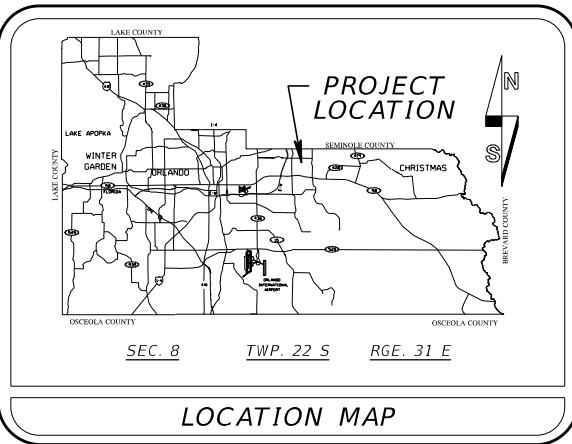
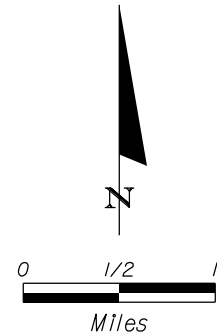
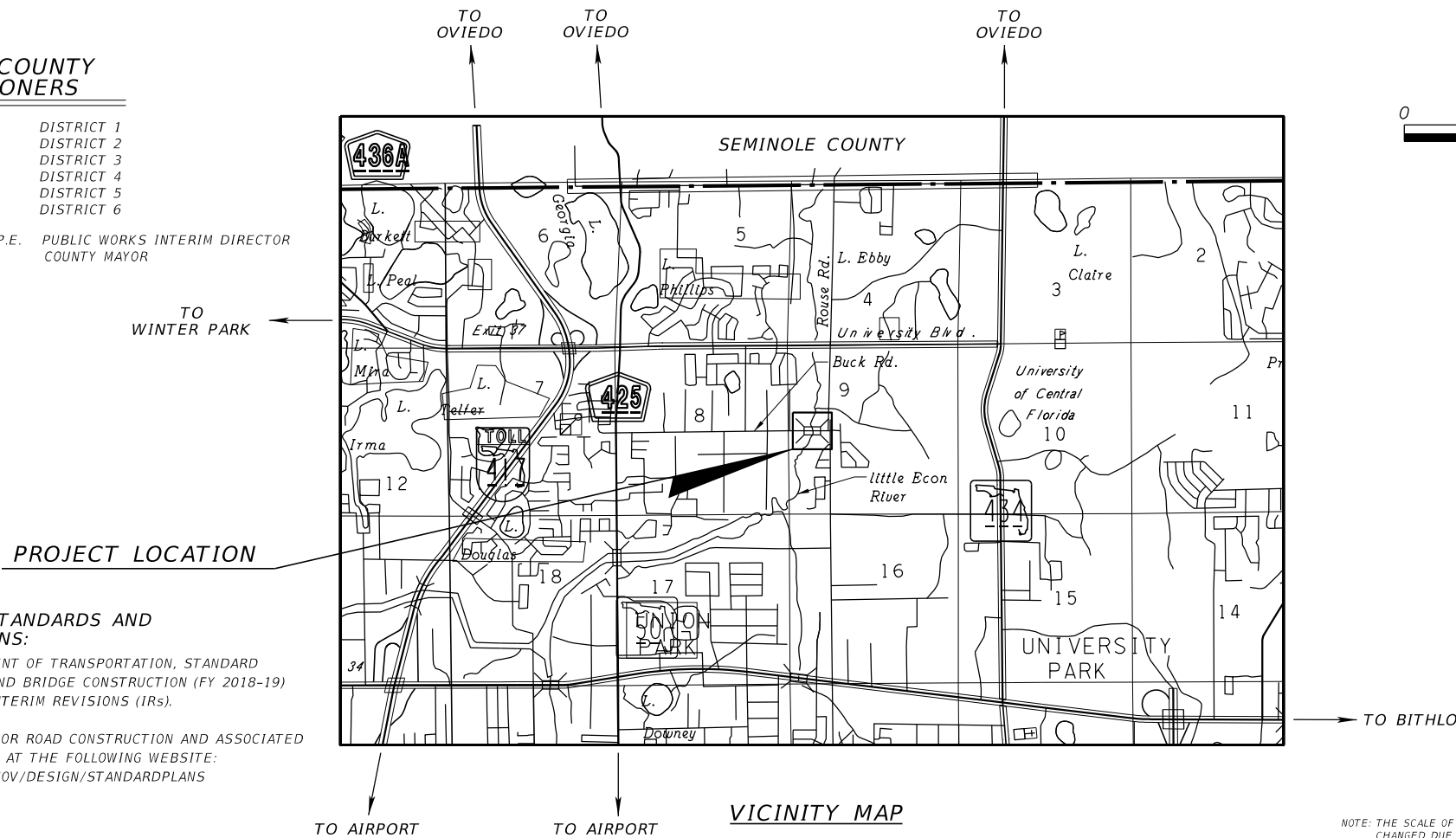




CONSTRUCTION PLANS FOR BUCK ROAD OVER LITTLE ECON RIVER ORANGE COUNTY, FLORIDA

BOARD OF COUNTY COMMISSIONERS

BETSY VANDERLEY	DISTRICT 1
CHRISTINE MOORE	DISTRICT 2
MAYRA URIBE	DISTRICT 3
MARIBEL G. CORDERO	DISTRICT 4
EMILY BONILLA	DISTRICT 5
VICTORIA P. SIPLIN	DISTRICT 6
DIANA M. ALMODOVAR, P.E.	PUBLIC WORKS INTERIM DIRECTOR
JERRY L. DEMINGS	COUNTY MAYOR



INDEX OF SHEETS

SHEET	DESCRIPTION
1	KEY SHEET
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3	TEMPORARY TRAFFIC CONTROL DETAILS
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B-2	CURB SPALL REPAIR DETAILS
B-3	NORTHEAST EMBANKMENT TOPPING REPAIR DETAILS
B-4	SOUTHEAST EMBANKMENT REPAIR DETAILS (1 OF 2)
B-5	SOUTHEAST EMBANKMENT REPAIR DETAILS (2 OF 2)
BX1-1 THRU BX1-4	EXISTING BRIDGE PLANS

UTILITIES ENCOUNTERED

CHARTER COMMUNICATIONS	(407) 532 - 8509
DUKE ENERGY	(407) 905 - 3376
ORANGE COUNTY UTILITIES - WASTE WATER	(407) 254 - 9764
ORANGE COUNTY PUBLIC WORKS	(407) 836 - 7804
ORANGE COUNTY UTILITIES	(407) 836 - 6869
AT&T/DISTRIBUTION	(561) 997 - 0240
CENTURYLINK	(407) 830 - 3359

GOVERNING STANDARDS AND SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION (FY 2018-19) 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](http://www.flDOT.gov/design/standardplans)

APPLICABLE IRs:

FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED JANUARY 2018, AT THE FOLLOWING WEBSITE:
[HTTP://WWW.FDOT.GOV/PROGRAMMANAGEMENT/IMPLEMENTED/SPECBOOKS](http://www.flDOT.gov/programmanagement/implemented/specbooks)

LENGTH OF PROJECT		
	LINEAR FT.	MILES
CANAL	-	-
BRIDGES	260	0.049
NET LENGTH OF PROJ.	260	0.049
EXCEPTIONS		
GROSS LENGTH OF PROJ.	260	0.049

**FINAL SUBMITTAL
AUGUST 2019**

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:

THIS IS TO CERTIFY THAT THE CONSTRUCTION PLANS AND SPECIFICATIONS AS CONTAINED HEREIN WERE DESIGNED TO APPLICABLE STANDARDS AS SET FORTH IN THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS", STATE OF FLORIDA, AS PREPARED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION TALLAHASSEE, FLORIDA. DATED LATEST EDITION.

DATE: _____ ENGINEER: _____ REG. NO. _____ 60074
KEVIN B. FISCHER, P.E.



Kevin B. Fischer Certificate of Authorization No. 7074
FL P.E. No. 60074 3000 Dovera Drive, Suite 200 Oviedo, FL 32765

REVISIONS	DATE	BY

DESIGNED BY: TTW	DATE: 10-2018
DRAWN BY: NS	DATE: 10-2018
CHECKED BY: KBF	DATE: 10-2018
APPROVED BY: KBF	DATE: 10-2018
PROJECT NO: ORC-18-41	

SHEET 1
OF 12

SUMMARY OF PAY ITEMS				
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY TOTAL	
			PLANS	FINAL
101-1	MOBILIZATION	LS	1	
102-1	MAINTENANCE OF TRAFFIC	LS	1	
460-98-1	PIPE HANGER, CARBON	EA	1	
901-7	CURB SPALL REPAIR	CF	1.0	
901-8	NORTHEAST EMBANKMENT STABILIZATION	CY	10.0	
901-9	NORTHEAST EMBANKMENT TOPPING REPAIR	CF	18.0	
901-10	SOUTHEAST EMBANKMENT SLOPE PAVEMENT, NON-REINFORCED, 4"	SY	15	
901-11	SOUTHEAST EMBANKMENT SAND-CEMENT RIPRAP	CY	2.0	

PAY ITEM NOTES:

102-1 SEE SHEET 3 FOR ADDITIONAL INFORMATION.

460-98-1 INCLUDES ALL ITEMS AND WORK ASSOCIATED WITH FURNISHING AND INSTALLING PIPE HANGER INCLUDING BUT NOT LIMITED TO BOLT, NUT, AND LOCK WASHER. THE BOLT, NUT AND LOCK WASHER SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A307. THE HANGER, BOLT, NUT AND LOCK WASHER SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 962-9. ALL PIPE HANGER REPAIR INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

901-7 INCLUDES ALL ITEMS, MATERIALS AND WORK ASSOCIATED WITH REPAIR OF CURB INCLUDING BUT NOT LIMITED TO SURFACE PREPARATION, APPLICATION OF EPOXY BONDING COMPOUND AND PLACEMENT OF CURB REPAIR CONCRETE. ALL CURB SPALL REPAIR INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

901-8 INCLUDES ALL ITEMS AND WORK ASSOCIATED WITH STABILIZING NORTHEAST EMBANKMENT INCLUDING BUT NOT LIMITED TO PLACEMENT OF FLOWABLE FILL FOR FILLING THE CRACK AND VOID BENEATH THE EXISTING CONCRETE TOPPING. ALL NORTHEAST EMBANKMENT STABILIZATION INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

901-9 INCLUDES ALL ITEMS AND WORK ASSOCIATED WITH REPAIRING NORTHEAST EMBANKMENT TOPPING INCLUDING BUT NOT LIMITED TO SURFACE PREPARATION, WELDED WIRE REINFORCEMENT, TOPPING REPAIR CONCRETE, SURFACE FINISHING AND INSTALLATION OF HOT POURED SEALER. ALL NORTHEAST EMBANKMENT TOPPING REPAIR INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

901-10 INCLUDES ALL ITEMS AND WORK ASSOCIATED WITH REPLACEMENT OF EXISTING CONCRETE TOPPING AT SOUTHEAST EMBANKMENT WITH CONCRETE SLOPE PROTECTION. INCLUDING BUT NOT LIMITED TO REMOVAL OF EXISTING CONCRETE TOPPING, GRADING, CONCRETE TOE WALLS, AND INSTALLATION OF HOT POURED SEALER FOR THE SLOPE PROTECTION. ALL SOUTHEAST EMBANKMENT SLOPE PAVEMENT REPAIR INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

901-11 INCLUDES ALL ITEMS AND WORK ASSOCIATED WITH THE CONSTRUCTION OF SAND-CEMENT RIPRAP RETAINING WALL INCLUDING BUT NOT LIMITED TO SITE PREPARATIONS, EMBEDDED REINFORCING AND INSTALLATION OF FILTER FABRIC. ALL SAND-CEMENT RIPRAP CONSTRUCTION INCIDENTAL ITEMS ARE INCLUSIVE TO THIS PAY ITEM.

BRIDGE NO. 754005

REVISIONS					ENGINEER OF RECORD		SHEET TITLE: PROJECT NAME:	REF. DWG. NO. SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			
						Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074	SUMMARY OF PAY ITEMS BUCK ROAD OVER LITTLE ECON RIVER	2



TRAFFIC CONTROL GENERAL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING A DETAILED AND COMPLETE TRAFFIC CONTROL PLAN (MAINTENANCE OF TRAFFIC PLAN) FOR THE PROJECT. ALL COSTS SHALL BE INCLUDED IN THE BID PRICE FOR PAY ITEM NUMBER 102-1.

