THIS CONTRACT PLAN SET INCLUDES

ROADWAY PLANS
STRUCTURE PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT SET OF PLANS

W.P.J. NO. 1110874

FISCAL YEAR	SHEET NO.
99	1

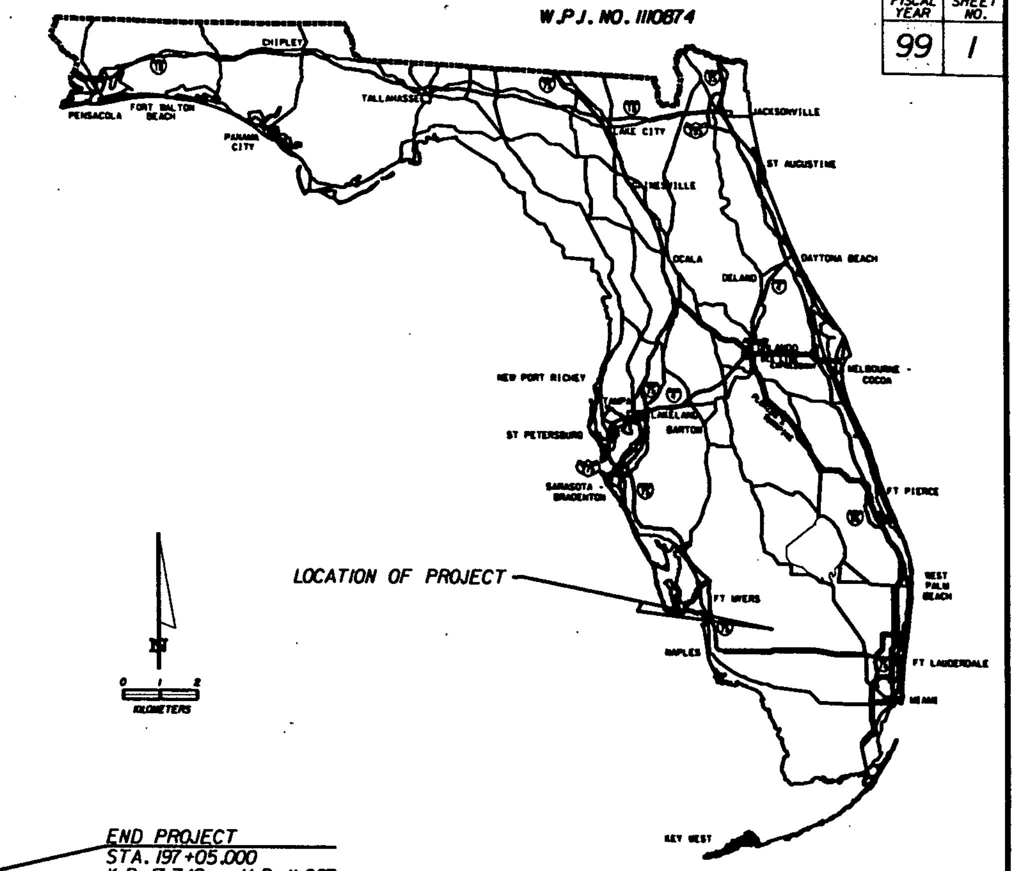
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINAL PLANS

~~PLANS OF PROPOSED~~

STATE HIGHWAY

FINANCIAL PROJECT NO. 193991-1-52-01
STATE PROJECT NO. 05090-3511
GLADES COUNTY
STATE ROAD NO. 29



LOCATION OF PROJECT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2	SUMMARY OF PAY ITEMS
3	TYPICAL SECTION
4-5	SUMMARY OF QUANTITIES
6-13	ROADWAY PLAN-PROFILES
14	ROADWAY SOIL SURVEY
15-28	CROSS SECTIONS
29-31	TRAFFIC CONTROL PLAN
32-39	UTILITY ADJUSTMENTS
40	SIGNING AND MARKING SHEET
41	APPROACH SLAB
42	APPROACH SLAB DETAILS

Contractor: Sheltra & Sons, Inc.,
District Engineer: Dan Foss, P.E.
Resident Engineer: Paul Theberge, P.E.
Project Engineer: Thomas Hobbs
Work Started: January 26, 1999
Work Conditionally Accepted: June 10, 2000
Work Final Accepted: August 1, 2000

R 28 E | R 29 E   R 29 E | R 30 E   R 30 E | R 31 E

TO SEBRING

T 40 S / T 41 S

BEGIN EXCEPTION
STA. 97+25.000

END BRIDGE
. 95+62.359
GE 050035
N BRIDGE
. 95+48.619

EXCEPTION
. 93+85.000

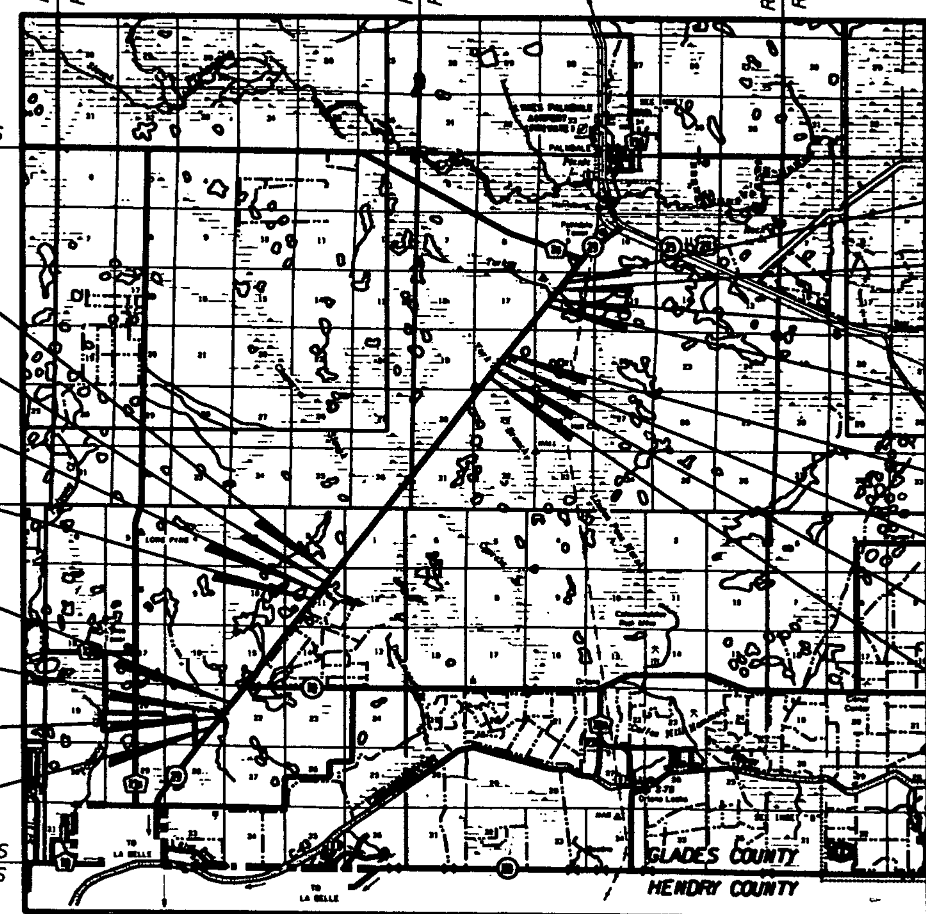
T 41 S / T 42 S

N EXCEPTION
. 51+10.000

BRIDGE
. 49+42.308
GE 050941
IN BRIDGE
. 49+33.208

BEGIN PROJECT
STA. 47+50.000
K.P. 2.800 = M.P. 1.740

T 42 S / T 43 S



TO LABELLE

END PROJECT
STA. 197+05.000
K.P. 17.749 = M.P. 11.027

END BRIDGE
STA. 195+72.759
BRIDGE 050031
BEGIN BRIDGE
STA. 195+63.689

END EXCEPTION
STA. 194+37.500

BEGIN EXCEPTION
STA. 171+75.000

END BRIDGE
STA. 170+36.023
BRIDGE 050032
STA. 170+22.363
BEGIN BRIDGE

END EXCEPTION
STA. 168+90.000

PLANS PREPARED BY :
GENESIS GROUP
3910 U.S. HIGHWAY 301 NORTH
SUITE 140
TAMPA, FLORIDA 33619
LARRY L. FLUTY, P.E.
VENDOR NO. VF591-663-160-001

ROADWAY PLANS
ENGINEER OF RECORD
LARRY L. FLUTY, P.E.
FL. P.E. NO. 38628

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, ROADWAY AND TRAFFIC DESIGN STANDARDS (BOOKLET DATED JANUARY, 1998 METRIC).

