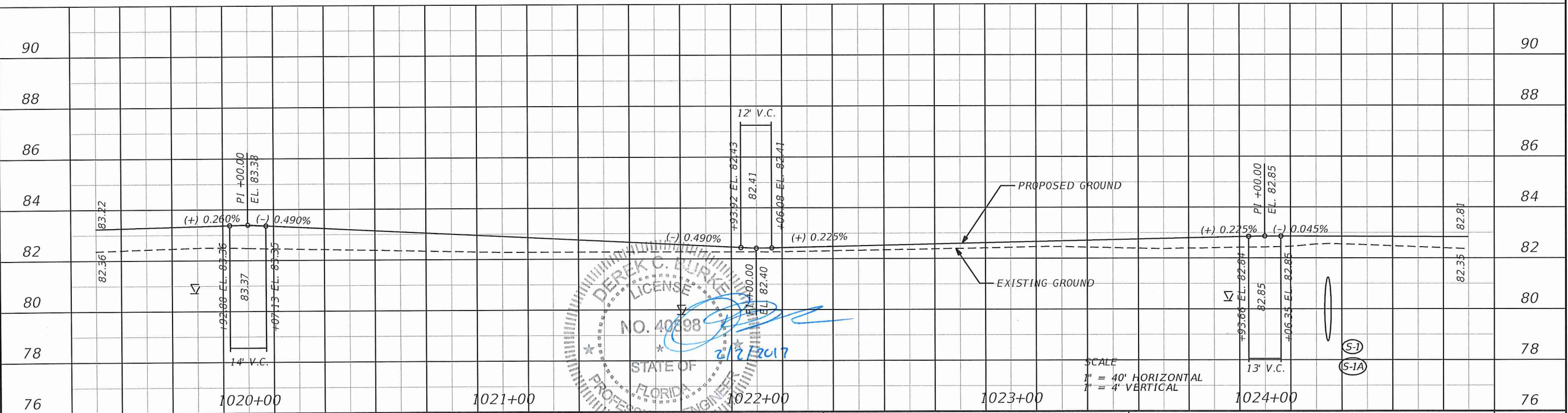
SHEET NO.
16



LEGEND

	ASPHALT TRAIL
	CONCRETE RIBBON CURB
	SEDIMENT BARRIER
	FLOATING TURBIDITY BARRIER
	AUGER SOIL BORING

- (S-1) 30" CONCRETE 1:2 SLOPE MES
STA. 1024+24.67
24.47' RT
INV EL 78.73
- (S-1A) 30" CONCRETE 1:2 SLOPE MES
STA. 1024+26.73
10.97' LT
INV EL 78.35



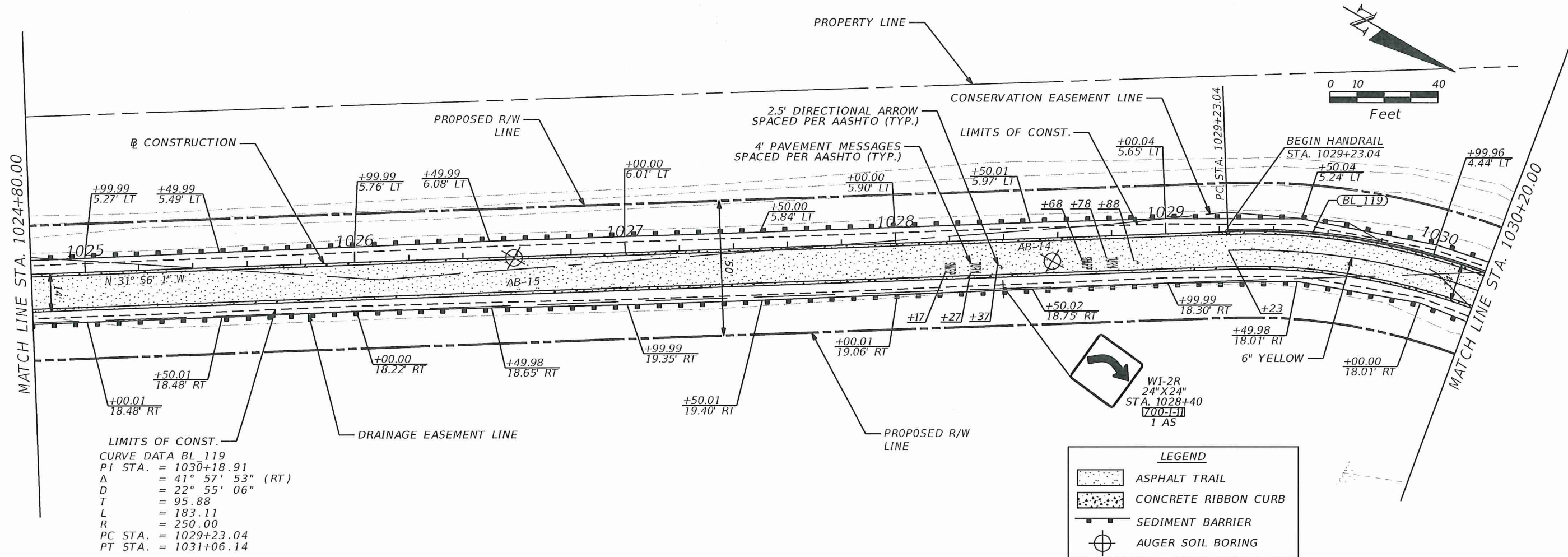
REVISIONS	
DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