1. THE CONTRACTOR SHALL ADHERE TO THE REQUIREMENTS SET FORTH IN THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) LATEST PUBLISHED EDITION, CHAPTER 6 AND THE FY 2018-19 FDOT STANDARD PLANS.
2. ALL TRAFFIC CONTROL DEVICES (TEMPORARY SIGNS, PAVEMENT MARKINGS, BARRIER WALL, ETC.) REQUIRED DURING A CONSTRUCTION PHASE SHALL BE INSTALLED AND APPROVED BY THE ORANGE COUNTY PROJECT MANAGER PRIOR TO COMMENCEMENT OF CONSTRUCTION AND WILL BE MAINTAINED IN ACCORDANCE WITH INDEX 102-600 OF THE FY 2018-19 FDOT STANDARD PLANS AND JULY 2018 SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION.
3. ALL EXISTING SIGNS AND PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN DURING CONSTRUCTION PHASE SHALL BE REMOVED OR TEMPORARILY RELOCATED AS NECESSARY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE COST OF REMOVING AND/OR REPLACING SIGNS AND PAVEMENT MARKINGS FOR MAINTENANCE OF TRAFFIC SHALL BE INCLUDED IN PAY ITEM 102-1.
4. ALL SIGNS 48"X48" OR LARGER SHALL BE MAINTAINED ON TWO (2) BREAKAWAY SUPPORTS OR YIELDING POSTS AS SHOWN IN FIGURE 6-1 OF THE MUTCD. THE CONTRACTOR SHALL USE THE MUTCD TO DETERMINE THE APPROPRIATE PLACEMENT AND ELEVATION OF CONSTRUCTION SIGNS. REFLECTIVITY SHALL ADHERE TO THE FY 2018-19 FDOT STANDARD PLANS AND JULY 2018 SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION.
5. IF REQUIRED BY THE COUNTY THE CONTRACTOR WILL PROVIDE OFF DUTY LAW ENFORCEMENT OFFICER(S) TO BE USED FOR TRAFFIC CONTROL FOR MAJOR CHANGES IN TRAFFIC MOVEMENTS (INTERSECTION CHANGES, ETC.) AS DIRECTED BY THE ORANGE COUNTY PROJECT MANAGER. THE COST TO BE INCLUDED IN ITEM 102-1, MAINTENANCE OF TRAFFIC.
6. TRAFFIC CONTROL OFFICERS SHALL BE PROVIDED DURING ALL LANE CLOSURES, MINIMUM ONE OFFICER PER CLOSED LANE. COST TO BE INCLUDED IN PRICE BID FOR 102-1, MAINTENANCE OF TRAFFIC.
7. VEHICULAR ACCESS TO RESIDENCES AND BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
8. PORTABLE-CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PROVIDED DURING, AND PLACED TEN (10) DAYS IN ADVANCE OR AT THE COUNTY'S DISCRETION, OF ALL LANE CLOSURES. TWO PCMS MINIMUM, SHALL BE PROVIDED FOR EACH LANE CLOSURE. COST TO BE INCLUDED IN PRICE BID FOR PAY ITEM 102-1, MAINTENANCE OF TRAFFIC.
9. WORK HOURS ARE FROM 7:00 AM TO 6:00 PM MONDAY TO FRIDAY. WORK WILL NOT BE ALLOWED ON WEEKENDS OR HOLIDAYS OBSERVED BY ORANGE COUNTY UNLESS AUTHORIZED BY THE COUNTY.

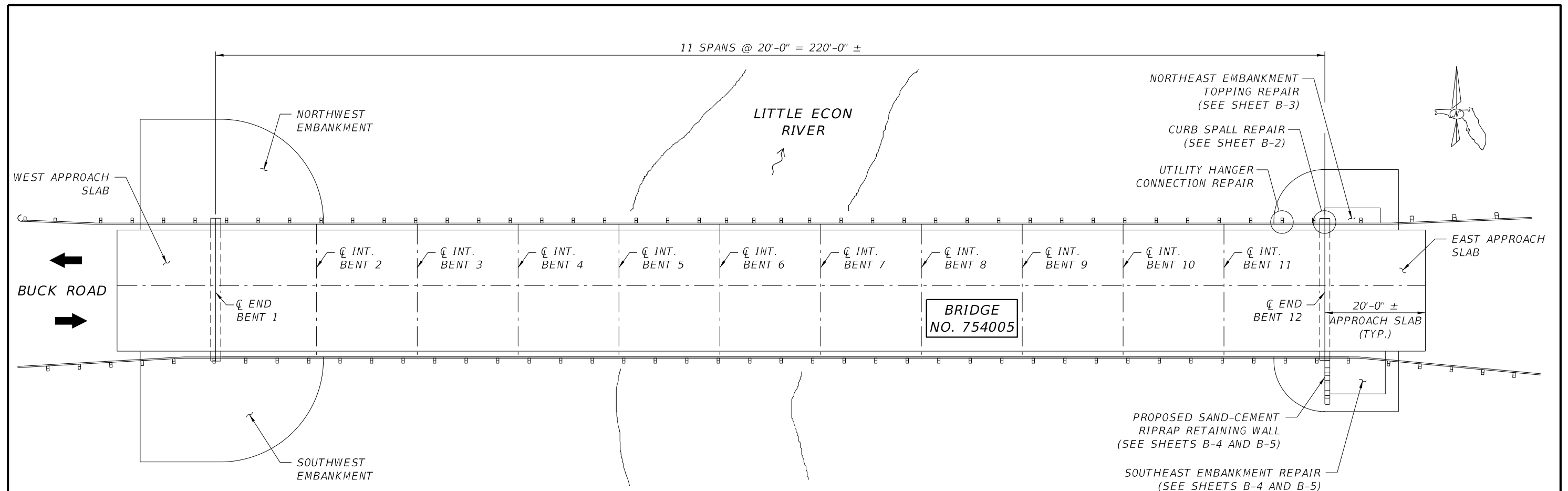
10. ALL OPERATIONS REQUIRING LANE CLOSURES SHALL BE SUBMITTED TO THE ORANGE COUNTY TRAFFIC ENGINEERING DIVISION.
11. LANE CLOSURES ARE TO BE BETWEEN 9:00 AM AND 4:00 PM ONLY. LANE SHALL ONLY BE CLOSED DURING WORK PERIODS OR AS OTHERWISE DIRECTED BY THE COUNTY.
12. TRAFFIC CONDITIONS, ACCIDENTS, AND/OR OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ORANGE COUNTY PROJECT MANAGER TO MODIFY CHANNELIZATIONS. THE CONTRACTOR SHALL MAKE THE NECESSARY ADJUSTMENTS AS DIRECTED BY THE PROJECT MANAGER WITHOUT DELAY.
13. ALL TEMPORARY MARKINGS SHALL BE IN PLACE ONE HOUR BEFORE SUNSET.
14. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS THROUGH THE PROJECT LIMITS AT ALL TIMES.
15. THE EXISTING POSTED SPEED OF 40 MPH WILL BE MAINTAINED DURING CONSTRUCTION.
16. ORANGE COUNTY IS ADMINISTERING THE CONSTRUCTION OF THIS PROJECT. IT IS THE COUNTY'S POLICY TO PLACE THE RESPONSIBILITY FOR MAINTENANCE OF TRAFFIC DURING CONSTRUCTION ON THE CONTRACTOR. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN SIGNED AND SEALED BY A STATE OF FLORIDA REGISTERED PROFESSIONAL ENGINEER TO THE COUNTY PRIOR TO BEGINNING THE PROJECT.
17. THIS TRAFFIC CONTROL DATA SHEET IS INTENDED ONLY TO DEMONSTRATE THAT THE PROJECT IS CONSTRUCTABLE AS DESIGNED.

BRIDGE REPAIR PHASE

THE INTENT OF THIS PHASE IS TO COMPLETE THE BRIDGE REPAIRS

1. USE INDEX 102-603 AND INDEX 102-605 TO CLOSE A LANE ON BUCK ROAD.
2. REPAIR THE OTHER SIDE OF THE BRIDGE.
3. USE INDEX 102-603 AND INDEX 102-605 TO CLOSE THE OTHER LANE ON BUCK ROAD.
4. COMPLETE THE BRIDGE REPAIRS.

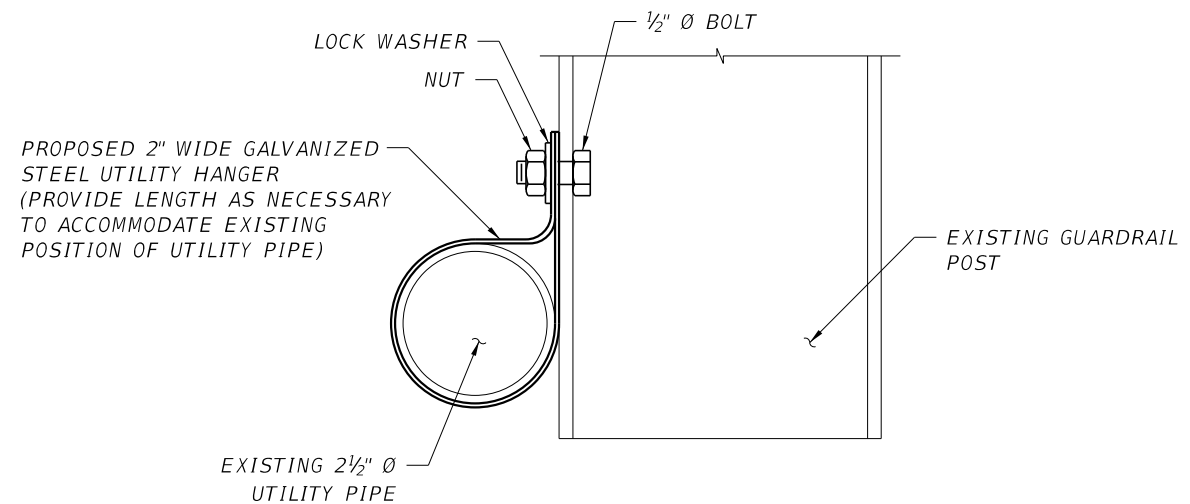
REVISIONS			BUCK ROAD OVER LITTLE ECON RIVER	 ORANGE COUNTY GOVERNMENT FLORIDA	ENGINEER OF RECORD Catherine L. Spiess, PE PE No. 62501 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074	TEMPORARY TRAFFIC CONTROL DETAILS	SHEET NO.
DATE	BY	DESCRIPTION					3



PLAN

UTILITY HANGER REPAIR PROCEDURE:

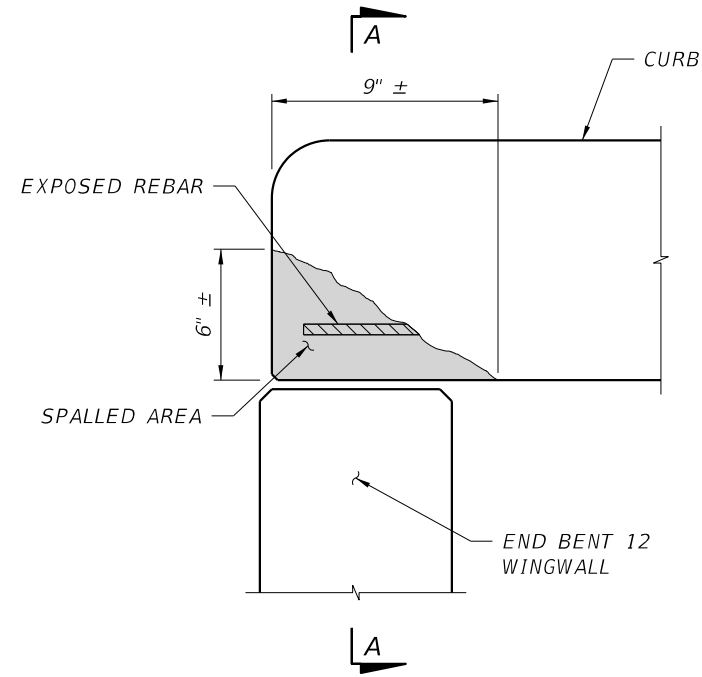
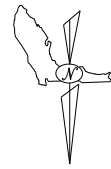
1. BOLT, NUT AND LOCK WASHER SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A307. HANGER, BOLT, NUT AND LOCK WASHER SHALL BE GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 962-9.
2. LOCATE MISSING UTILITY HANGER AT SECOND GUARDRAIL POST BETWEEN INT. BENT 11 AND END BENT 12. FIT NEW UTILITY HANGER AROUND EXISTING PIPE AS INDICATED IN UTILITY HANGER CONNECTION DETAIL.
3. FASTEN HANGER TO GUARDRAIL POST THROUGH EXISTING HOLE IN POST. TIGHTEN NUT ON BOLT TO SNUG FIT.