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

GOVERNING SPECIFICATIONS: STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, DATED 1996, SUPPLEMENTS AND SPECIAL PROVISIONS THERETO IF NOTED IN THE CONTRACT SPECIFICATIONS FOR THIS PROJECT.

NOTE: THIS IS A METRIC UNIT PROJECT

REVISIONS

RECYCLED PAPER

LENGTH OF PROJECT	
	METERS
ROADWAY	1 206.930
BRIDGES	45.570
NET LENGTH OF PROJ.	1 252.500
EXCEPTIONS	13 696.696
GROSS LENGTH OF PROJ.	14 949.196

REVISIONS		
DATE	BY	DESCRIPTION

ROADWAY PLANS ENGINEER OF RECORD: LARRY L. FLUTY, P.E.
DATE: 2/13/98
P.E. NO.: 38628

FDOT PROJECT MANAGER : MICHAEL A ENOT, P.E.   BRIDGE WIDENINGS AT BRIDGE NOS. 050941, 050035, 050032, 050031

11/DEC/96
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$$$$$$SYTIME$$$$$$
$$$$$$$DGNSPECIFICATION$$$$$$

STATE PROJ. NO.	SHEET NO.
05090-3511	2

6/24/98
CES0154

CESPJ15 4
PAGE 01 OF 01

MANDIST: 01 COUNTY: 05 SECTION: 090 193991 1 52 01

SUMMARY OF BRIDGE PAY ITEMS

ALT SPC	ITEM NUMBER	ITEM	UNIT	19399115201 BR - 050031 FA NON PART	19399115201 BR - 050032 FA NON PART	19399115201 BR - 050035 FA NON PART	19399115201 BR - 050941 FA NON PART	QUANTITY TOTAL
1	2110 3	STRUCTURE REMOVAL OF EXISTING	LS	.000	.000	.000	.000	1.000
3	2350 72	CLEANING 8 RESEALING JOINTS	MI	44.000	59.000	59.000	44.000	206.000
1	2400 4 4	CONCRETE CLASS IV (SUPERSTRUCTURE)	M3	14.800	21.600	21.700	14.800	72.900
1	2400 4 5	CONCRETE CLASS IV (SUBSTRUCTURE)	M3	6.800	9.000	9.000	8.200	33.000
2	2400 143	CONCRETE SURFACES CLEANING 8 COATING	M2	91.700	112.300	112.700	91.800	408.500
2	2400 148 1	TRAFFIC RAILING (F81)(BARRIER)	MI	22.700	31.900	32.100	22.800	109.500
1	2401 70	SPALLED AREA RESTORE (GUNITE)	M3	.000	.000	.000	6.010	6.010
1	2415 1 4	REINFORCING STEEL (SUPERSTRUCTURE)	KG	3983.000	5663.000	5663.000	3983.000	19292.000
1	2415 1 5	REINFORCING STEEL (SUBSTRUCTURE)	KG	650.000	904.000	884.000	870.000	3308.000
1	2455 3 2	PILING FURNISHED (PRESTRESSED CONCRETE)(455MM SQ*	MI	34.000	48.000	80.000	24.000	186.000
1	2455 4 2	PILING DRIVEN (PRESTRESSED CONCRETE)(455MM SQ)	MI	34.000	48.000	80.000	24.000	186.000
1	2455 15	PILE HOLE PREFORMED	EA	1.000	1.000	1.000	1.000	4.000
1	2455 17 2	PILE SPLICES (455MM) *	EA	1.000	1.000	1.000	1.000	4.000

NOTE: * IDENTIFIES ITEMS NORMALLY REQUIRING SHOP DRAWINGS CONTRACTOR SHALL DETERMINE OTHER ITEMS REQUIRING SHOP DRAWINGS.

6/24/98
CES0152

CESPJ15 2
PAGE 01 OF 01

MANDIST: 01 COUNTY: 05 SECTION: 090 193991 1 52 01

SUMMARY OF ROADWAY PAY ITEMS

ALT SPC	ITEM NUMBER	ITEM	UNIT	19399115201 FA NON PART	QUANTITY TOTAL
1	2101 1	MOBILIZATION	LS	1.000	1.000
1	2102 1	MAINTENANCE OF TRAFFIC	LS	1.000	1.000
2	2102 60	WORK ZONE SIGNS	ED	16208.000	16208.000
2	2102 70 11	BARRIER WALL (TEMP) (F81)(STANDARD)(CONCRETE)	MI	1612.800	1612.800
2	2102 70 21	BARRIER WALL (TEMP) (REL)(STANDARD)(CONCRETE)	MI	1612.800	1612.800
2	2102 74 1	BARRICADE (TEMPORARY)(TYPES I,II,VP B DRUM)	ED	27744.000	27744.000
2	2102 77	HIGH INTENSITY FLASHING LIGHTS (TEMP TYPE B)	ED	4930.000	4930.000
2	2102 78	MARKER PAVT REFLECTIVE (TEMPORARY)	EA	400.000	400.000
2	2102 79	LIGHTS(TEMP BARR. WALL MOUNT)(TYPE C STEADY BURN)	ED	5920.000	5920.000
2	2102 81 1	IMPACT ATTENUATOR MODULES VEHIC. (INERTIA)(TEMP)	EA	144.000	144.000
3	2102 911 2	PAVT MARKING REMOVABLE (WHITE/BLACK)(SOLID)	MI	960.000	960.000
3	2102 912 2	PAVT MARKING REMOVABLE (YELLOW) (SOLID)	MI	960.000	960.000
2	2104 10 1	HAY OR STRAW BALE (450MM X 450MM X 900MM)	EA	20.000	20.000
1	2104 11	TURBIDITY BARRIER FLOATING	MI	235.000	235.000
1	2104 12	TURBIDITY BARRIER STAKED	MI	160.000	160.000
1	2104 13 1	SILT FENCE STAKED (TYPE III)	MI	1399.000	1399.000
6	2104 15	SOIL TRACKING PREVENTION DEVICE	EA	2.000	2.000
2	2109 71 2	FIELD OFFICE (56 M2)	DA	290.000	290.000
1	2110 1 1	CLEARING AND GRUBBING	LS	1.000	1.000
3	2120 1	EXCAVATION REGULAR	M3	841.000	841.000
1	2162 2	TOPSOIL	M2	6519.000	6519.000
1	2285 701	BASE OPTIONAL (BASE GROUP M1)	M2	5427.000	5427.000
1	2300 1 1	BITUMINOUS MATERIAL (PRIME COAT)	LI	623.000	623.000
1	2300 1 3	BITUMINOUS MATERIAL (TACK COAT)	LI	5622.000	5622.000
1	2327 70 040	MILLING EXISTING ASPHALT PAVT (40MM AVG DEPTH)	M2	9163.000	9163.000
3	2331 2	ASPHALTIC CONCRETE TYPE S	MT	964.500	964.500
2	2337 7 3	ASPH CONC FRICTION COURSE (INC RUBBER)(60KG FC 3)	MT	845.900	845.900
1	2339 1	ASPHALT PAVEMENT MISCELLANEOUS	MT	210.300	210.300
2	2360 71	APPROACH SLABS CONCRETE (WIDENING)	M3	132.800	132.800
1	2400 1 15	CONCRETE CLASS I (MISCELLANEOUS)	M3	5.000	5.000
1	2430 984 229	MITERED END SECTION (CONC PIPE ROUND) (600MM SD)	EA	4.000	4.000
1	2536 1 1	GUARDRAIL (ROADWAY)	MI	1131.600	1131.600
2	2536 73	GUARDRAIL REMOVAL	MI	244.000	244.000
4	2536 85 7	GUARDRAIL END ANCHORAGE ASSEMBLY SRT 350	EA	20.000	20.000
1	2570 5	FERTILIZER	MT	.600	.600
1	2570 9	WATER FOR GRASSING	KL	32.500	32.500
1	2575 1	SODDING	M2	6519.000	6519.000
1	2700 46 11	SIGN EXISTING (REMOVAL) (SINGLE POST)	AS	4.000	4.000
2	2706 3	RETRO REFLECTIVE PAVEMENT MARKERS	EA	288.000	288.000
3	2710 23 61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150MM)	NK	10.400	10.400
3	2710 24 61	TRAFFIC STRIPE SOLID (YELLOW) (150MM)	NK	6.932	6.932
3	2710 25 61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150MM)	MI	3465.000	3465.000
3	2710 28	TRAFFIC STRIPE SKIP (YELLOW)	MI	433.300	433.300
1	2711 7	PAVEMENT MARKING(THERMOPLASTIC)(REMOVAL)	M2	90.000	90.000

NOTE: * IDENTIFIES ITEMS NORMALLY REQUIRING SHOP DRAWINGS CONTRACTOR SHALL DETERMINE OTHER ITEMS REQUIRING SHOP DRAWINGS.