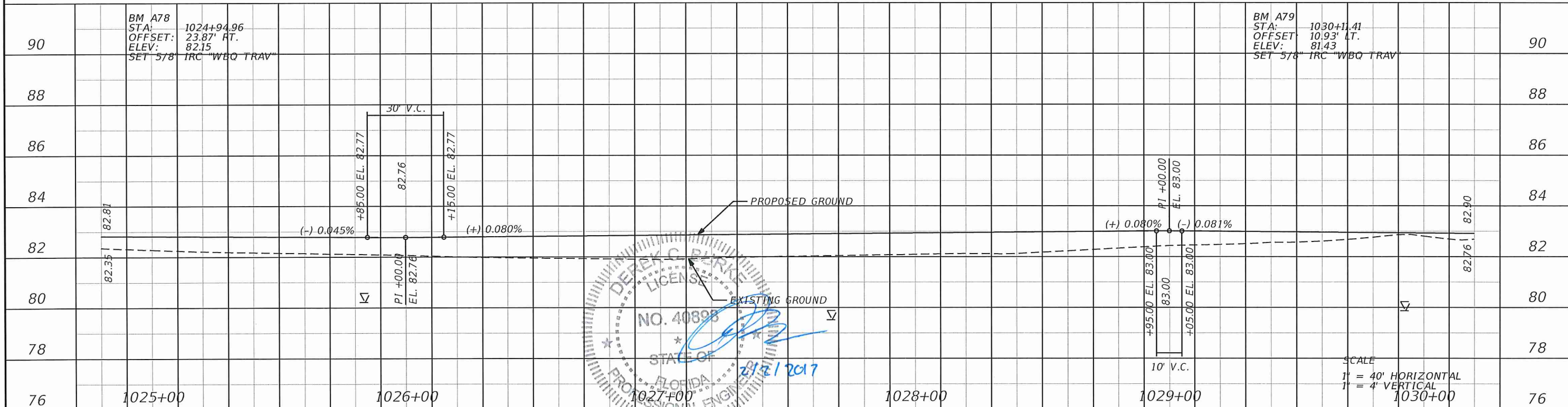
PLAN & PROFILE SHEET (5)

SHEET NO.
17



LIMITS OF CONST.
 CURVE DATA BL 119
 PI STA. = 1030+18.91
 Δ = 41° 57' 53" (RT)
 D = 22° 55' 06"
 T = 95.88
 L = 183.11
 R = 250.00
 PC STA. = 1029+23.04
 PT STA. = 1031+06.14

LEGEND	
	ASPHALT TRAIL
	CONCRETE RIBBON CURB
	SEDIMENT BARRIER
	AUGER SOIL BORING



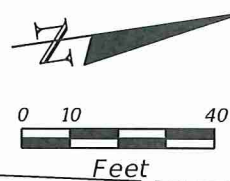
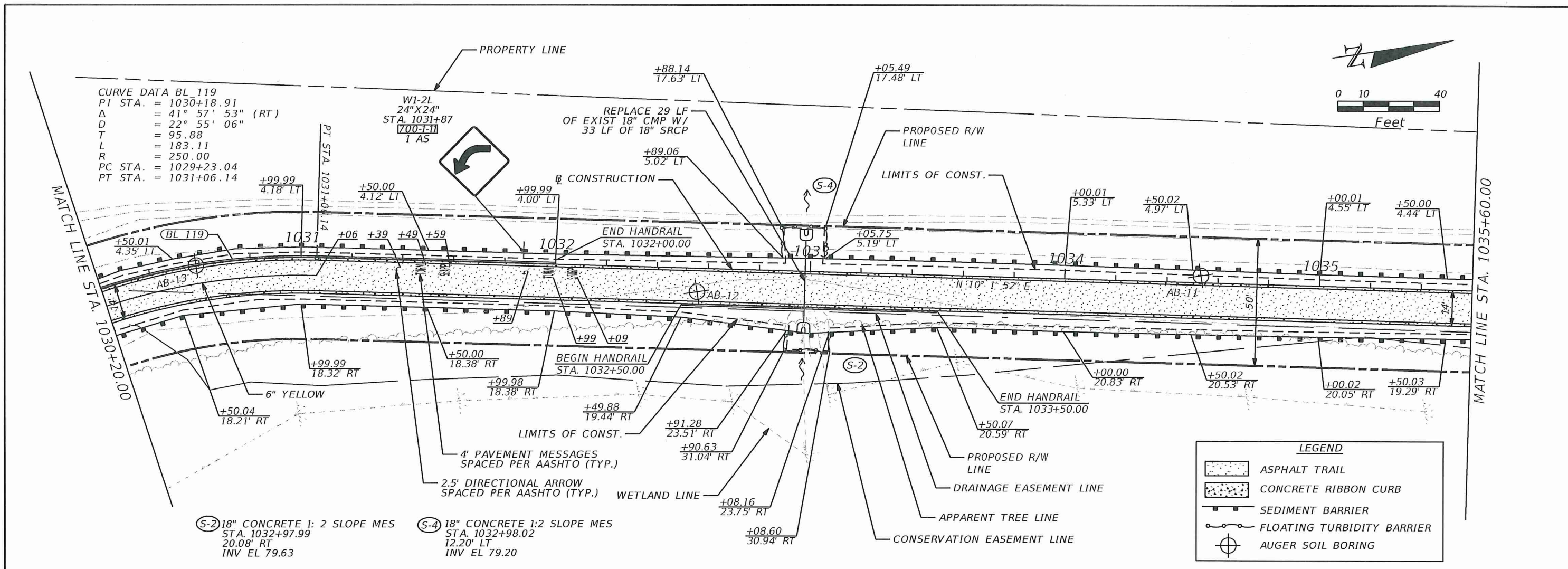
DEREK C. BURKE, P.E.
 LICENSE NO. 40898
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 2/2/2017