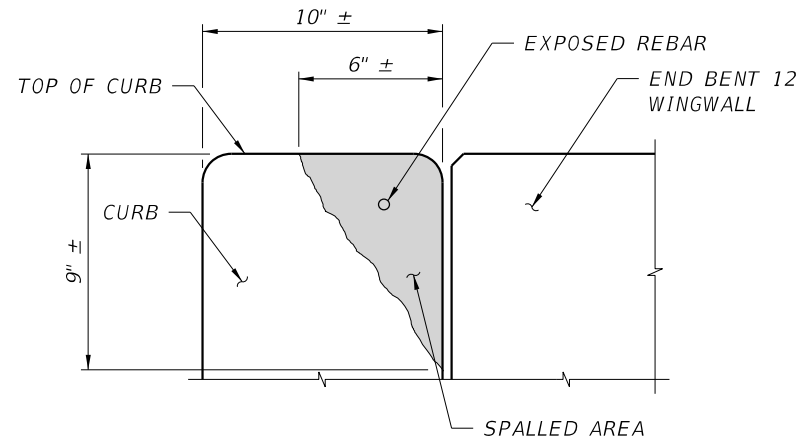
UTILITY HANGER CONNECTION REPAIR

BRIDGE NO. 754005

REVISIONS						ENGINEER OF RECORD		SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074		PLAN		
								PROJECT NAME:		SHEET NO.
								BUCK ROAD OVER LITTLE ECON RIVER		B-1



PLAN VIEW



SECTION A-A

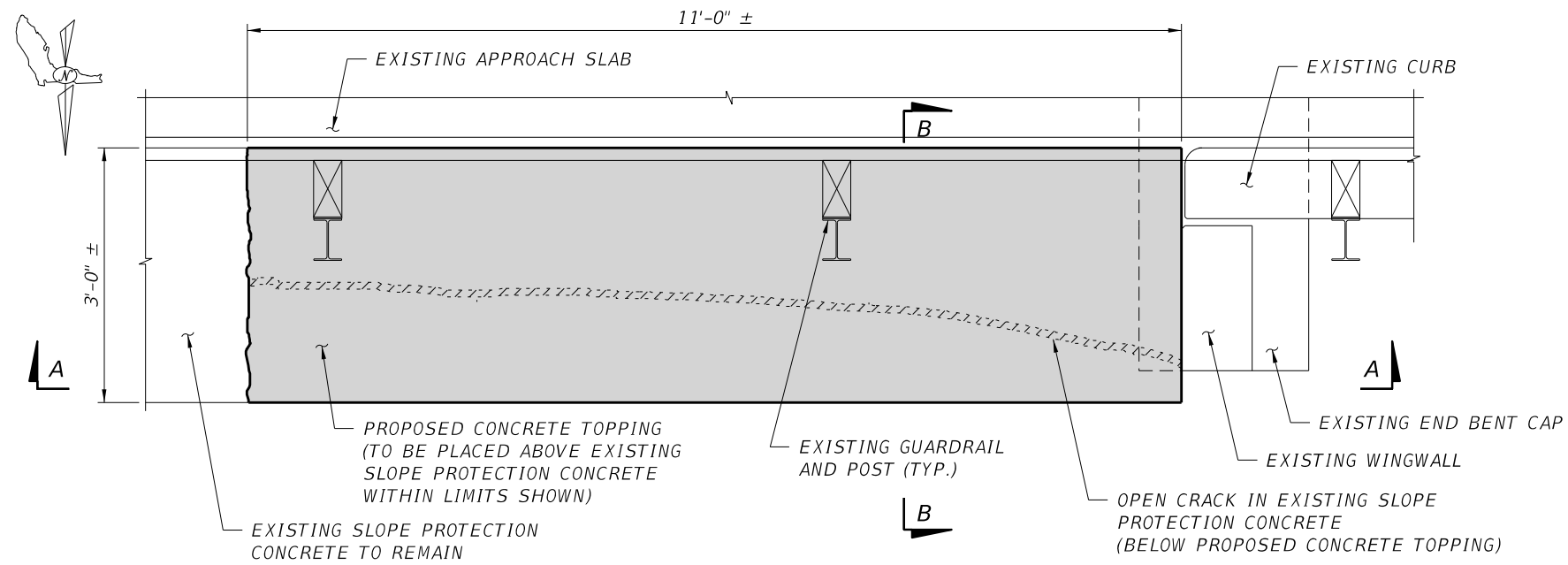
CURB SPALL REPAIR PROCEDURE:

1. **MATERIALS:**

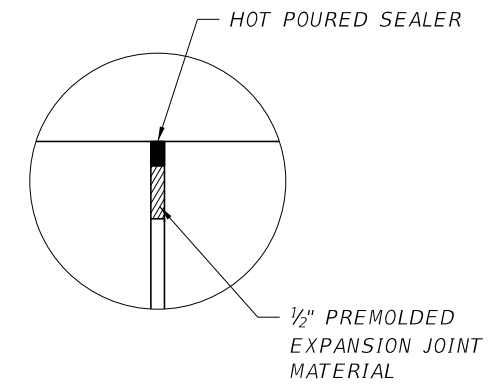
EPOXY BONDING COMPOUND	TYPE A OR AB PER THE FDOT APPROVED PRODUCT LIST (APL) MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 926-3.
CURB REPAIR CONCRETE	RAPID HARDENING CONCRETE BASED REPAIR MORTAR FOR HORIZONTAL SURFACES PER THE FDOT APL MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 930-4.
2. USE A WIRE WHEEL TO REMOVE ANY LOOSE OR UNSOUND CONCRETE FROM THE CURB SPALL. CARE SHALL BE TAKEN NOT TO DAMAGE THE CURB REINFORCING.
3. USE OIL AND WATER FREE COMPRESSED AIR ON THE EXPOSED CONCRETE AND REINFORCING TO REMOVE ANY REMAINING DUST OR DEBRIS UNTIL THE EXPOSED CONCRETE AND REINFORCING ARE CLEAN AND DRY.
4. APPLY EPOXY BONDING COMPOUND TO THE EXPOSED SPALL SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
5. USE CURB REPAIR CONCRETE TO RECONSTRUCT THE CURB SURFACES AND EDGES TO THE ORIGINAL DIMENSIONS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS (INCLUDING MINIMUM TIME BEFORE FORM REMOVAL) WHILE THE EPOXY BONDING COMPOUND IS STILL TACKY.

BRIDGE NO. 754005

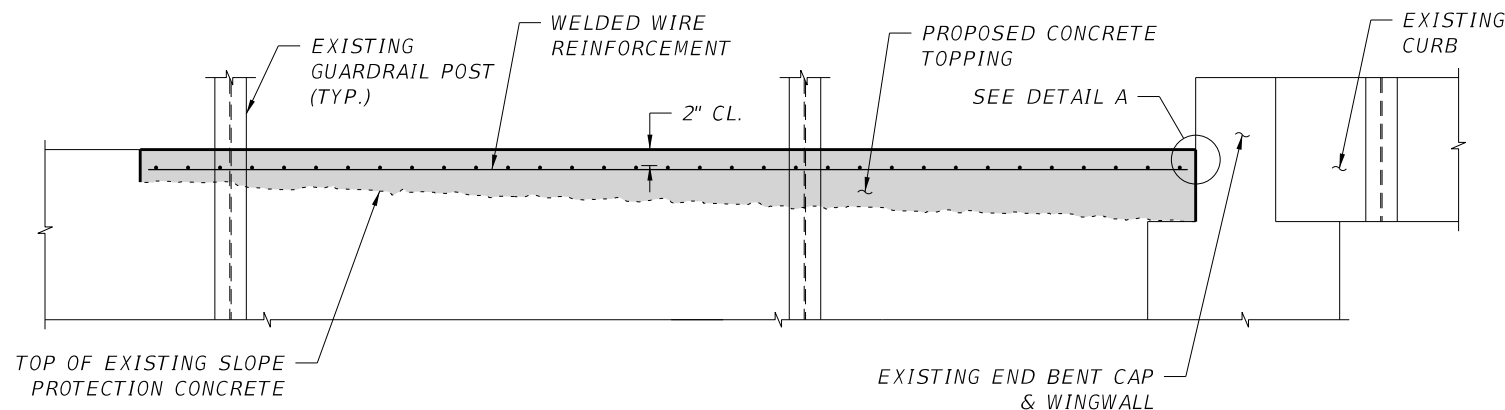
REVISIONS						ENGINEER OF RECORD	SHEET TITLE:	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074	CURB SPALL REPAIR DETAILS	
						ORANGE COUNTY GOVERNMENT FLORIDA	PROJECT NAME:	SHEET NO.
							BUCK ROAD OVER LITTLE ECON RIVER	B-2



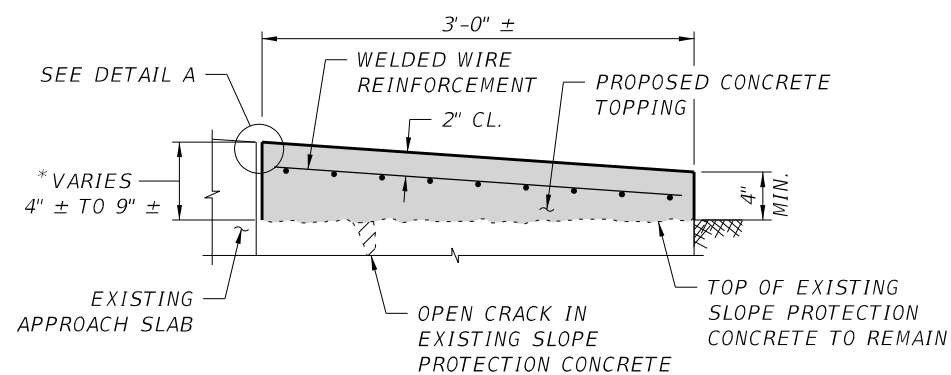
PLAN



DETAIL A



SECTION A-A



SECTION B-B

* FINISH TOP OF PROPOSED CONCRETE TOPPING TO MATCH EXISTING APPROACH SLAB ELEVATION.

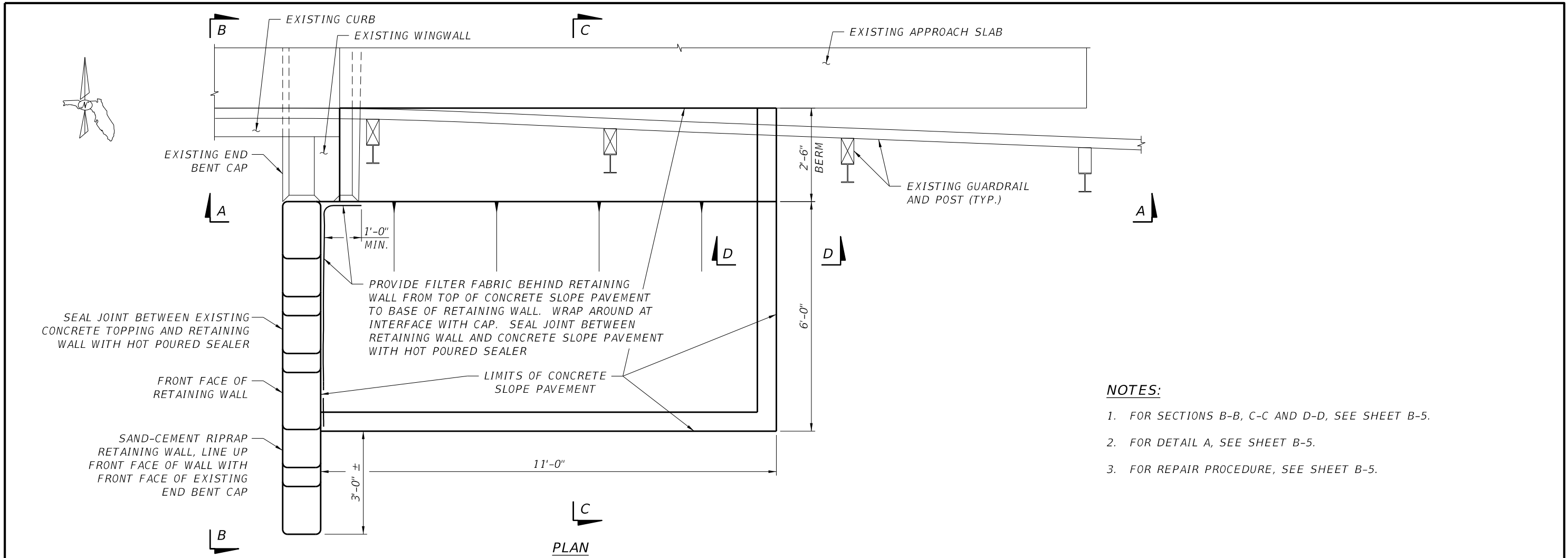
NORTHEAST EMBANKMENT REPAIR PROCEDURE:

- 1. MATERIALS:**

 - FLOWABLE FILL** EXCAVATABLE LOW CEMENTITIOUS FLOWABLE MIXTURE MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 121.
 - TOPPING REPAIR CONCRETE** RAPID HARDENING CONCRETE BASED REPAIR MORTAR FOR HORIZONTAL SURFACES PER THE FDOT APPROVED PRODUCT LIST (APL) MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 930-4.
 - WELDED WIRE REINFORCEMENT** ASTM A1064, GRADE 75 MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 931.
 - HOT Poured SEALER** TYPE A OR B SILICONE MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 932.
- 2. THE FLOWABLE FILL MIX DESIGN SHALL BE SUBMITTED TO ORANGE COUNTY PUBLIC WORKS FOR APPROVAL IN ADVANCE OF USAGE. FILL THE OPENING AT THE CRACK IN THE EMBANKMENT SLOPE PROTECTION CONCRETE WITH FLOWABLE FILL UNTIL THE FILL MATERIAL OVERFLOWS THE TOP EDGE OF THE CRACK. FINISH THE FLOWABLE FILL LEVEL WITH THE TOP OF THE CRACK. ALLOW FOR THE PROPER FLOWABLE FILL SET UP TIME IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. EMPLOY FILL PLACEMENT TECHNIQUES TO MINIMIZE THE POTENTIAL FOR BLOW-OUTS AT THE EDGES OF THE SLOPE PROTECTION CONCRETE AND REMEDIATE AND CLEAN UP ANY SLURRY BLOW-OUTS THAT SHOULD OCCUR. EXTREME CARE SHALL BE TAKEN TO ELIMINATE THE POTENTIAL FOR SLURRY LEAKAGE OR SPILLAGE INTO THE ADJACENT WATERWAY.**
- 3. CLEAN EXPOSED CONCRETE SURFACE WITHIN LIMITS OF EMBANKMENT REPAIR SO THAT IT IS FREE FROM VEGETATION, DUST AND DEBRIS.**
- 4. PLACE 4 X 4-W4 X W4 WELDED WIRE REINFORCEMENT ONTO REPAIR AREA. PLACE REINFORCEMENT WITH 2" CLEAR COVER BELOW THE TOP OF THE REPAIR AREA USING REINFORCEMENT SUPPORT CHAIRS. CUT PERIMETER OF REINFORCEMENT IN ORDER TO MAINTAIN 2" CLEARANCE FROM ALL VERTICAL FACES OF REPAIR AREA. CUT AND SPLICE WELDED WIRE REINFORCEMENT (6" MIN. LAP) AS REQUIRED TO ACCOMMODATE REPAIR AREA AND TO ACCOMMODATE OPENINGS FOR THE EXISTING GUARDRAIL POSTS.**
- 5. PLACE THE TOPPING REPAIR CONCRETE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SCREED TO A UNIFORM FINISH.**

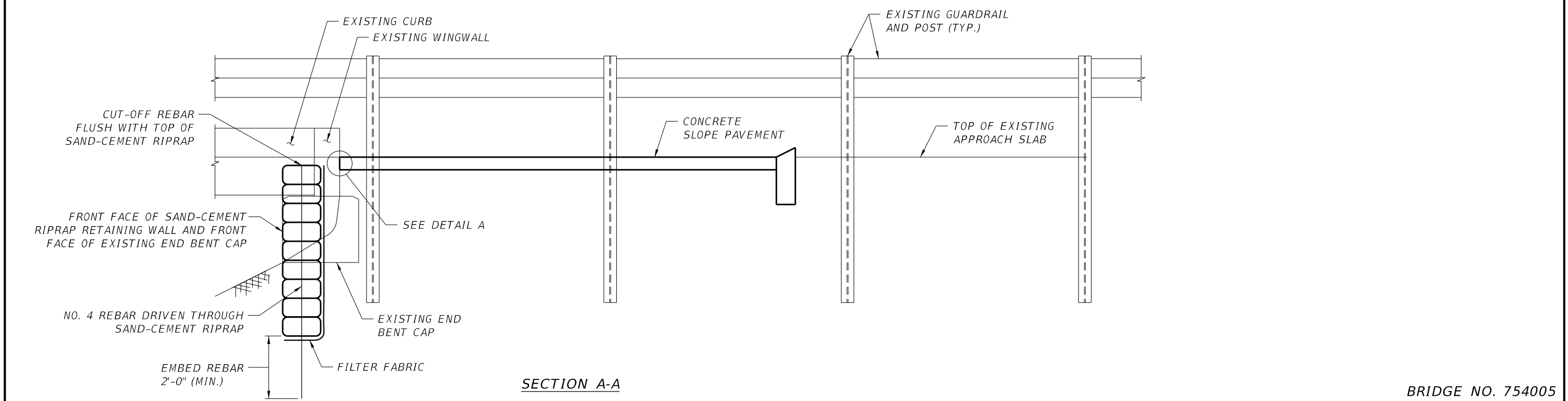
BRIDGE NO. 754005

REVISIONS						ENGINEER OF RECORD		SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074		NORTHEAST EMBANKMENT TOPPING REPAIR DETAILS		
								PROJECT NAME:		SHEET NO.
								BUCK ROAD OVER LITTLE ECON RIVER		B-3



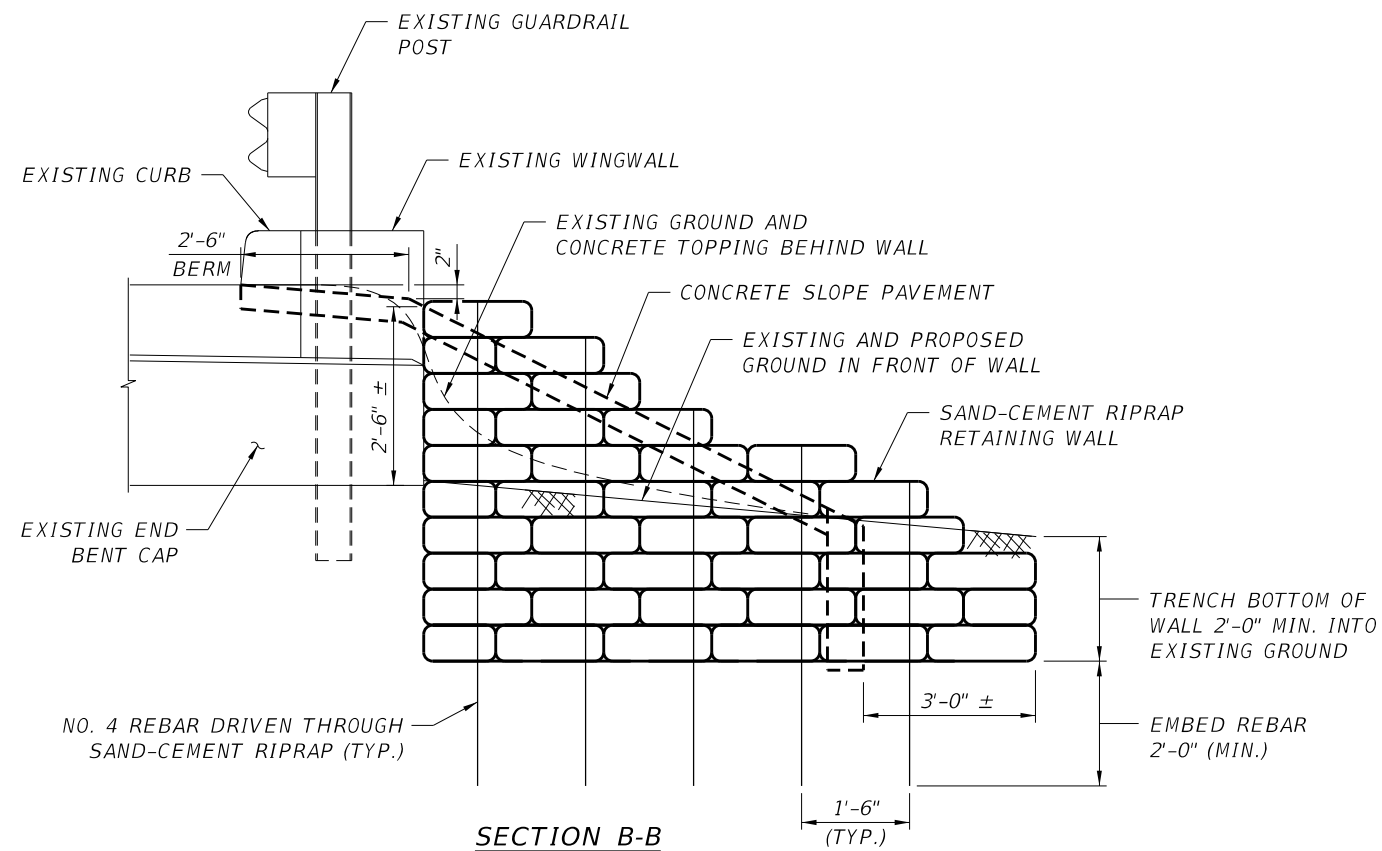
NOTES:

1. FOR SECTIONS B-B, C-C AND D-D, SEE SHEET B-5.
2. FOR DETAIL A, SEE SHEET B-5.
3. FOR REPAIR PROCEDURE, SEE SHEET B-5.

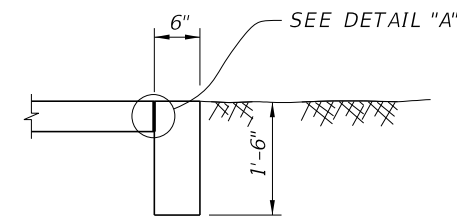


BRIDGE NO. 754005

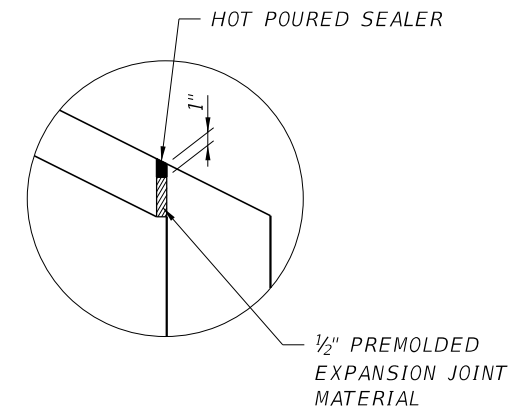
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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074		SOUTHEAST EMBANKMENT REPAIR DETAILS (1 OF 2)		
								PROJECT NAME:		SHEET NO.
								BUCK ROAD OVER LITTLE ECON RIVER		B-4



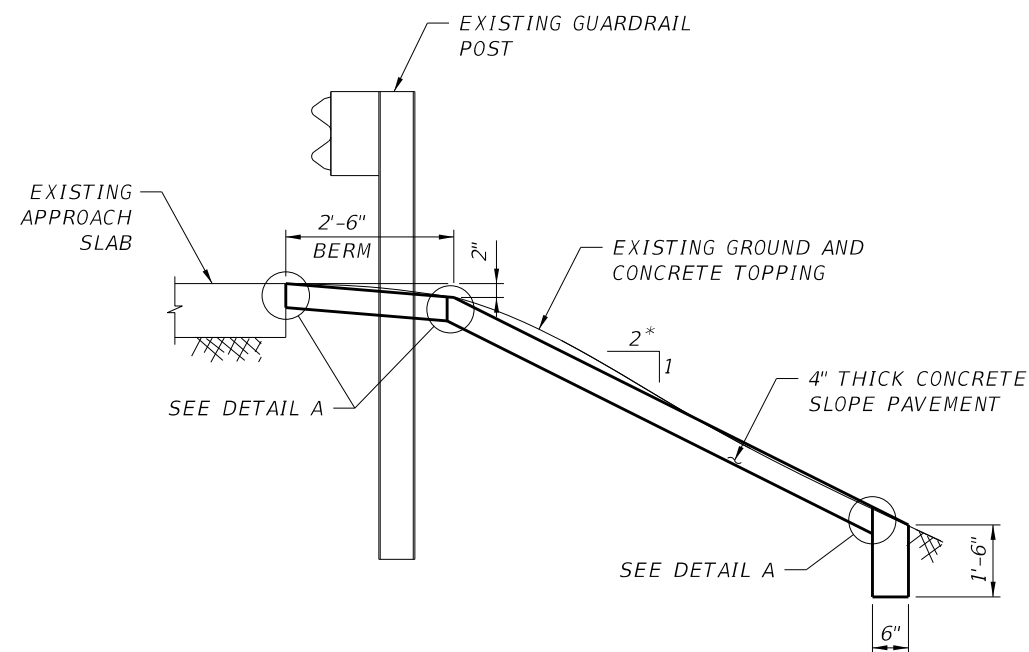
SECTION B-B



SECTION D-D



DETAIL A



SECTION C-C

* SLOPE MAY VARY. TERMINATE TOE OF SLOPE PAVEMENT WHERE IT MERGES INTO EXISTING GROUND.