NOTE: THE TOTALS SHOWN ON THE SUMMARY OF ROADWAY PAY ITEMS INCLUDE THE QUANTITIES FOR PAVEMENT MARKINGS USED FOR PAVEMENT MARKINGS (AS SHOWN IN THE ROADWAY PLANS) AND FOR FINAL PAVEMENT MARKINGS (AS SHOWN ON THE SIGNING AND PAVEMENT MARKING PLANS.

REVISIONS

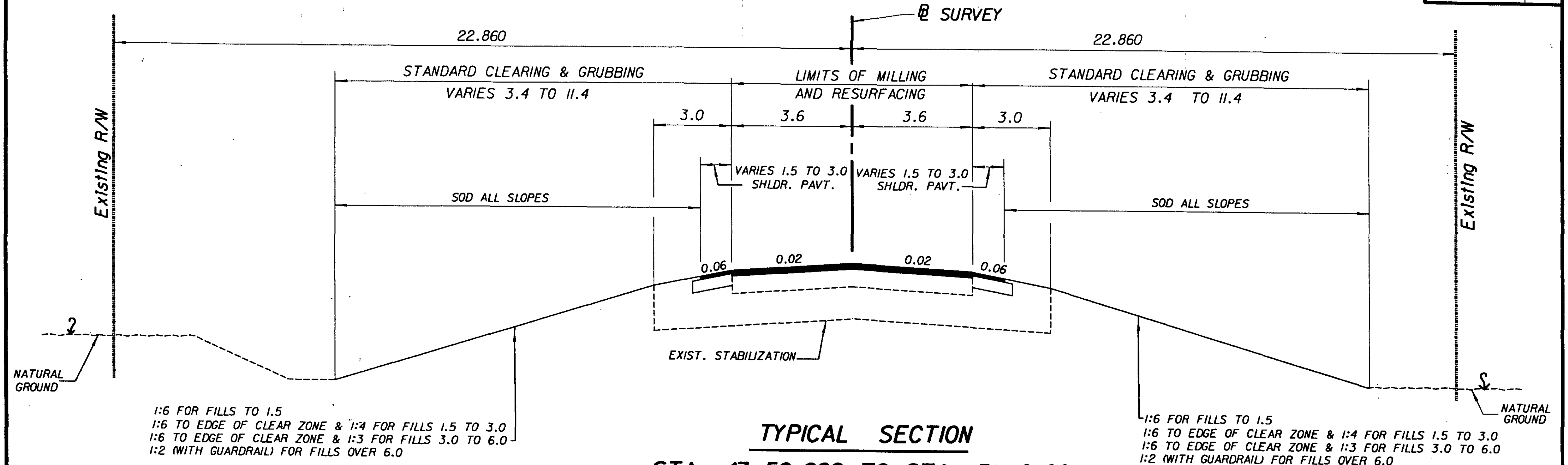
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

FLORIDA DEPARTMENT OF TRANSPORTATION

SUMMARY OF PAY ITEMS

STATE PROJ. NO.	SHEET NO.
05090-3511	3

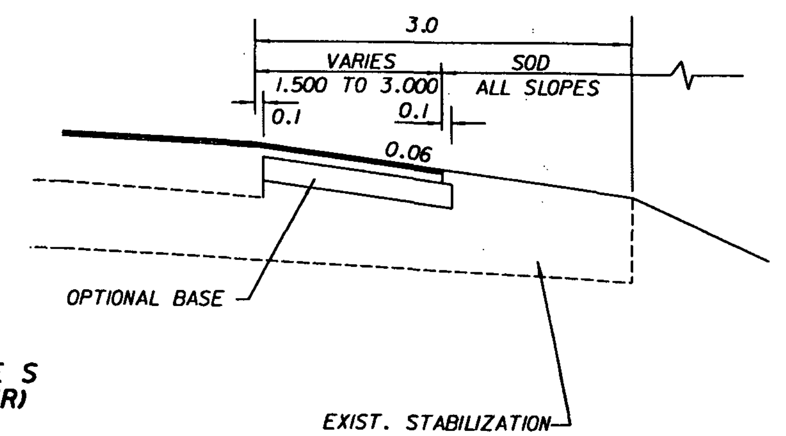


TYPICAL SECTION

STA. 47+50.000 TO STA. 51+10.000
STA. 93+85.000 TO STA. 97+25.000
STA. 168+90.000 TO STA. 171+75.000
STA. 194+37.500 TO STA. 197+05.000

EROSION CONTROL NOTE

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE SPECIAL PROVISIONS OF THIS CONTRACT WHICH REQUIRE THE PREPARATION AND APPROVAL OF AN EROSION CONTROL PLAN THAT ADDRESSES THE PREVENTION, CONTROL, AND ABATEMENT OF WATER POLLUTION.



SHOULDER PAVEMENT DETAIL

OPTIONAL BASE GROUP 01 WITH TYPE S STRUCTURAL COURSE (66KG/M2 AVG.) AND FRICTION COURSE (FC-3) (60kg/M2) (RUBBER)

MILLING AND RESURFACING

MILL EXISTING ASPHALT PAVEMENT (40mm AVG. DEPTH) AND RESURFACE WITH TYPE S STRUCTURAL COURSE (66KG/M2 AVG.) AND FRICTION COURSE FC-3 (60kg/M2) (RUBBER)

TRAFFIC DATA BRIDGE NO. 050941

1997 A.A.D.T. = 4300
ESTIMATED OPENING YEAR 1999 A.D.T. = 4500
DESIGN YEAR 2019 A.D.T. = 7000
K= 10.9% D= 53.9% 24-HR. T= 25.0%
DESIGN-HR. T= 12.5%
DESIGN SPEED 100 km/h

TRAFFIC DATA BRIDGE NOS. 050035, 050032, 050031

1996 A.A.D.T. = 2800
ESTIMATED OPENING YEAR 1999 A.D.T. = 3000
DESIGN YEAR 2019 A.D.T. = 4800
K= 10.4% D= 55.6% 24-HR. T= 32.6%
DESIGN-HR. T= 16.3%
DESIGN SPEED 100 km/h

7/24/98

DATE: 11/DEC/96
FILE: [illegible]

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	3/96	DRAWN BY:	DLD	3/96
CHECKED BY:	HFL	3/96	CHECKED BY:	HFL	3/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

TYPICAL SECTION

GENERAL NOTES

1. ANY PUBLIC LAND CORNER WITH IN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED AND HAS NOT BEEN PROPERLY REFERENCED, THE PROJECT ENGINEER SHOULD NOTIFY THE DISTRICT LOCATION SURVEYOR WITHOUT DELAY BY TELEPHONE.
2. AT THE BEGINNING AND END OF THE PROJECT, CONSTRUCTION LIMITS SHALL BE EXTENDED BEYOND THE PROJECT LIMITS (WHERE APPLICABLE) TO ALLOW FOR THE ASPHALT COURSES TO BE FEATHERED. FEATHER SHALL BE CONSTRUCTED IN SUCH A MANNER AS TO CONSTRUCT A SMOOTH TRANSITION. THE COST SHALL BE INCLUDED IN THE FRICTION COURSE PAY ITEM.
3. EXISTING DRAINAGE STRUCTURES WITHIN THE CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
4. EXISTING DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT HAVE BEEN EVALUATED FOR CONFORMANCE WITH FAC RULE 14-97.003(1)(b). THOSE THAT ARE IN SUBSTANTIAL CONFORMANCE WITH THE RULE AND THAT ARE TO REMAIN AT THEIR EXISTING LOCATION, ARE NOT SHOWN ON THE PLANS BUT ARE TO BE RECONSTRUCTED IN CONFORMANCE TO STANDARDS. THOSE THAT ARE TO BE RELOCATED OR CLOSED ARE DETAILED ON THE PLANS.
5. ALL ROADWAY PAVEMENT CUTS SHALL BE SAW CUT.
6. THE CONTRACTOR SHALL ERECT WIDE LOAD SIGNS AT EACH END OF BRIDGES AND APPROACHING INTERSECTIONS. CONTRACTOR SHALL CONTACT F.D.O.T. ROAD USE PERMITS ENGINEER IN WRITING, INFORMING HIM OF THE BEGINNING AND ENDING DATES THAT SIGNS WILL BE IN USE. THIS INFORMATION SHOULD BE ADDRESSED TO: ROAD USE PERMITS ENGINEER, FLORIDA DEPARTMENT OF TRANSPORTATION, MAIL STATION 62, 605 SUWANNEE STREET, TALLAHASSEE FLORIDA 32399-0450.

PAY ITEM NOTES

2102-1 INCLUDES APPROXIMATELY 792 M2 OF TEMPORARY PAVEMENT.