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796
 201 N. Magnolia Ave.
 Suite 200
 Orlando Fl. 32801
 Phone 407.839.4300
 Fax 407.839.1621

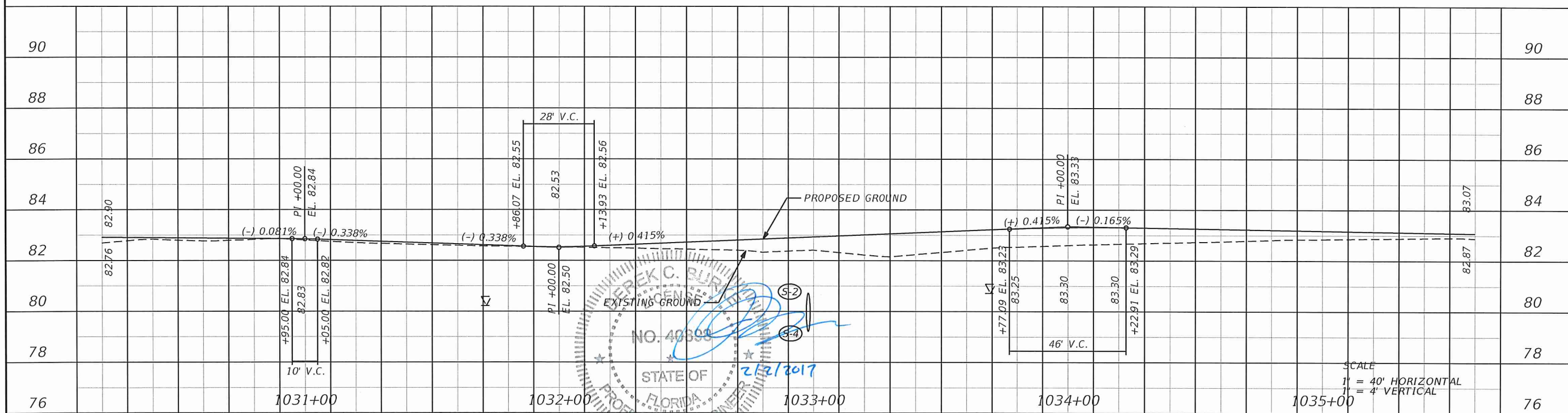
ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (6)
 SHEET NO. 18



LEGEND

	ASPHALT TRAIL
	CONCRETE RIBBON CURB
	SEDIMENT BARRIER
	FLOATING TURBIDITY BARRIER
	AUGER SOIL BORING



DEREK C. BURKE, P.E. LICENSE NO. 40898
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER
 2/2/2017

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

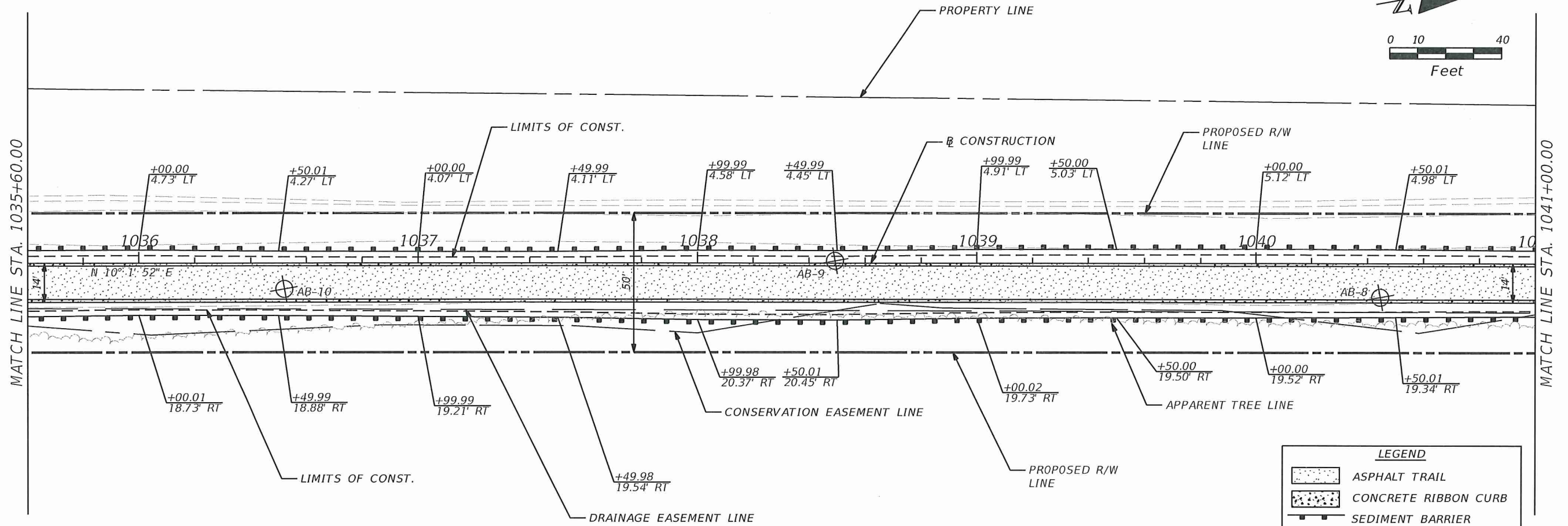
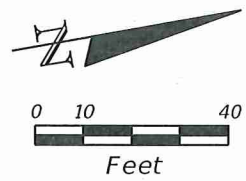
WBQ INC.
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