SOUTHEAST EMBANKMENT REPAIR PROCEDURE:

- 1. MATERIALS:**

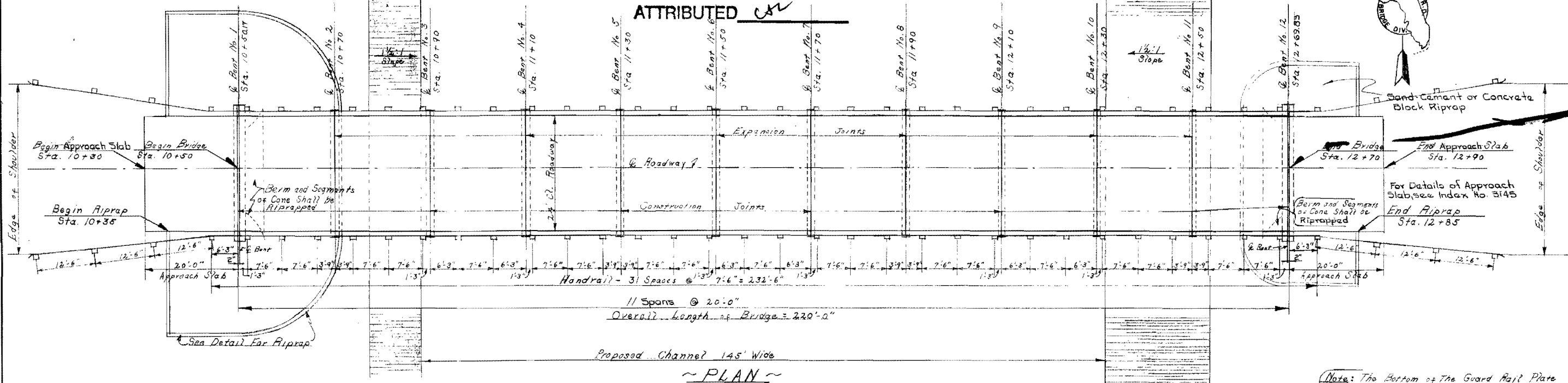
CONCRETE SLOPE PROTECTION	4" THICK, NON-REINFORCED CONCRETE SLOPE PAVEMENT MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 524.
FILTER FABRIC	TYPE D-2 MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 985.
HOT Poured SEALER	TYPE A OR B SILICONE MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 932.
SAND-CEMENT RIPRAP	SAND-CEMENT RIPRAP MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 530.
REINFORCING STEEL	ASTM A-615, GRADE 60 MEETING THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 931.
2. SAWCUT EXISTING CONCRETE TOPPING AT LOCATION OF THE FRONT FACE OF PROPOSED SAND-CEMENT RIPRAP RETAINING WALL TO PROVIDE A CLEAN, UNIFORM JOINT BETWEEN EXISTING CONCRETE TOPPING AND PROPOSED RETAINING WALL. REMOVE EXISTING CONCRETE TOPPING AND GRADE AREA OF EMBANKMENT BELOW PROPOSED CONCRETE SLOPE PAVEMENT PRIOR TO CONSTRUCTING RETAINING WALL.
3. PLACE BASE OF RETAINING WALL ON LEVEL AND THOROUGHLY COMPACTED GROUND TO A MINIMUM DEPTH OF 2'-0" BELOW EXISTING GROUND. FRONT FACE OF RETAINING WALL SHALL LINE UP WITH FRONT FACE OF EXISTING END BENT CAP. AFTER INSTALLATION OF RETAINING WALL HAS BEEN COMPLETED RESTORE ANY DISTURBED EMBANKMENT AND CONCRETE TOPPING IN FRONT OF WALL AND EXISTING END BENT CAP TO PRECONSTRUCTION CONDITION.
4. CONSTRUCT CONCRETE SLOPE PAVEMENT WITHIN LIMITS SHOWN. SOIL BENEATH SLOPE PAVEMENT SHALL BE UNIFORMLY GRADED, THOROUGHLY COMPACTED AND FREE OF VEGETATION AND DEBRIS.
5. NUMBER OF SAND-CEMENT BAGS SHOWN IN SECTION B-B IS A GRAPHICAL REPRESENTATION. ACTUAL NUMBER OF BAGS REQUIRED MAY VARY.

BRIDGE NO. 754005

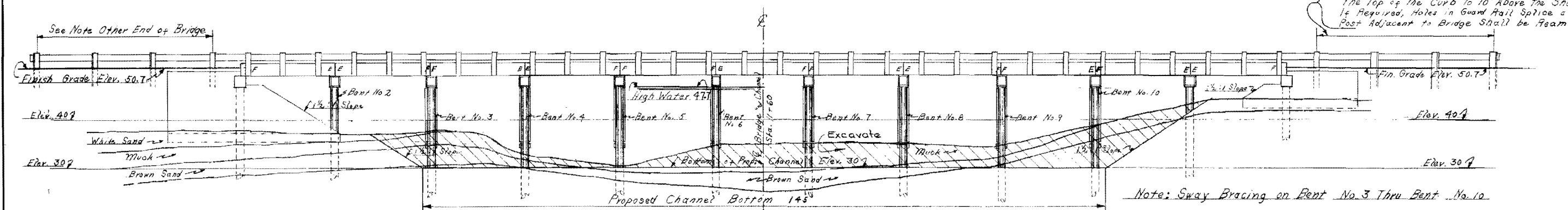
REVISIONS						ENGINEER OF RECORD		SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	Kevin B. Fischer, PE PE No. 60074 Inwood Consulting Engineers, Inc. 3000 Dovera Drive, Suite 200 Oviedo, Florida 32765 Certificate of Authorization No. 7074		SOUTHEAST EMBANKMENT REPAIR DETAILS (2 OF 2)		
								PROJECT NAME:		SHEET NO.
								BUCK ROAD OVER LITTLE ECON RIVER		B-5

MAR 24, 201

ATTRIBUTED *CV*



~ PLAN ~



~ ELEVATION ~

Note: The Bottom of the Guard Rail Plate Within These Limits Shall Slope From 9" Above the Top of the Curb to 10" Above the Shoulder. If Required, Holes in Guard Rail Splice at Post Adjacent to Bridge Shall be Reamed

Note: Sway Bracing on Bent No. 3 Thru Bent No. 10

INDEX OF BRIDGE SHEETS

- B-1 Plan and Elevation, Estimated Bridge Quantities, & Riprap Details.
- B-2 Timber Pile Bents, Index No. 3516, Dwg. TP 24.
- B-3 Slab Superstructure, Index No. 3516, Dwg. S.
- B-4 Guard Rail, Index No. 3453, Dwg. 1 of 1.

ESTIMATED BRIDGE QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
68	TREATED STRUCTURAL TIMBER (12 Treatment)	M.F.B.M.	2.24
70	CONCRETE, CLASS A	CU. YD.	261.0
77	REINFORCING STEEL	LBS.	42,210
99	TREATED TIMBER PILING	LIN. FT.	1800
108*	SAND-CEMENT RIPRAP	CU. YD.	120
132**	METAL GUARD RAIL (Min. 10 Ga.)	LIN. FT.	623

NOTES:

- * At the Contractors Option, Concrete Blocks 6"x12"x18" May be used in lieu of Sand-Cement Riprap.
- ** At the Contractors Option, Guard Rail shall be Armo Flex Beam, Bethlehem Safety Beam or Barrier Beam.

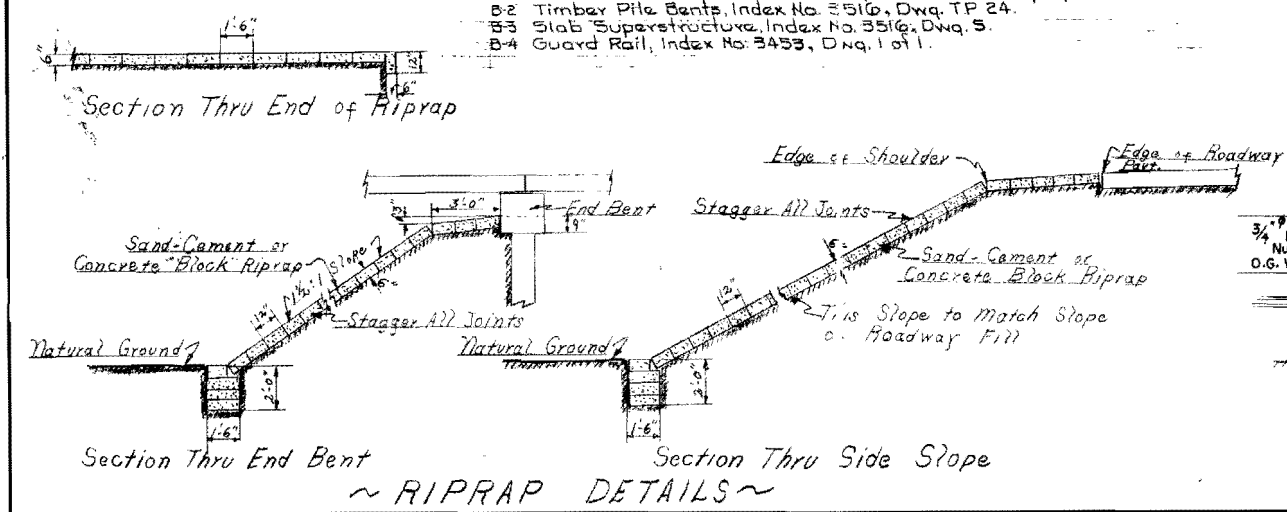
GENERAL NOTES
DESIGN SPECIFICATION: A.A.S.H.O.-1953
LOADING: H15-44

PLAN AND ELEVATION- ESTIMATED BRIDGE QUANTITIES & RIPRAP DETAILS

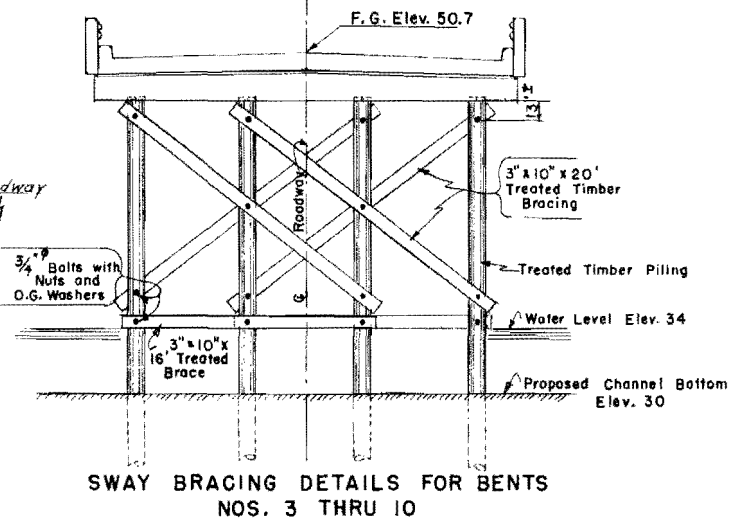
STATE ROAD DEPARTMENT OF FLORIDA
BRIDGE DIVISION

BRIDGE AT STA. 11+60-BUCK ROAD

REVISONS		ROAD NO.	COUNTY	PROJECT NO.
Date	Descriptions		ORANGE	7565-150
		APPROVED BY		
		Name	Date	
Detailed by		E.P.	9-55	
Checked by		E.C.D.	9-55	
Quantities by		E.C.D.	9-55	
Checked by		R.G.L.	9-55	
Traced by		E.P.	9-55	