2104-10 THRU 2104-13-1 ARE ESTIMATED FOR PREVENTION, CONTROL AND ABATEMENT OF EROSION AND WATER POLLUTION AND SHALL BE USED AT LOCATIONS DESCRIBED IN THE CONTRACTOR'S APPROVED EROSION CONTROL PLAN OR AS DIRECTED BY THE PROJECT ENGINEER TO COMPLY WITH THE FEDERAL, STATE, AND LOCAL REGULATIONS.

2104-10-1 BASED ON REPLACEMENT EVERY 3 MONTHS.

2104-13-1 BASED ON REPLACEMENT EVERY 12 MONTHS.

2536-73 EXISTING GUARDRAIL TO BE DISMANTLED AND STOCKPILED WITHIN THE RIGHT-OF-WAY IN AREAS DESIGNATED BY THE ENGINEER FOR REMOVAL BY D.O.T. MAINTENANCE FORCES.

2331-2 INCLUDES 5 METRIC TONS FOR ADJUSTMENT OF THE CONNECTIONS TO EXISTING DRIVES, STREETS, ETC. AS DIRECTED BY THE PROJECT ENGINEER.

2400-1-15 INCLUDES 5 M3 FOR MISCELLANEOUS CONSTRUCTION, AS DIRECTED BY THE PROJECT ENGINEER.

2570-5 BASED ON 2 APPLICATIONS.

2327-70-040 MILL EXISTING PAVEMENT (40mm AVERAGE DEPTH) WITH THE FOLLOWING EXCEPTION: MILL EXISTING PAVEMENT ON ALL BRIDGES AT A 55mm DEPTH FROM BEGIN BRIDGE STATION TO END BRIDGE STATION. TRANSITION FROM ROADWAY MILL AVERAGE DEPTH OF 40mm TO BRIDGE MILL DEPTH OF 55mm FOR A 5m TRANSITION LENGTH. COST OF THE EXTRA MILLING DEPTH SHALL BE INCLUDED IN PAY ITEM.

SUMMARY OF EARTHWORK

DESCRIPTION	P M3	F M3
BRIDGE NO. 050941		
TOTAL ROADWAY EXCAVATION (A-2, I-3 MATL)	162	162
BRIDGE NO. 050035		
TOTAL ROADWAY EXCAVATION (A-2, I-3 MATL)	157	157
BRIDGE NO. 050032		
TOTAL ROADWAY EXCAVATION (A-2, I-3 MATL)	235	235
BRIDGE NO. 050031		
TOTAL ROADWAY EXCAVATION (A-2, I-3 MATL)	287.0	287
TOTAL ROADWAY EXCAVATION	841	841

EARTHWORK HAS BEEN CALCULATED USING THE LIMEROCK BASE OPTION. IF ANOTHER OPTION IS CONSTRUCTED, THERE SHALL BE NO REVISION TO EARTHWORK QUANTITIES FOR WHICH PAYMENT IS MADE BY PLAN QUANTITY.

7/24/96

SUMMARY OF GUARDRAIL

LOCATION STA. TO STA.	SIDE	GUARDRAIL M P	GUARDRAIL M F	END ANCHORAGE TYPE SRT-350 EA P	END ANCHORAGE TYPE SRT-350 EA F	FIELD BOOK REFERENCE
BRIDGE NO. 050941						FB 318629
48+31.862 TO 49+27.112	RT	95.250	95.25	1	1	
48+77.582 TO 49+27.112	LT	49.530	49.53	1	1	
49+48.404 TO 49+97.934	RT	49.530	49.53	1	1	
49+48.404 TO 50+43.654	LT	95.250	95.25	1	1	
BRIDGE NO. 050035						
94+47.273 TO 95+42.523	RT	95.250	95.25	1	1	
94+92.993 TO 95+42.523	LT	49.530	49.53	1	1	
95+68.455 TO 96+17.985	RT	49.530	49.53	1	1	
95+68.455 TO 96+63.705	LT	95.250	95.25	1	1	
BRIDGE NO. 050032						
169+21.017 TO 170+16.267	RT	95.250	95.25	1	1	
169+73.757 TO 170+16.267	LT	49.530	49.53	1	1	
170+42.119 TO 170+91.649	RT	49.530	49.53	1	1	
170+42.119 TO 171+37.369	LT	95.250	95.25	1	1	
BRIDGE NO. 050031						
194+62.343 TO 195+08.063	RT	45.720	45.72	2	2	
195+08.063 TO 195+57.593	LT	49.530	49.53	1	1	
195+23.303 TO 195+57.593	RT	34.290	34.29	1	1	
195+78.855 TO 195+90.285	LT	11.430	15.24	1	1	
195+78.855 TO 196+28.385	RT	49.530	49.53	1	1	
196+01.715 TO 196+74.105	LT	72.390	72.39	2	2	
TOTAL		1131.6	1135.4	20	20	

SUMMARY OF SODDING

LOCATION STA. TO STA.	SIDE	P L	P W	P M2	F L	F W	F M2	FIELD BOOK REFERENCE
BRIDGE NO. 050941								FB 421812
47+50.000 TO 49+27.112	LT	177.112	4.336	768.0				
47+50.000 TO 49+27.112	RT	177.112	2.197	389.1				
49+48.404 TO 51+10.000	LT	161.596	1.170	189.1				
49+48.404 TO 51+10.000	RT	161.596	1.901	307.2				
BRIDGE NO. 050035								
93+85.000 TO 95+42.523	LT	157.523	1.480	233.1				
93+85.000 TO 95+42.523	RT	157.523	2.428	382.5				
95+68.455 TO 97+25.000	LT	156.545	3.982	623.3				
95+68.455 TO 97+25.000	RT	156.545	3.744	586.1				
BRIDGE NO. 050032								
168+90.000 TO 170+16.267	LT	126.267	3.083	389.3				
168+90.000 TO 170+16.267	RT	126.267	0.410	51.8				
170+42.119 TO 171+75.000	LT	132.881	2.921	388.1				
170+42.119 TO 171+75.000	RT	132.881	1.251	166.3				
BRIDGE NO. 050031								
194+37.500 TO 195+57.593	LT	120.093	4.086	490.8				
194+37.500 TO 195+57.593	RT	120.093	3.759	451.4				
195+78.855 TO 197+05.000	LT	126.450	5.057	639.4				
195+78.855 TO 197+05.000	RT	126.450	3.538	447.4				
SUMMARY OF SIDE DRAIN				16.0				
PROJECT TOTAL:				6 518.9			15,996	

SUMMARY OF EXISTING GUARDRAIL

LOCATION STA. TO STA.	SIDE	GUARDRAIL M P	GUARDRAIL M F	FIELD BOOK REFERENCE
BRIDGE NO. 050941				FB 318629
49+11.872 TO 49+27.112	LT/RT	30.5	49.0	
49+48.404 TO 49+63.664	LT/RT	30.5	49.5	
BRIDGE NO. 050035				
95+27.283 TO 95+42.523	LT/RT	30.5	51.5	
95+68.455 TO 95+83.695	LT/RT	30.5	55.0	
BRIDGE NO. 050032				
170+01.027 TO 170+16.267	LT/RT	30.5	52.0	
170+42.119 TO 170+57.359	LT/RT	30.5	53.0	
BRIDGE NO. 050031				
195+42.353 TO 195+57.593	LT/RT	30.5	45.75	
195+78.855 TO 195+94.095	LT/RT	30.5	50.0	
TOTAL		244.0	405.75	

SUMMARY OF SIDEDRAIN & MITERED END SECTIONS

	LOCATION STA. TO STA.	SIDE	375 mm	MES (EA)	450 mm	MES (EA)	600 mm	MES (EA)	750 mm	MES (EA)	SOD (M2)
	BRIDGE NO. 050031										
P	195+11.000 TO 195+22.000	RT						2		2	8.0
F											
P	195+89.000 TO 196+00.000	LT						2		2	8.0
F											
P											
F											
P											
F											
	PROJECT TOTAL							4		4	16.0