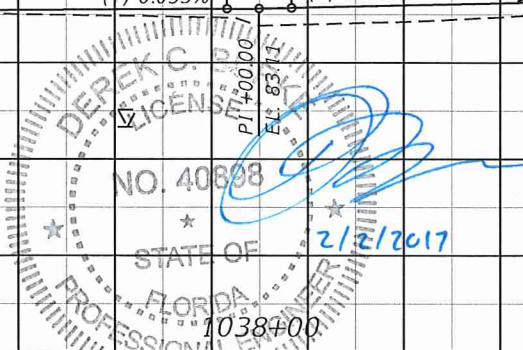
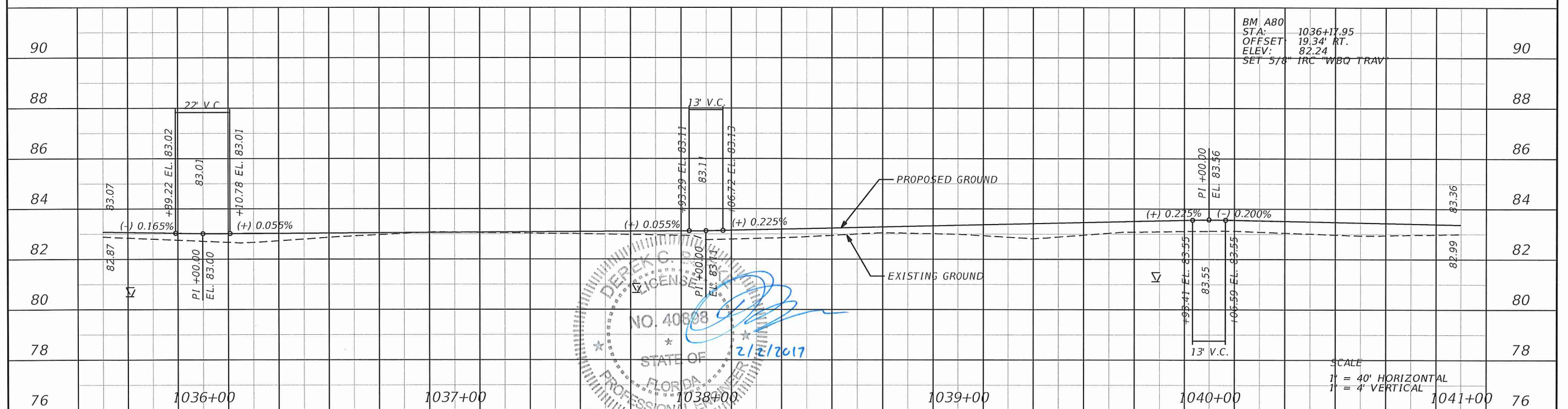
SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL

PLAN & PROFILE SHEET (7)