~ RIPRAP DETAILS ~

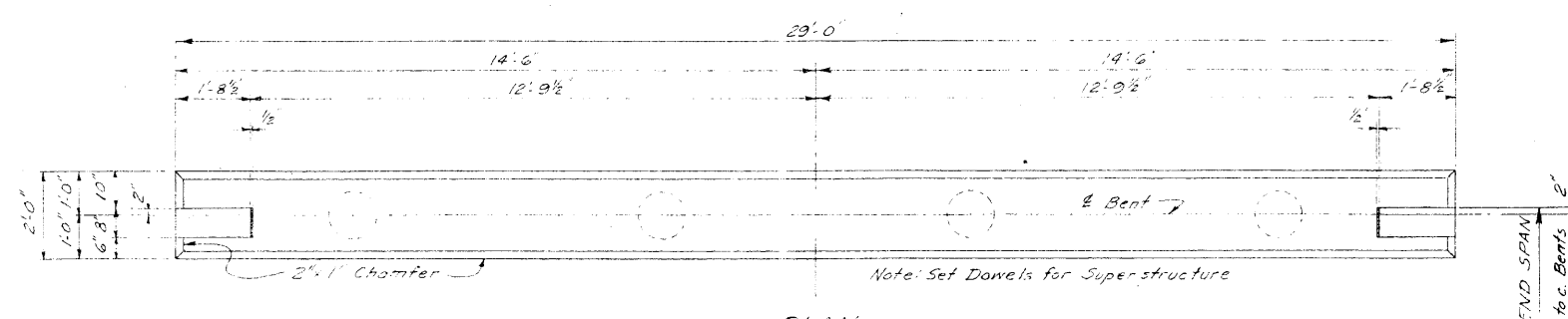


SWAY BRACING DETAILS FOR BENTS NOS. 3 THRU 10

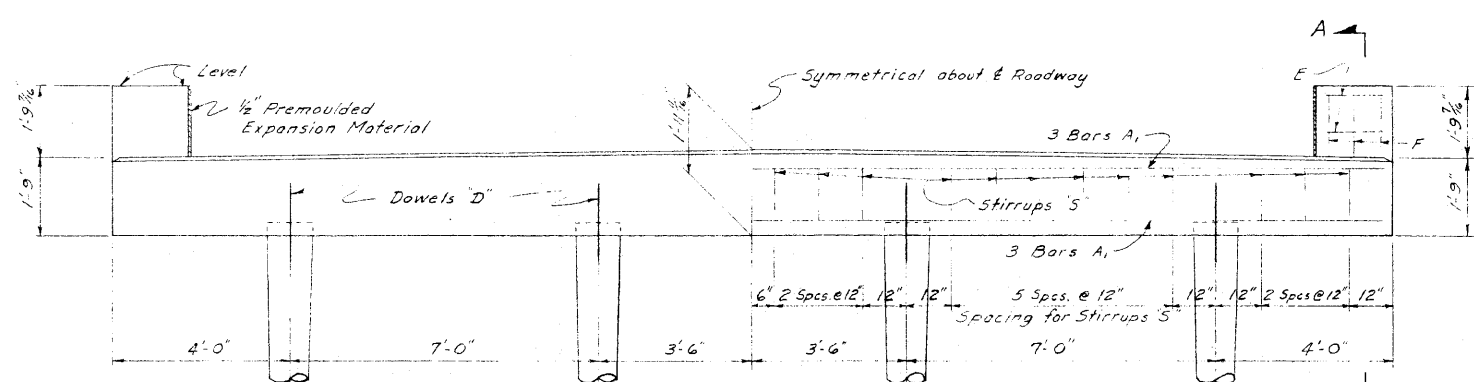
BR# 754005

255-176
563-150
562-151
256-250
6. 50

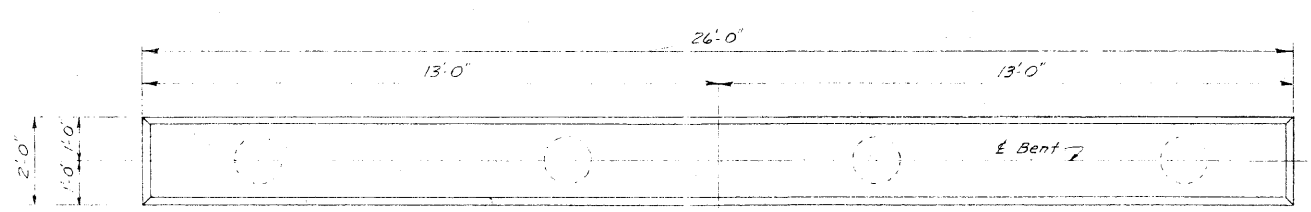
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	7565-150	55	B-2



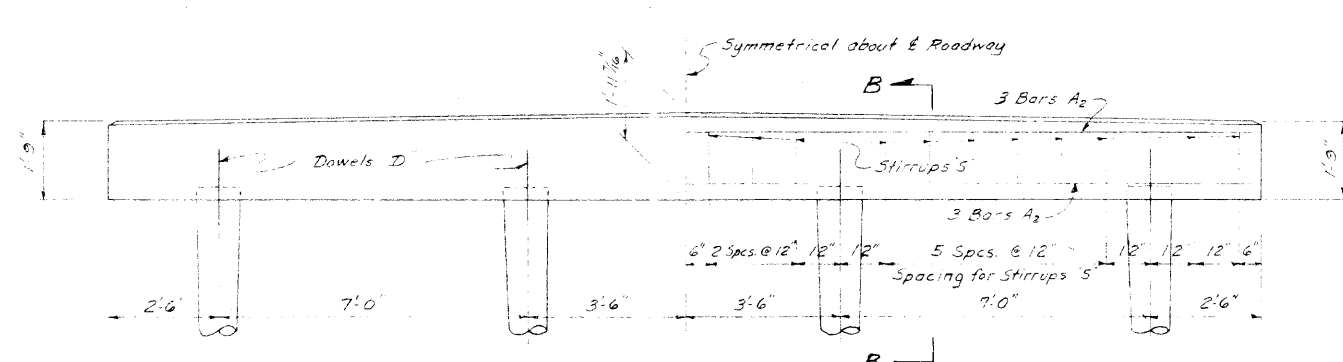
PLAN



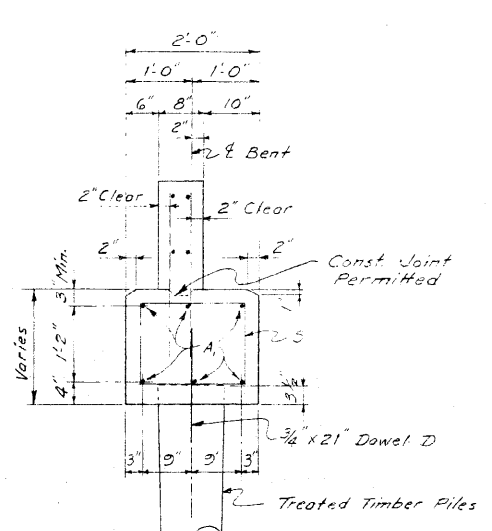
ELEVATION
END BENT



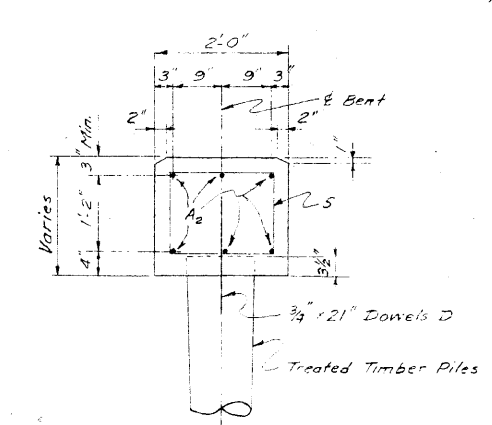
PLAN



ELEVATION
INTERMEDIATE BENT



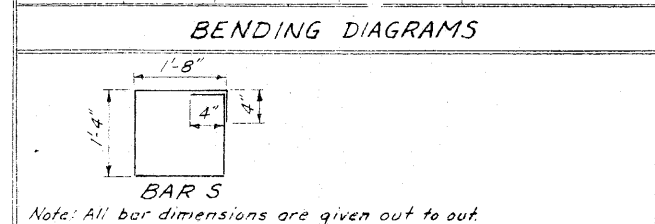
SECTION A-A



SECTION B-B

BILL OF REINFORCING STEEL				
ONE END BENT				
MARK	SIZE	No. REQD	LENGTH	BENDING
A ₁	8	6	28'-6"	Straight
D	6	4	1'-9"	"
E	4	8	1'-4"	"
F	4	12	2'-8"	"
S	4	24	6'-8"	See Diagram

ONE INTERMEDIATE BENT				
MARK	SIZE	No. REQD	LENGTH	BENDING
A ₂	8	6	25'-6"	Straight
D	6	4	1'-9"	"
S	4	22	6'-8"	See Diagram



Note: All bar dimensions are given out to out.

ESTIMATED QUANTITIES			
ITEM	UNIT	QUANTITY	
		END BENT	INTERMEDIATE BENT
Concrete, Class A	Cu. Yd.	4.12	3.53
Reinforcing Steel	Lb.	602	517
Treated Timber Piling	Lin. Ft.	*	*

* See Estimated Bridge Quantities.

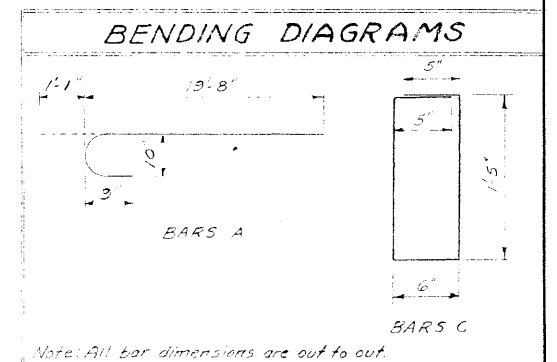
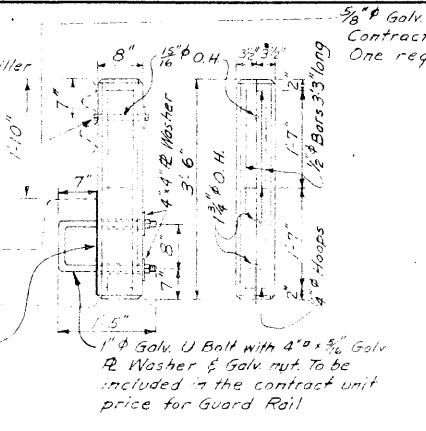
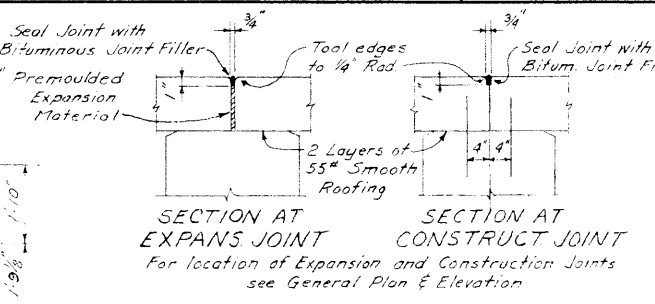
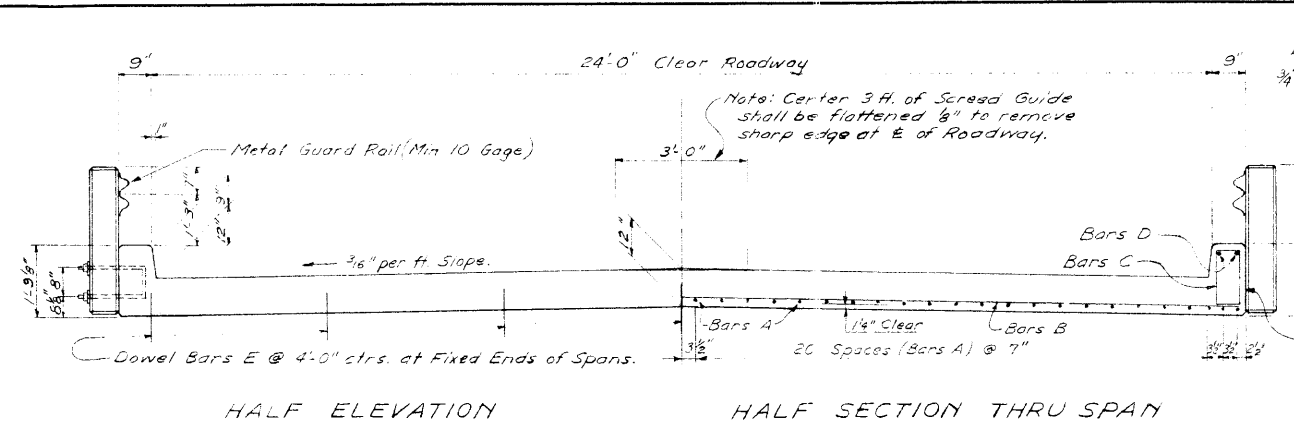
GENERAL NOTES

DESIGN SPECIFICATIONS A.A.S.H.O. 1953
LOADING: H15-44
DESIGN LOAD FOR PILES: 20 Tons
CHAMFER: All exposed edges to be chamfered 3/4" unless otherwise noted.
DOWELS: Set Dowels for Superstructure.