7/28/98

DATE: 17/DEC/96
FILE: r:\d11005\elb\sumquan\sum_1.dgn

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
		REVISIONS			

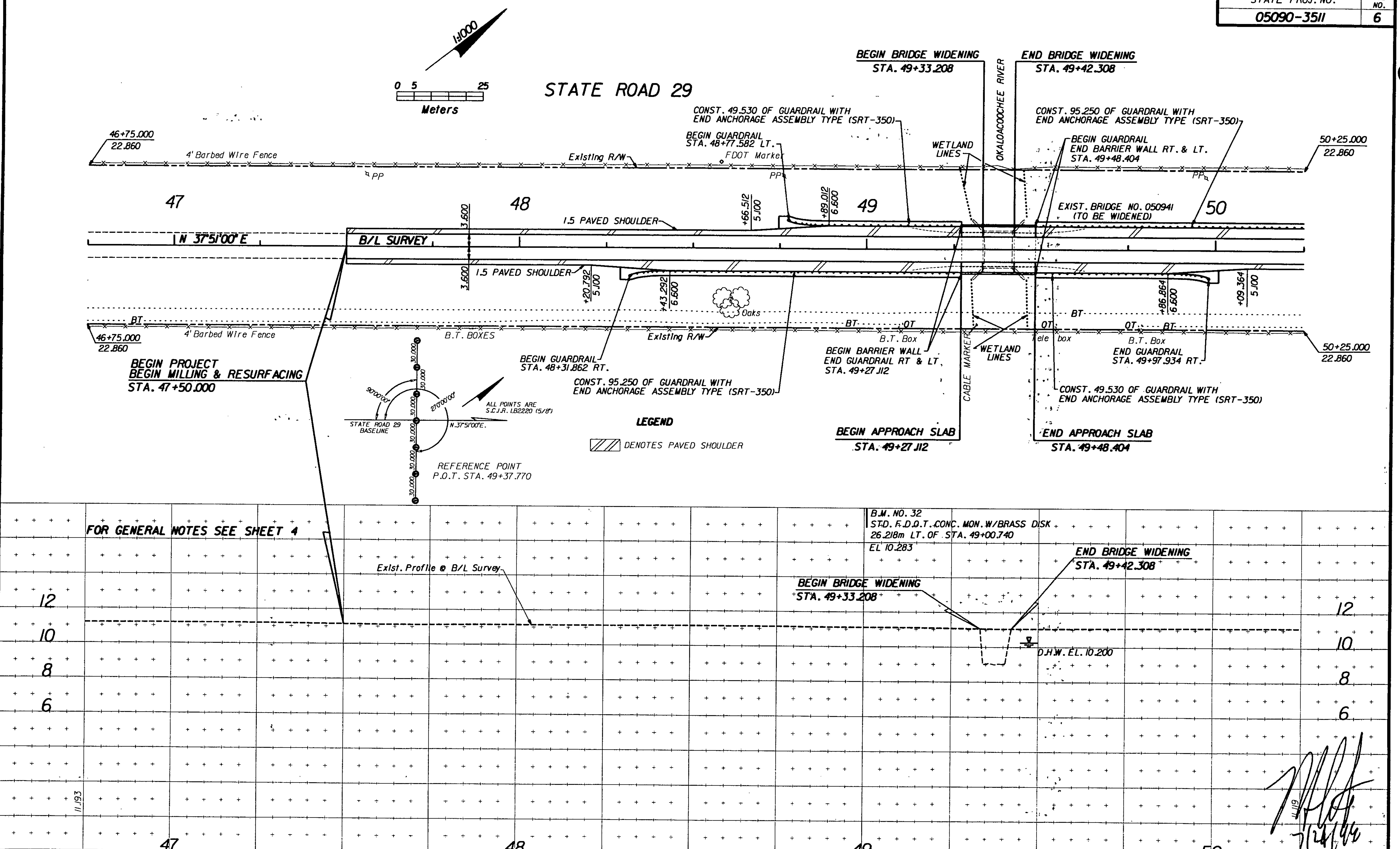
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	3/96	DRAWN BY:	TJB	3/96
CHECKED BY:	HFL	3/96	CHECKED BY:	DLD	3/96
SUPERVISED BY:	W.J. WARDEN				

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

SUMMARY OF QUANTITIES

STATE PROJ. NO.	SHEET NO.
05090-3511	6



STATE ROAD 29
1:1000
0 5 25
Meters
BEGIN BRIDGE WIDENING
STA. 49+33.208
END BRIDGE WIDENING
STA. 49+42.308
OKALOACOOCHEE RIVER
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN GUARDRAIL STA. 48+77.582 LT.
BEGIN GUARDRAIL END BARRIER WALL RT. & LT. STA. 49+48.404
WETLAND LINES
FDOT Marker
46+75.000
22.860
50+25.000
22.860
4' Barbed Wire Fence
Existing R/W
PP
47
48
49
50
1.5 PAVED SHOULDER
EXIST. BRIDGE NO. 050941 (TO BE WIDENED)
N 37°51'00" E
B/L SURVEY
3.600
+66.512 5.100
+89.012 6.600
+20.792 5.100
+43.292 6.600
+86.864 6.600
+09.364 5.100
Oaks
BT
OT
B.T. BOXES
B.T. Box
Tele box
BEGIN GUARDRAIL STA. 48+31.862 RT.
BEGIN BARRIER WALL END GUARDRAIL RT & LT. STA. 49+27.112
CABLE MARKER
END GUARDRAIL STA. 49+97.934 RT.
BEGIN PROJECT
BEGIN MILLING & RESURFACING
STA. 47+50.000
CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN APPROACH SLAB
STA. 49+27.112
END APPROACH SLAB
STA. 49+48.404
LEGEND
DENOTES PAVED SHOULDER
90°00'00"
270°00'00"
30.000
ALL POINTS ARE S.C.I.R. LB2220 (5/8")
STATE ROAD 29 BASELINE
N.37°51'00"E.
REFERENCE POINT
P.O.T. STA. 49+37.770
FOR GENERAL NOTES SEE SHEET 4
B.M. NO. 32
STD. F.D.O.T. CONC. MON. W/BRASS DISK
26.218m LT. OF STA. 49+00.740
EL 10.283
Exist. Profile @ B/L Survey
BEGIN BRIDGE WIDENING
STA. 49+33.208
END BRIDGE WIDENING
STA. 49+42.308
D.H.W. EL. 10.200
12
10
8
6
11.193
11.119

DATE: FEBRUARY 1991
FILE: f:\d11\005\e2b\50941\geopak\planrd01.dgn

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS								

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96

SUPERVISED BY: W.J. WARDEN

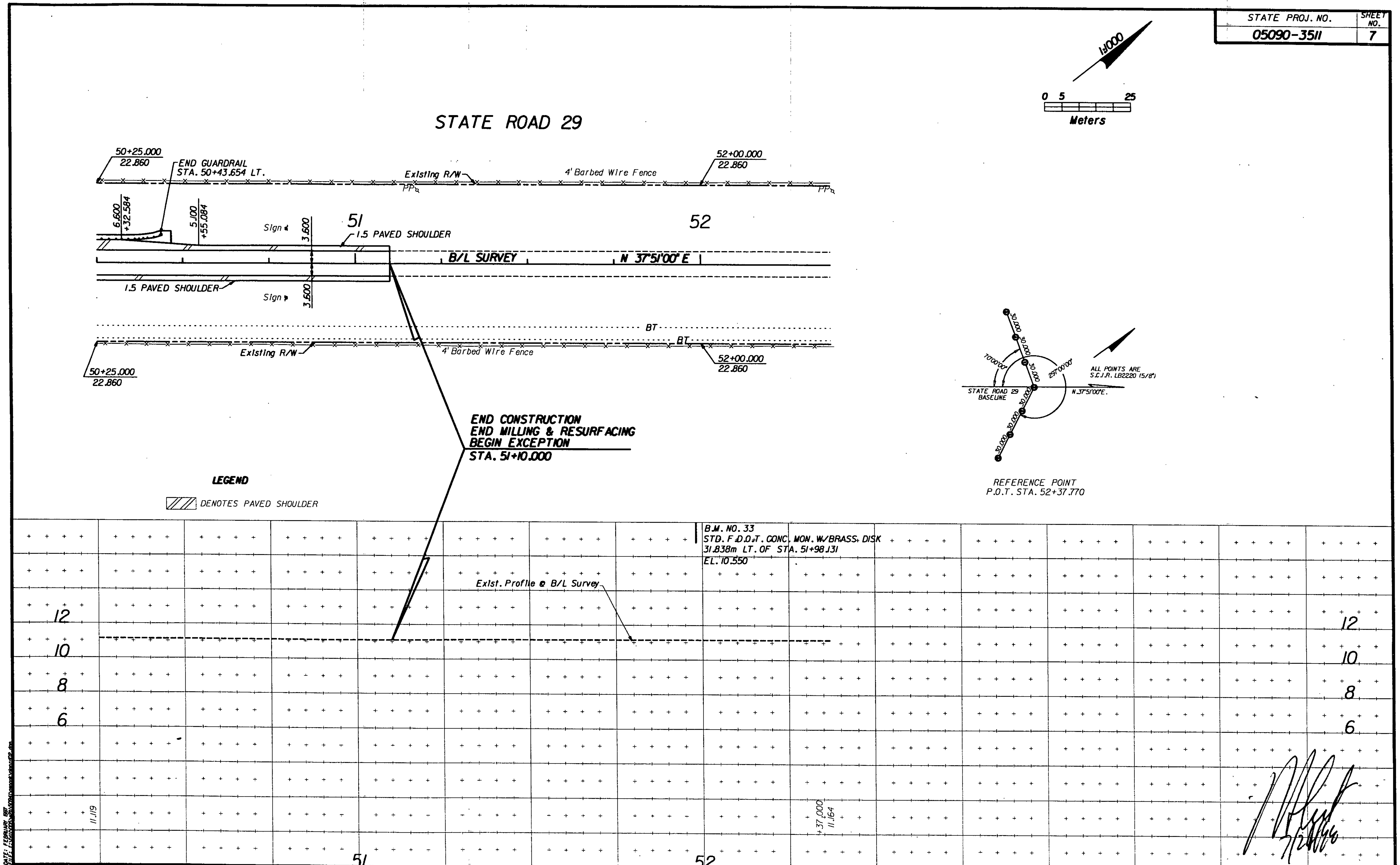
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