SHEET NO. 19



LEGEND	
	ASPHALT TRAIL
	CONCRETE RIBBON CURB
	SEDIMENT BARRIER
	AUGER SOIL BORING



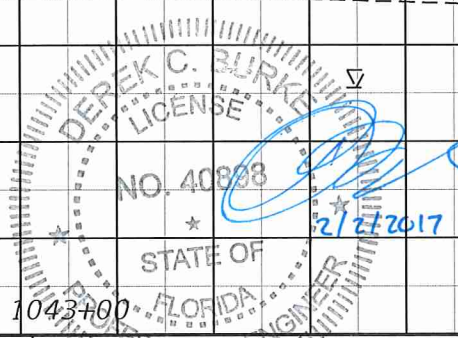
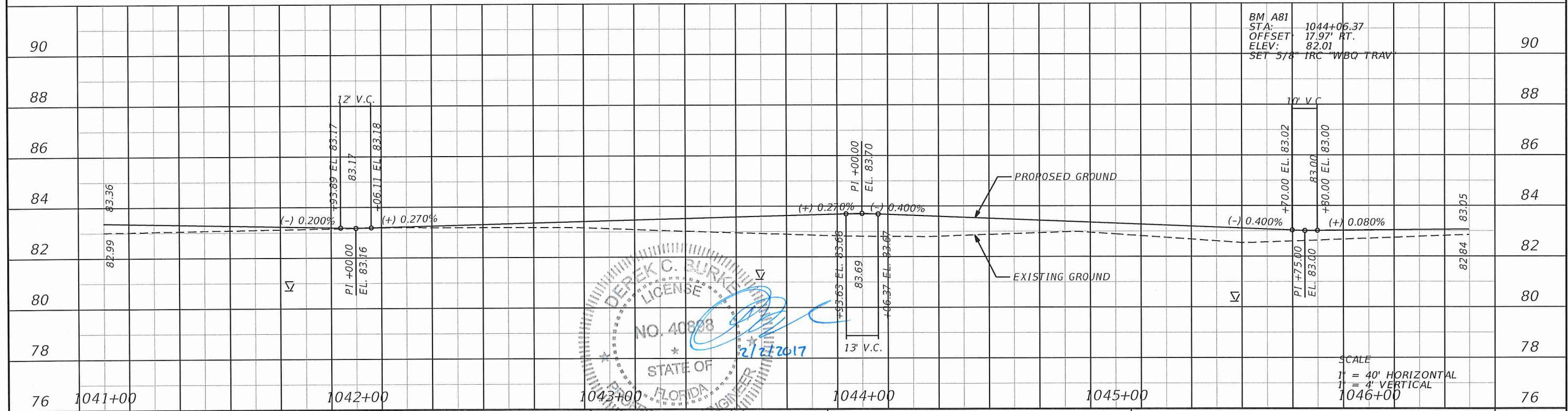
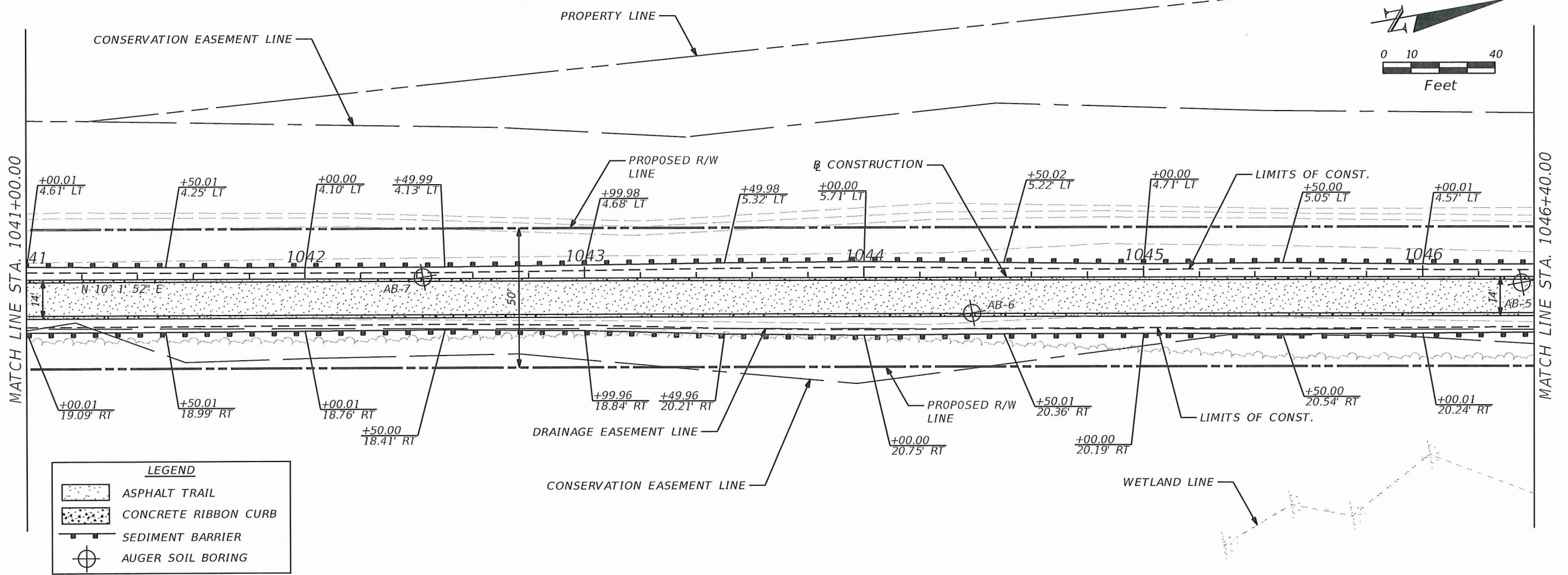
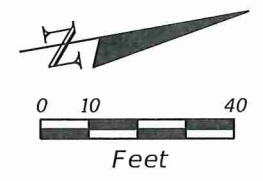
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Design & Engineering Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (8)

SHEET NO.
 20



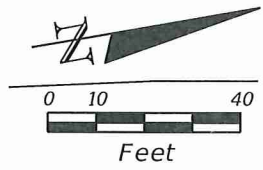
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
WBQ
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