STATE ROAD DEPARTMENT OF FLORIDA BRIDGE DIVISION			
TIMBER PILE BENTS 20 FT. SPAN 24 FT. ROADWAY			
ROAD NO.	COUNTY	PROJECT NO.	
	ORANGE	7565-150	
REVISIONS	Names	Dates	Recommended For Approval by
Date	Descriptions		
	Detailed by W.M.G.	8-55	APPROVED BY [Signature] Office Engineer
	Checked by M.E.F.	8-55	
	Quantities by W.M.G.	8-55	
	Checked by M.E.F.	8-55	
	Traced by W.M.G.	8-55	Engineer of Bridges
		Drawing No. T.P. 24	Index No. 3516

155-176
563-150
562-151
756-250
50 50

FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	7565-150	55	3

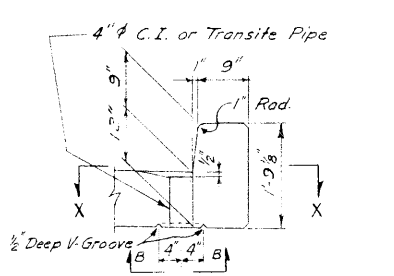
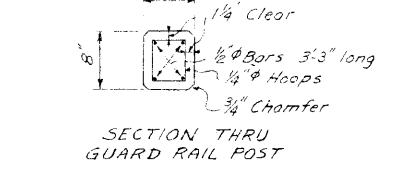


MARK	SIZE	No REQD	LENGTH	LOCATION	BENDING
A	8	46	20'-0"	Slab	Bend
B	4	32	25'-2"	Slab	Straight
C	4	38	4'-2"	Curb	Bend
D	4	4	19'-8"	Curb	Straight
E	6	7	1'-3"	Slab	Straight

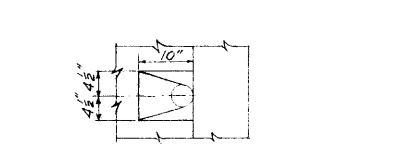
ITEM	UNIT	QUANTITY
Concrete, Class A	Cu Yd.	19.77
Reinforcing Steel	Lb.	3258
Metal Guard Rail (Min. 10 Gauge)	Lin Ft.	*

* See Estimated Bridge Quantities

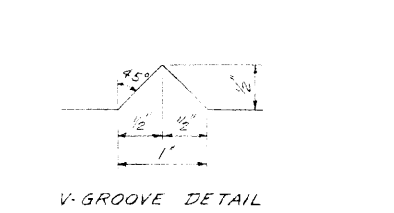
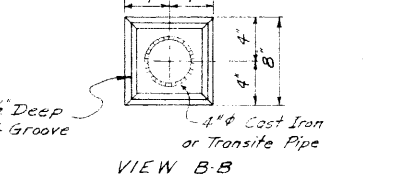
DETAIL OF GUARD RAIL POST



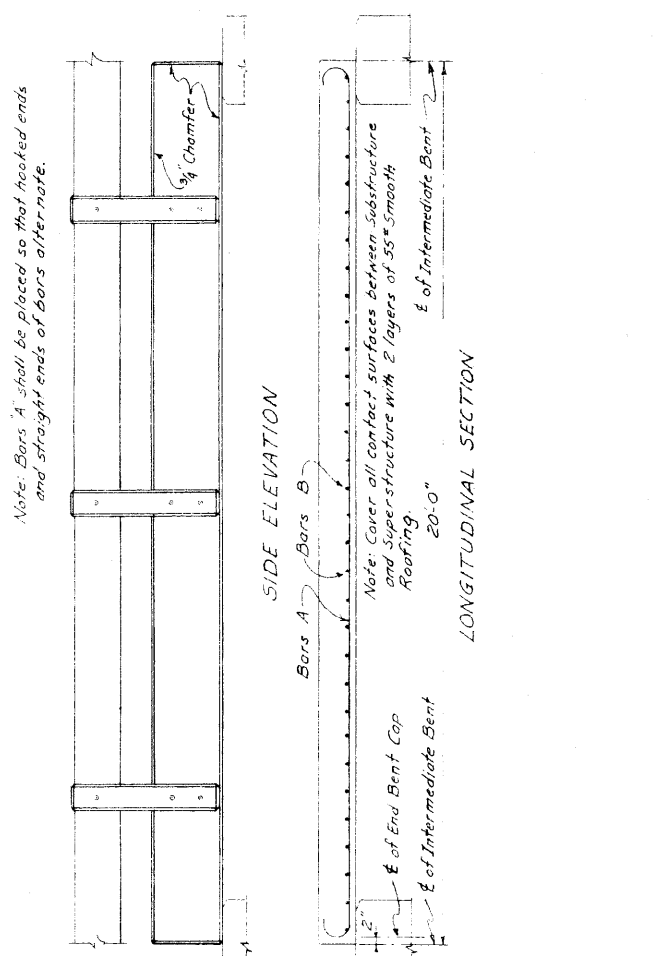
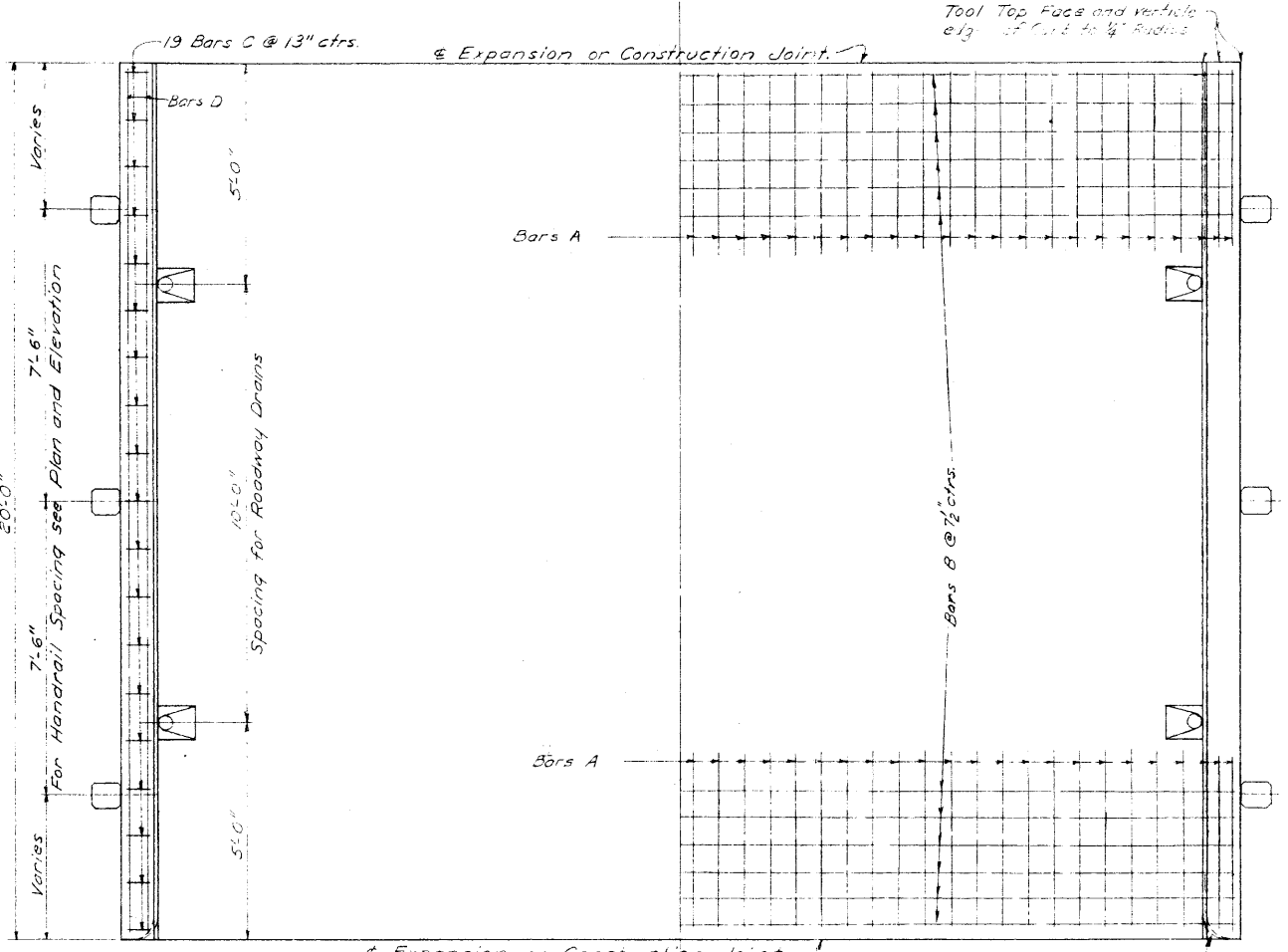
SECTION THRU CURB AT DRAIN