ROADWAY PLAN/PROFILE (1)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-35II	7



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
					REVISIONS			

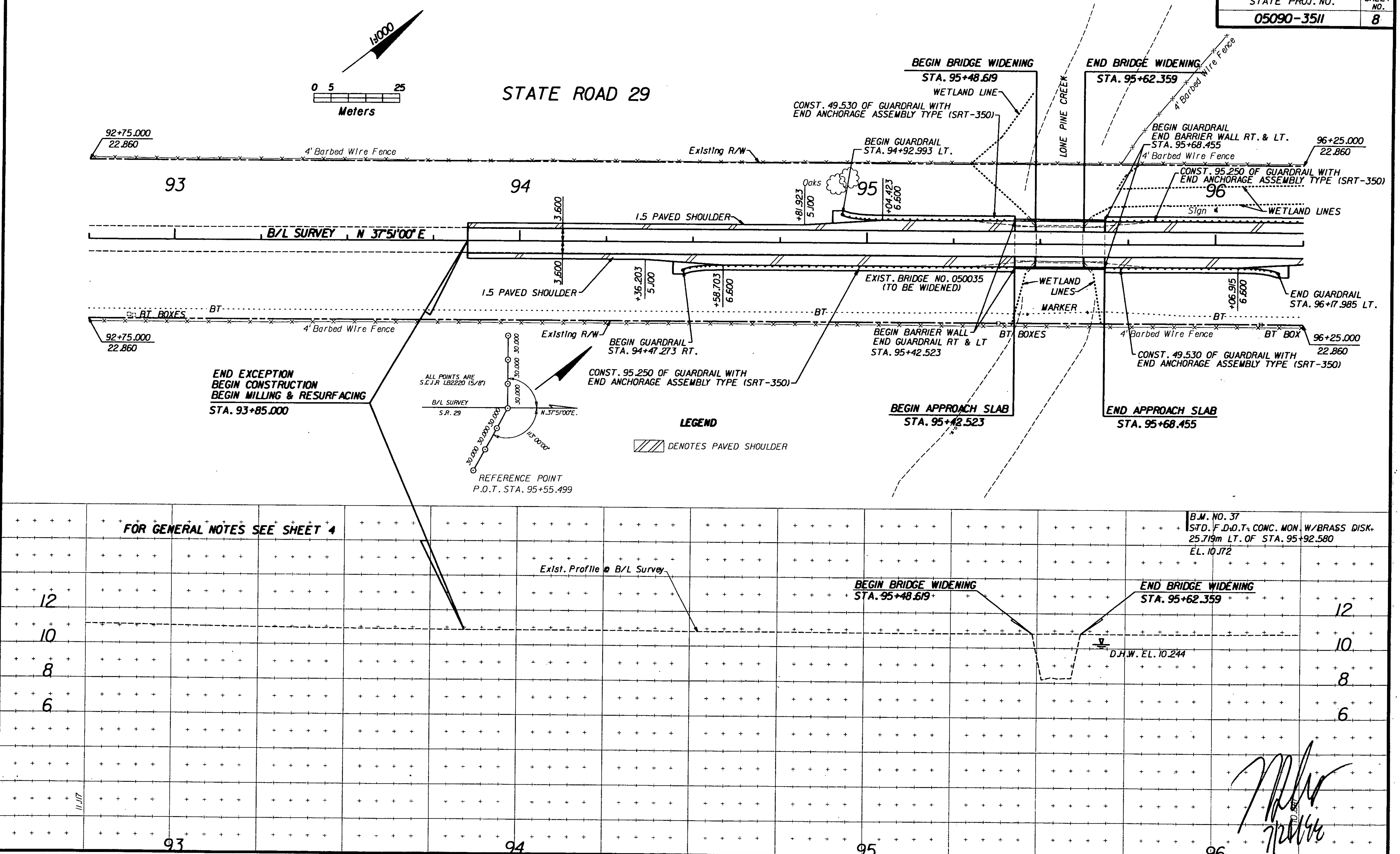
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

ROADWAY PLAN/PROFILE (2)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-3511	8



1:1000
0 5 25
Meters
STATE ROAD 29
BEGIN BRIDGE WIDENING
STA. 95+48.619
END BRIDGE WIDENING
STA. 95+62.359
WETLAND LINE
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
LONE PINE CREEK
4' Barbed Wire Fence
BEGIN GUARDRAIL END BARRIER WALL RT. & LT. STA. 95+68.455
92+75.000
22.860
96+25.000
22.860
Existing R/W
BEGIN GUARDRAIL STA. 94+92.993 LT.
CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
Oaks
93
94
95
96
Sign
WETLAND LINES
1.5 PAVED SHOULDER
B/L SURVEY N 37°51'00" E
EXIST. BRIDGE NO. 050035 (TO BE WIDENED)
END GUARDRAIL STA. 96+17.985 LT.
BT BOXES
BT
MARKER
BT BOX
BEGIN GUARDRAIL STA. 94+47.273 RT.
BEGIN BARRIER WALL END GUARDRAIL RT & LT STA. 95+42.523
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 93+85.000
ALL POINTS ARE S.C.J.R. LB2220 (5/8")
B/L SURVEY S.R. 29
N.37°51'00"E.
REFERENCE POINT P.O.T. STA. 95+55.499
BEGIN APPROACH SLAB STA. 95+42.523
END APPROACH SLAB STA. 95+68.455
LEGEND
DENOTES PAVED SHOULDER
FOR GENERAL NOTES SEE SHEET 4
B.M. NO. 37
STD. F.D.O.T. CONC. MON. W/BRASS DISK 25.719m LT. OF STA. 95+92.580
EL. 10.172
Exist. Profile @ B/L Survey
D.H.W. EL. 10.244
12
10
8
6

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY:	W.J. WARDEN				

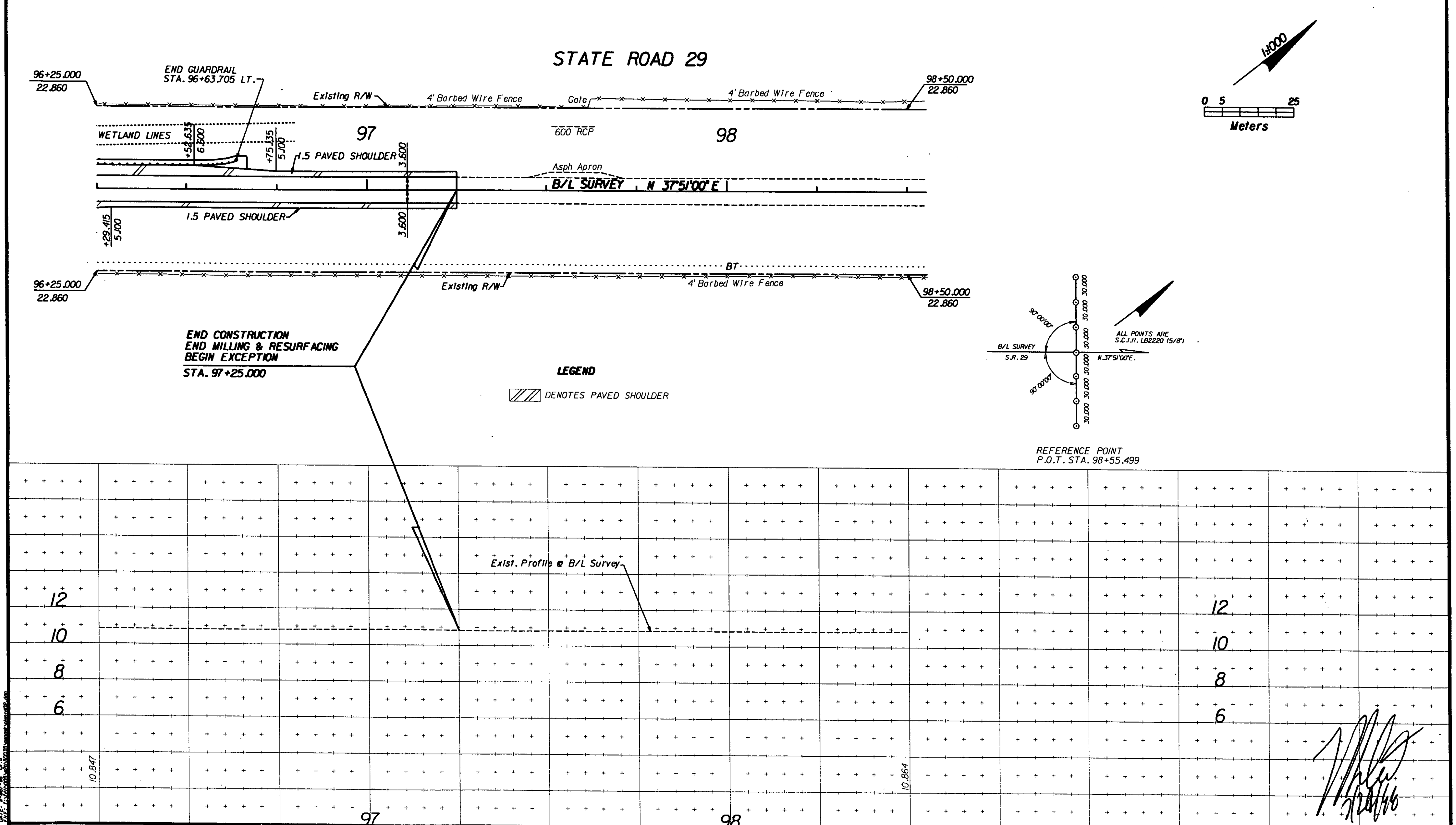
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