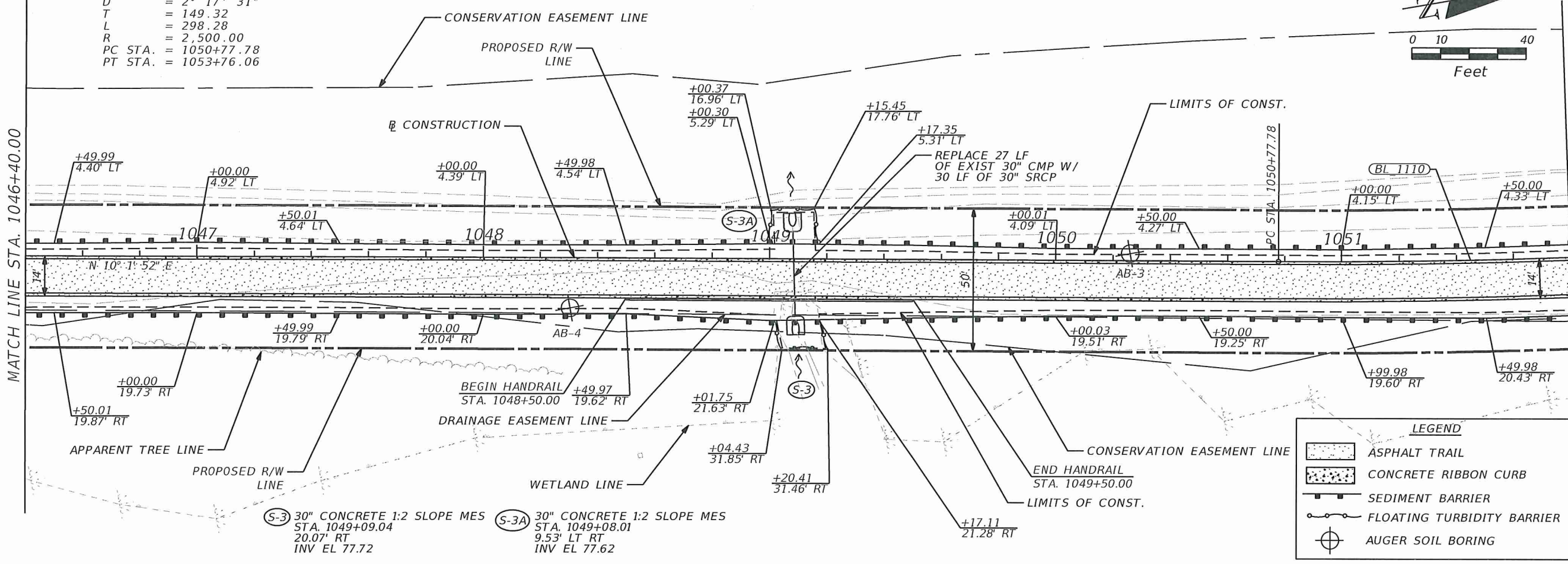
SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL
PLAN & PROFILE SHEET (9)
 SHEET NO. 21

CURVE DATA BL 1110
 PI STA. = 1052+27.10
 Δ = 6° 50' 10" (LT)
 D = 2° 17' 31"
 T = 149.32
 L = 298.28
 R = 2,500.00
 PC STA. = 1050+77.78
 PT STA. = 1053+76.06



MATCH LINE STA. 1046+40.00

MATCH LINE STA. 1051+80.00

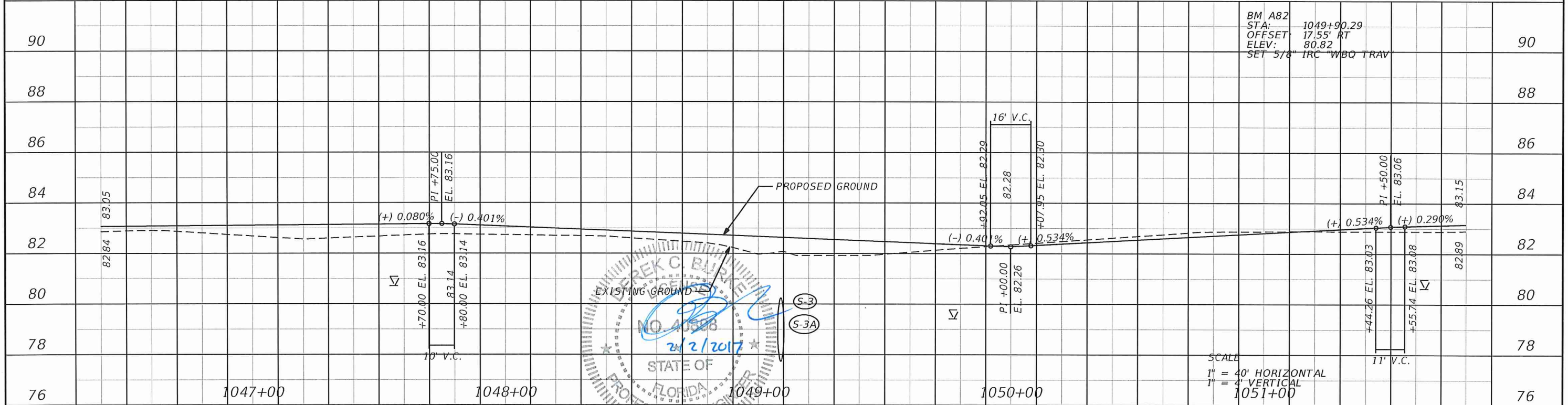


LEGEND

	ASPHALT TRAIL
	CONCRETE RIBBON CURB
	SEDIMENT BARRIER
	FLOATING TURBIDITY BARRIER
	AUGER SOIL BORING

(S-3) 30" CONCRETE 1:2 SLOPE MES
 STA. 1049+09.04
 20.07' RT
 INV EL 77.72

(S-3A) 30" CONCRETE 1:2 SLOPE MES
 STA. 1049+08.01
 9.53' LT RT
 INV EL 77.62



EXISTING GROUND

PROPOSED GROUND

DEREK C. BURKE, P.E.
 LICENSE NO. 40898
 2/2/2017
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