VIEW B-B



V-GROOVE DETAIL

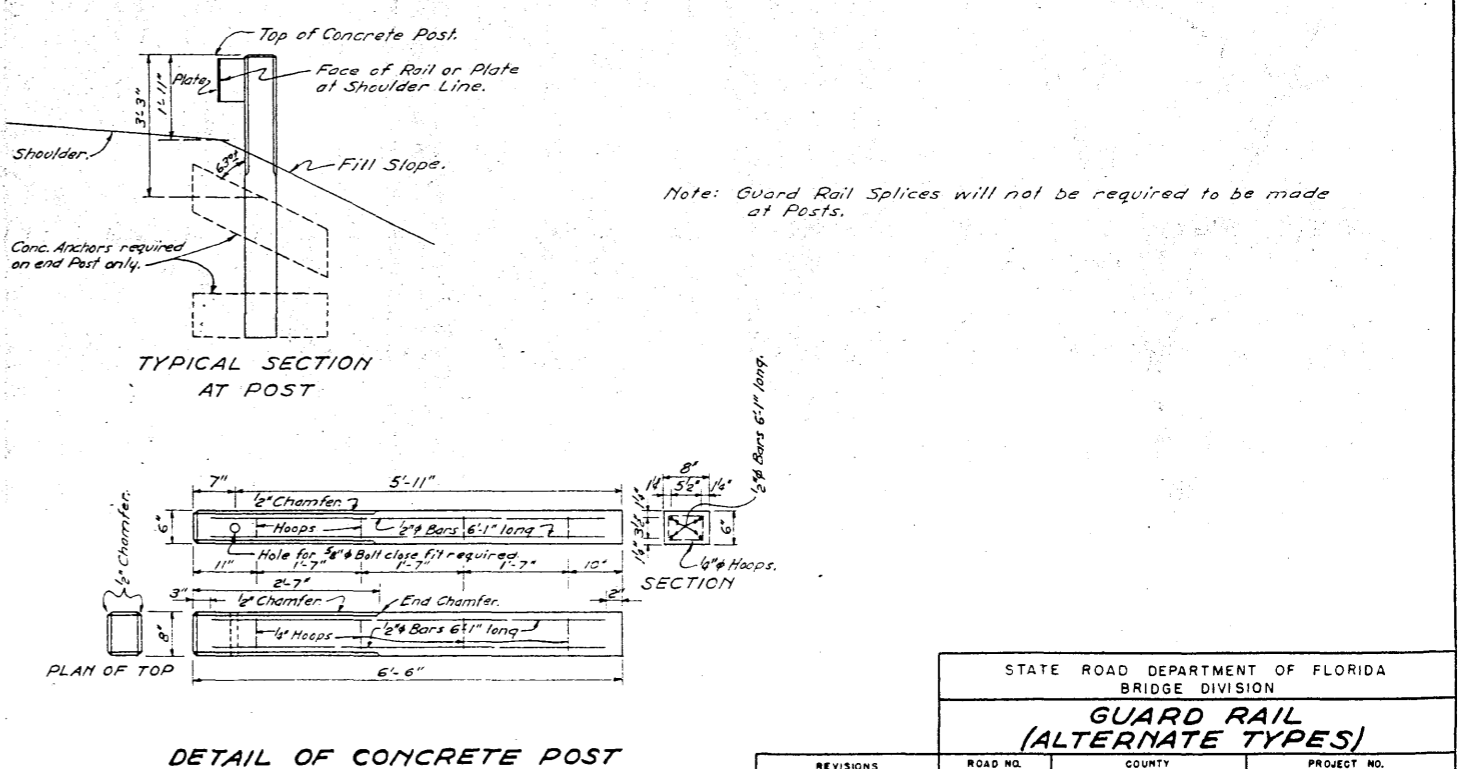
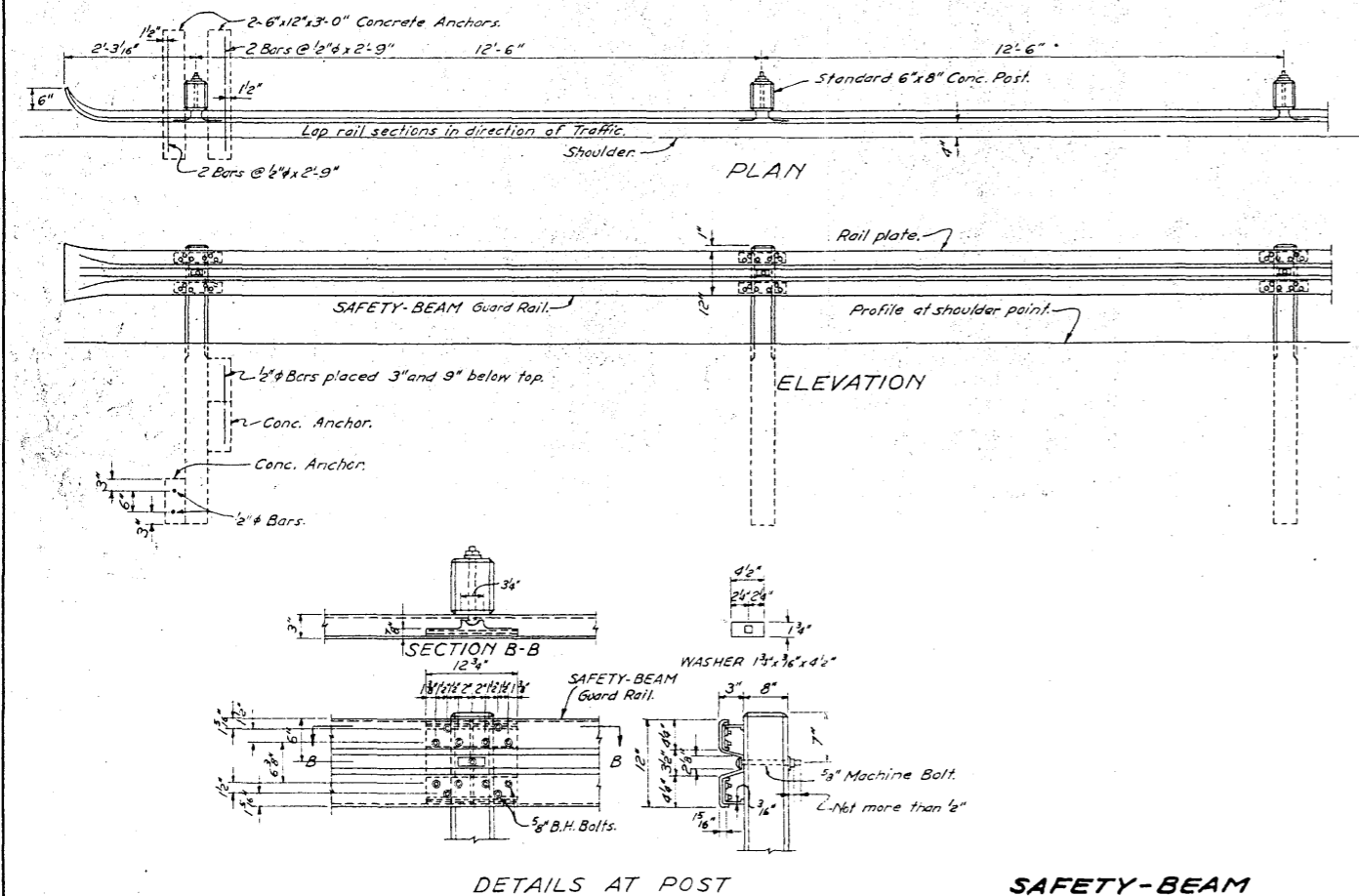
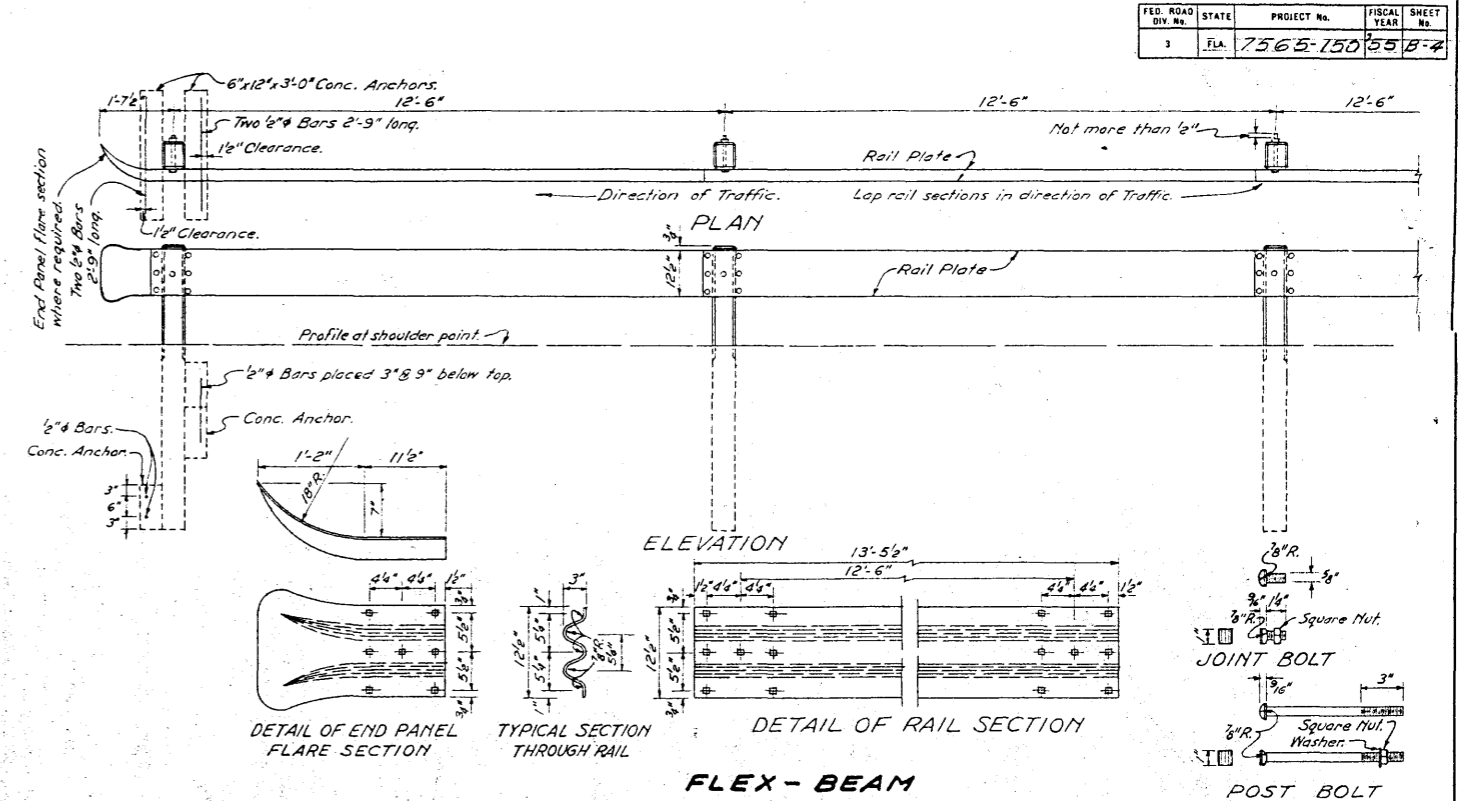
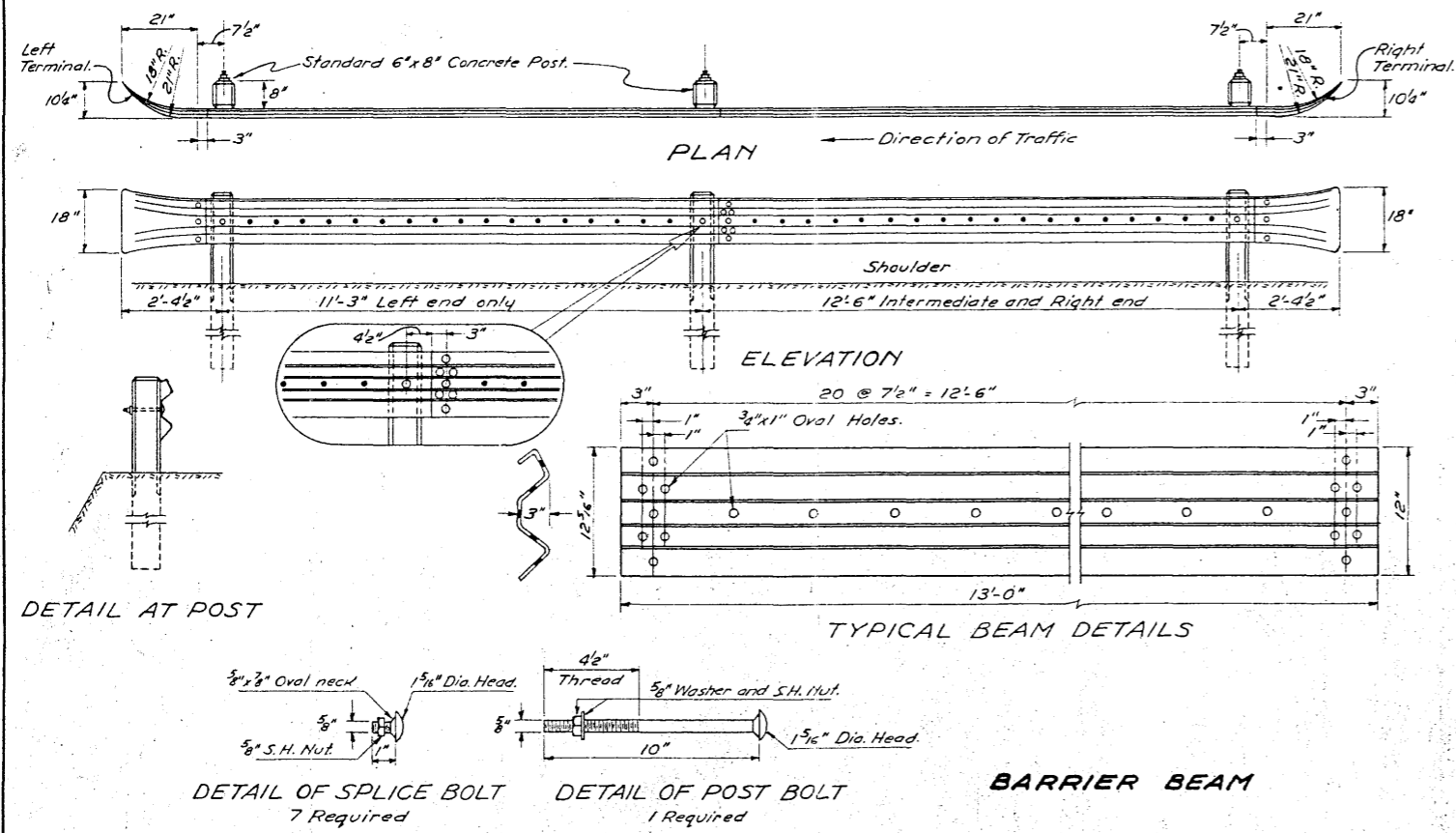


HALF PLAN SHOWING BARS C AND D IN CURS
HALF PLAN SHOWING BARS A AND B IN BOTTOM OF SLAB
PLAN OF END OR INTERMEDIATE SPANS

~ GENERAL NOTES ~
DESIGN SPECIFICATIONS: A.A.S.H.O., 1953
LOADING: H 15-44
CHAMFER: All exposed edges and corners to be chamfered 3/4" unless otherwise shown.
CONTACT SURFACES: Cover all contact surfaces between Substructure and Superstructure with two layers of 55 lb smooth roofing.
GUARD RAIL POSTS: Guard Rail Post shall be precast concrete, 7'-8" x 3'-6" long. Guard Rail Posts shall be included in the Contract Unit Price for Guard Rail.

STATE ROAD DEPARTMENT OF FLORIDA
BRIDGE DIVISION
STANDARD SLAB SUPERSTRUCTURE
20' SPAN 24 FT ROADWAY

REVISIONS		ROAD NO.	COUNTY	PROJECT NO.
Date	Descriptions		ORANGE	7565-150
		Names	Dates	Recommended For Approval by
		Detailed by	W.M.G. 8-55	APPROVED BY Office Engineer
		Checked by	M.E.F. 8-55	
		Quantities by	W.M.G. 8-55	
		Checked by	M.E.F. 8-55	
		Traced by	W.M.G. 8-55	Drawing No. 5 Index No. 3516



Note: Guard Rail Splices will not be required to be made at Posts.

STATE ROAD DEPARTMENT OF FLORIDA BRIDGE DIVISION				
GUARD RAIL (ALTERNATE TYPES)				
REVISIONS	ROAD NO.	COUNTY	PROJECT NO.	
DATES	DESCRIPTIONS	ORANGE		7565-150
		NAMES	DATES	RECOMMENDED FOR APPROVAL BY
				APPROVED BY
				ENGINEER OF BRIDGES
				DRAWING NO.
				INDEX NO.
				3453