ROADWAY PLAN/PROFILE (1)
BRIDGE NO. 050035

STATE PROJ. NO.	SHEET NO.
05090-3511	9



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

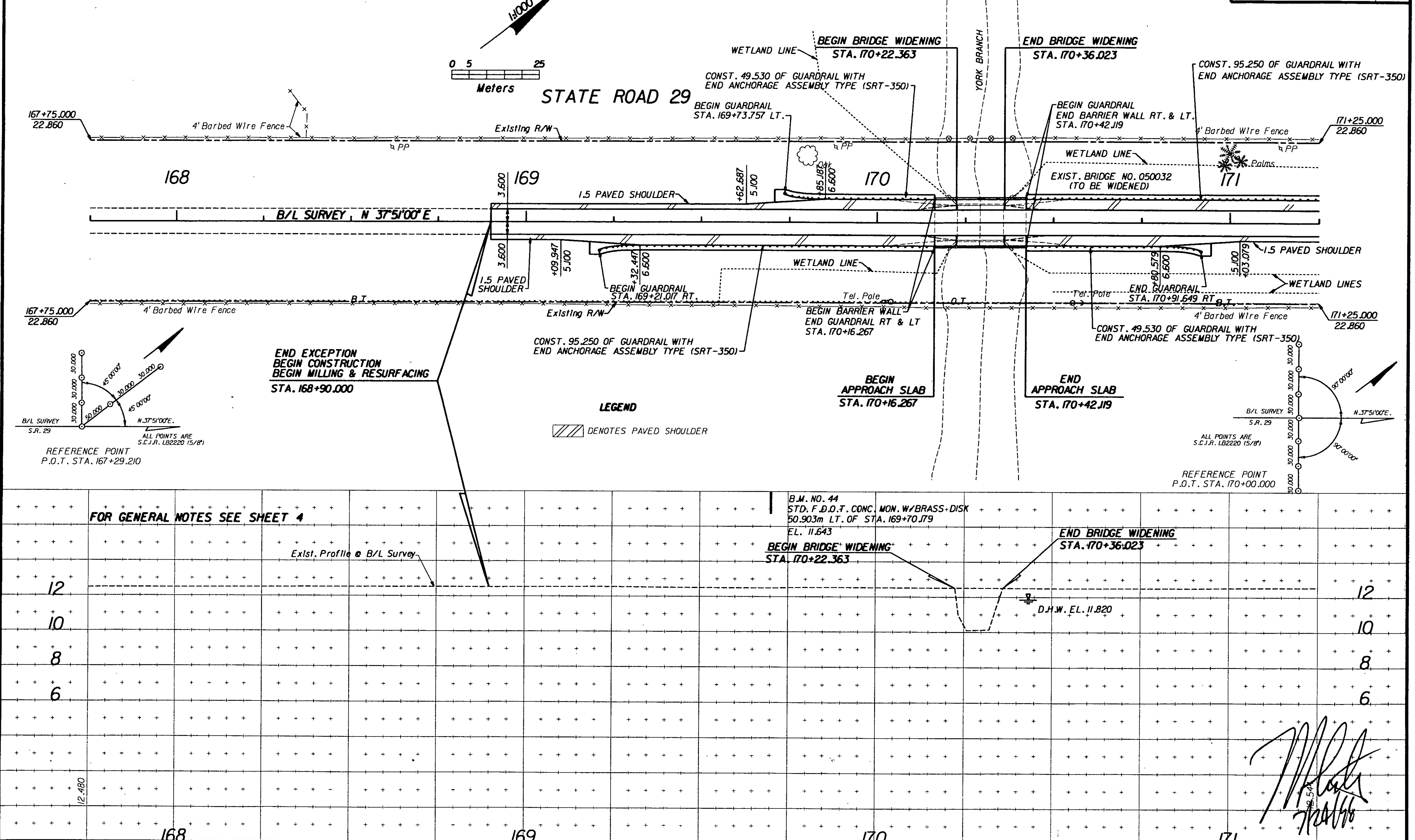
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

ROADWAY PLAN/PROFILE (2)
BRIDGE NO. 050035

STATE PROJ. NO.	SHEET NO.
05090-3511	10


1:1000
0 5 25
Meters
STATE ROAD 29
167+75.000
22.860
4' Barbed Wire Fence
Existing R/W
PP
WETLAND LINE
BEGIN BRIDGE WIDENING
STA. 170+22.363
END BRIDGE WIDENING
STA. 170+36.023
YORK BRANCH
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN GUARDRAIL
STA. 169+73.757 LT.
BEGIN GUARDRAIL
END BARRIER WALL RT. & LT.
STA. 170+42.119
CONST. 95.250 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
171+25.000
22.860
Oak
Palms
EXIST. BRIDGE NO. 050032
(TO BE WIDENED)
168
169
170
171
1.5 PAVED SHOULDER
+62.687
5.100
+85.187
6.600
3.600
B/L SURVEY N 37°51'00" E
+09.947
5.100
+32.447
6.600
1.5 PAVED SHOULDER
BEGIN GUARDRAIL
STA. 169+21.017 RT.
WETLAND LINE
Tel. Pole
BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 170+16.267
END GUARDRAIL
STA. 170+91.649 RT.
+80.579
6.600
5.100
+03.079
WETLAND LINES
B.T.
O.T.
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 95.250 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 168+90.000
BEGIN
APPROACH SLAB
STA. 170+16.267
END
APPROACH SLAB
STA. 170+42.119
LEGEND
DENOTES PAVED SHOULDER
B/L SURVEY
S.R. 29
N.37°51'00"E.
45°00'00"
30.000
50.000
ALL POINTS ARE
S.C.I.R. LB2220 (5/8")
REFERENCE POINT
P.O.T. STA. 167+29.210
90°00'00"
REFERENCE POINT
P.O.T. STA. 170+00.000
FOR GENERAL NOTES SEE SHEET 4
B.M. NO. 44
STD. F.D.O.T. CONC. MON. W/BRASS DISK
50.903m LT. OF STA. 169+70.179
EL. 11.643
Exist. Profile @ B/L Survey
BEGIN BRIDGE WIDENING
STA. 170+22.363
END BRIDGE WIDENING
STA. 170+36.023
D.H.W. EL. 11.820
12
10
8
6
12.480
12.54
168
169
170
171