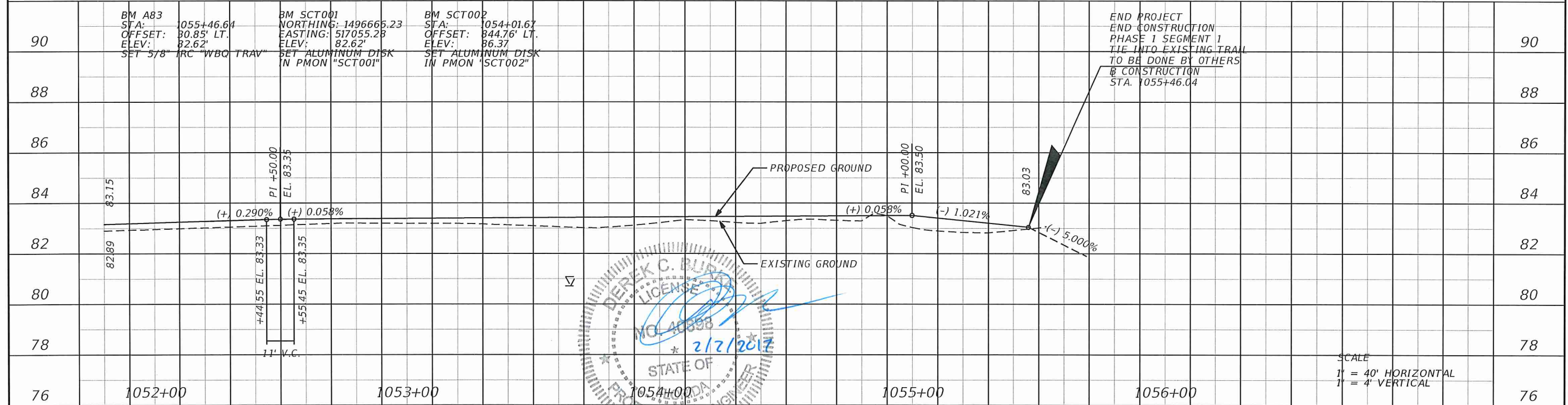
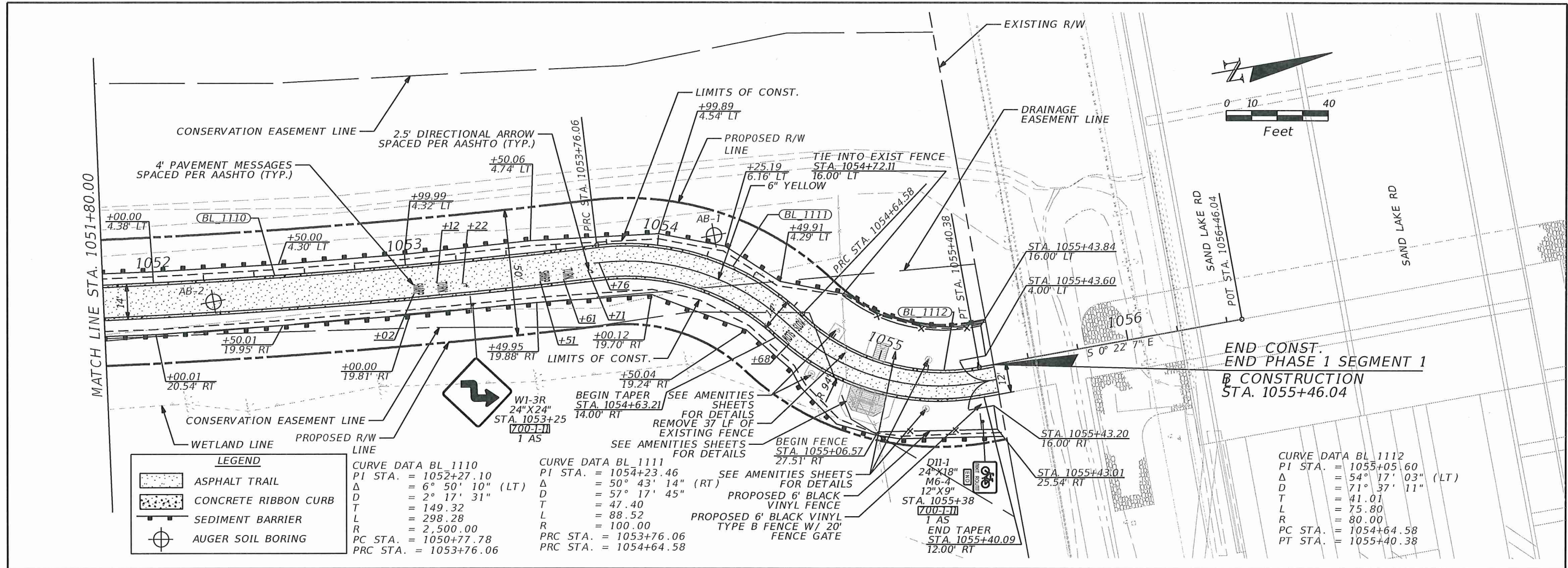
DEREK C. BURKE, P.E. LICENSE NO. 40898
 201 N. Magnolia Ave.
 Suite 200
 Orlando Fl. 32801
 Phone 407.839.4300
 Fax 407.839.1621

WBQ INC.
 Design & Engineering
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY
 DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN & PROFILE SHEET (10)

SHEET NO. 22



REVISIONS		REVISIONS	
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898

WBQ INC. Design & Engineering
CERTIFICATE OF AUTHORIZATION NO. 6796

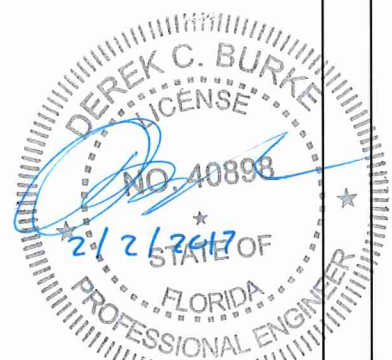
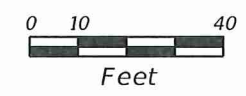
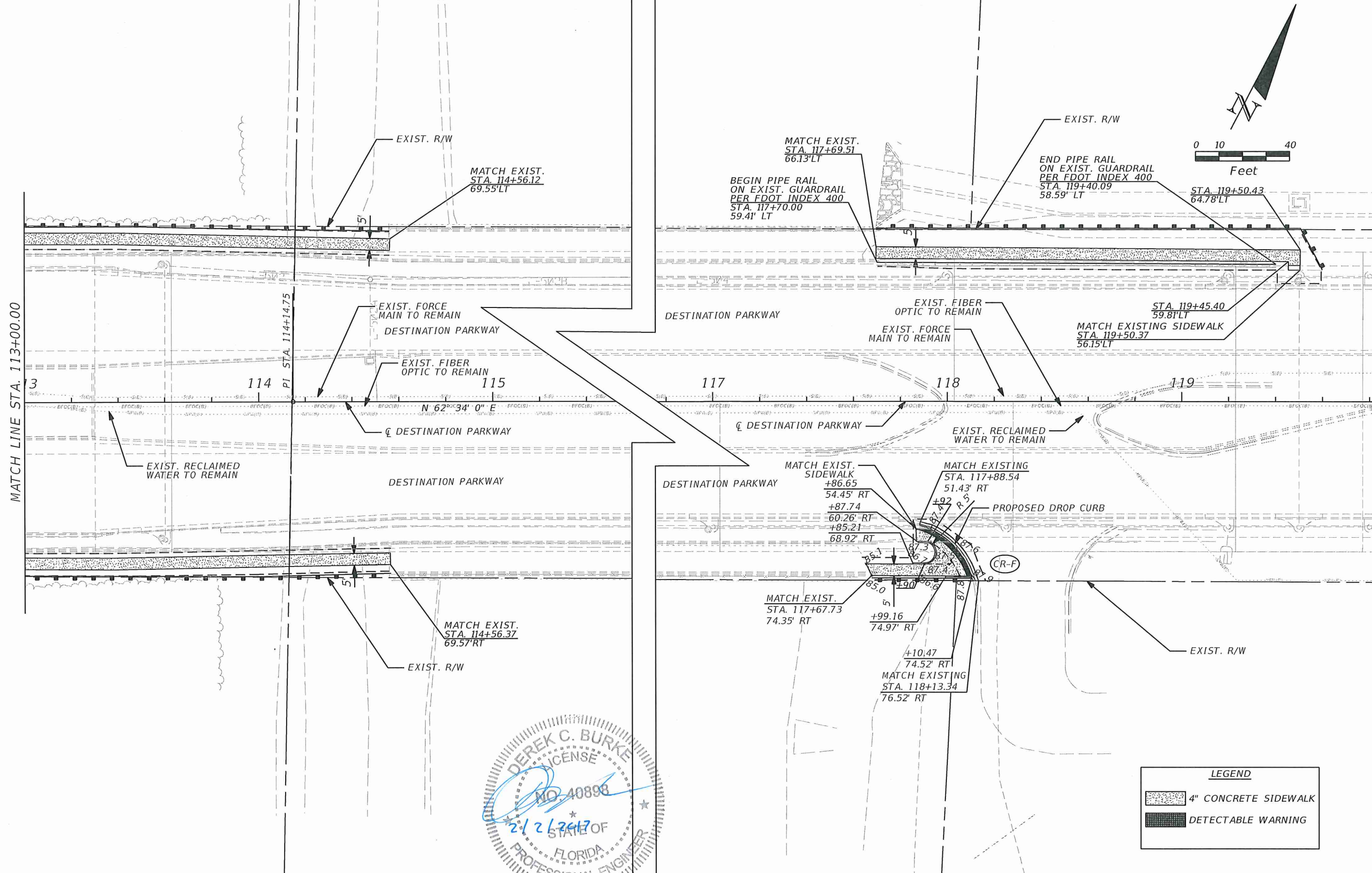
ORANGE COUNTY GOVERNMENT

ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
4200 SOUTH JOHN YOUNG PARKWAY
ORLANDO, FLORIDA 32839
(407) 836-7900

PLAN & PROFILE SHEET (11)

SHEET NO. 23

MATCH LINE STA. 113+00.00



LEGEND	
	4" CONCRETE SIDEWALK
	DETECTABLE WARNING

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

DEREK C. BURKE, P.E. LICENSE NO. 40898

 201 N. Magnolia Ave.
 Suite 200
 Orlando FL 32801
 Phone 407.839.4300
 Fax 407.839.1621
 CERTIFICATE OF AUTHORIZATION NO. 6796

ORANGE COUNTY GOVERNMENT
ORANGE COUNTY DEPARTMENT OF PUBLIC WORKS
 ENGINEERING DIVISION
 4200 SOUTH JOHN YOUNG PARKWAY
 ORLANDO, FLORIDA 32839
 (407) 836-7900

PLAN SHEET (12)

SHEET NO.
24