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

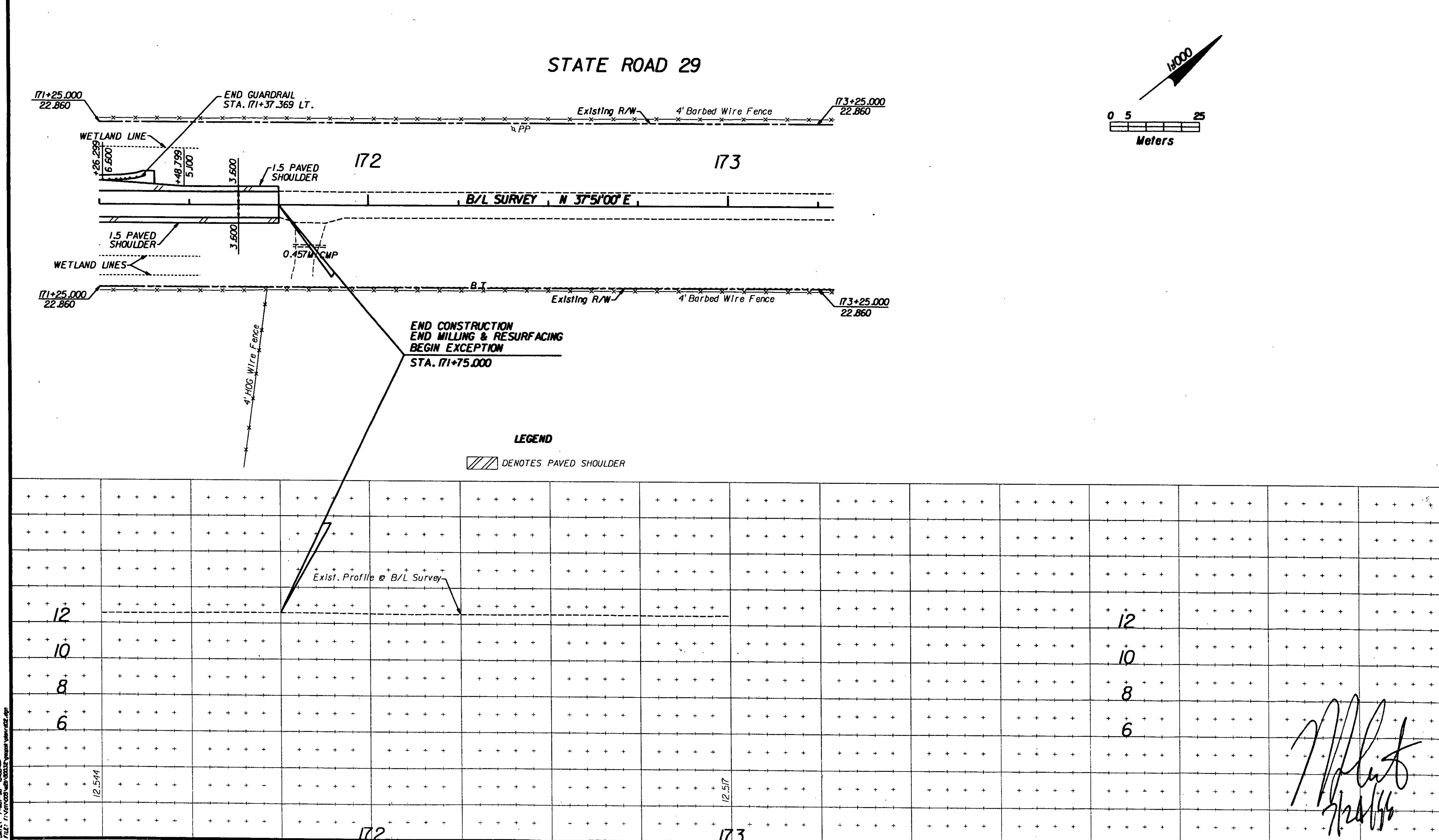
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

ROADWAY PLAN/PROFILE (1)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	11



REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/95	DRAWN BY:	DLD	5/95
CHECKED BY:	HFL	5/95	CHECKED BY:	TJB	5/95
SUPERVISED BY:	W.J. WARDEN				

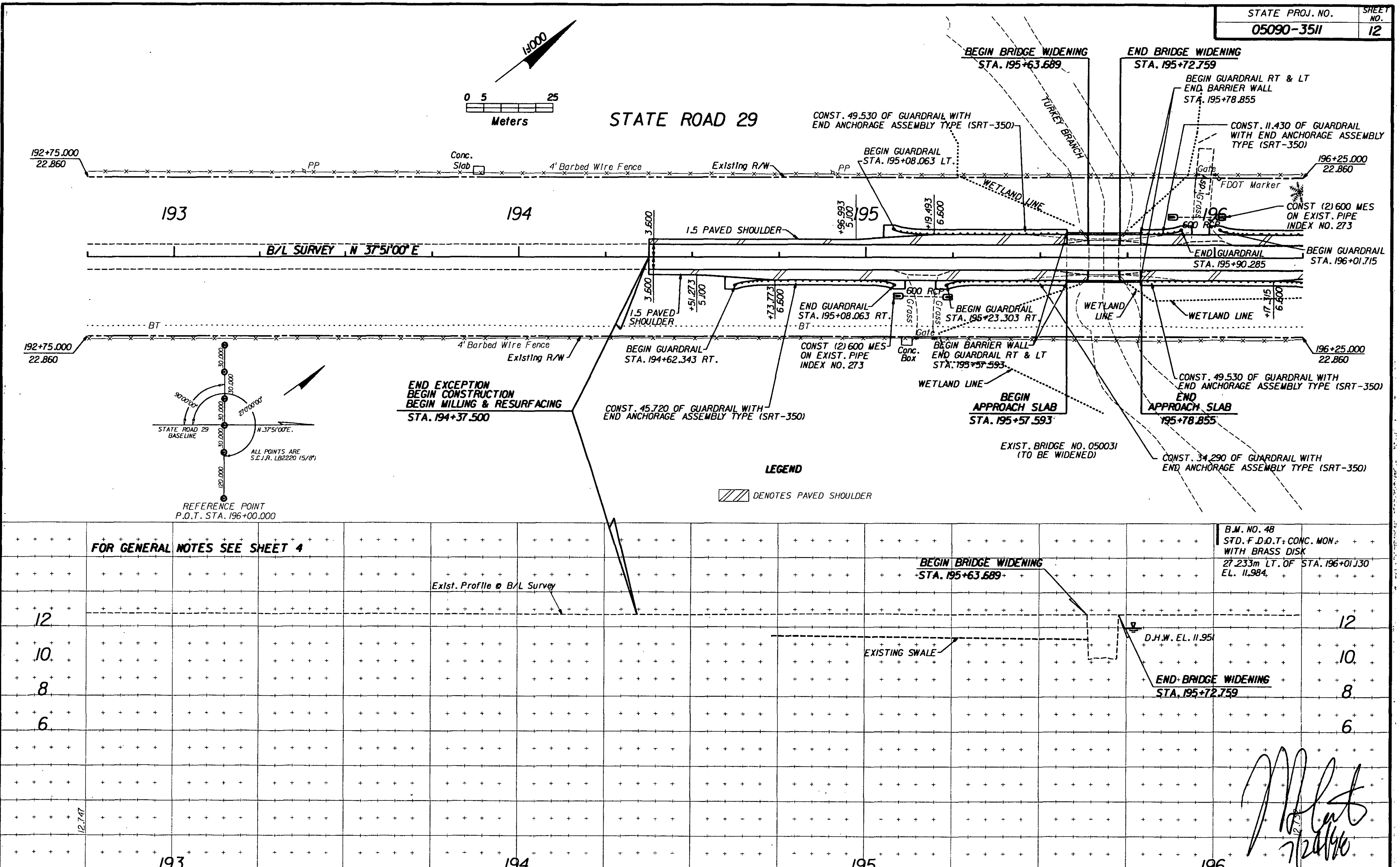
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

ROADWAY PLAN/PROFILE (2)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	12


STATE ROAD 29
0 5 25
Meters
BEGIN BRIDGE WIDENING
STA. 195+63.689
END BRIDGE WIDENING
STA. 195+72.759
BEGIN GUARDRAIL RT & LT
END BARRIER WALL
STA. 195+78.855
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 11.430 OF GUARDRAIL
WITH END ANCHORAGE ASSEMBLY
TYPE (SRT-350)
TURKEY BRANCH
BEGIN GUARDRAIL
STA. 195+08.063 LT.
192+75.000
22.860
Conc. Slab
4' Barbed Wire Fence
Existing R/W
PP
196+25.000
22.860
Gate
FDOT Marker
WETLAND LINE
CONST (2) 600 MES
ON EXIST. PIPE
INDEX NO. 273
193
194
195
196
1.5 PAVED SHOULDER
3.600
+96.993
5.100
+19.493
6.600
600 RCP
B/L SURVEY N 37°51'00" E
END GUARDRAIL
STA. 195+90.285
BEGIN GUARDRAIL
STA. 196+01.715
1.5 PAVED SHOULDER
+51.273
5.100
+73.773
6.600
END GUARDRAIL
STA. 195+08.063 RT.
BEGIN GUARDRAIL
STA. 195+23.303 RT.
Grass
WETLAND LINE
+17.715
6.600
BT
BEGIN GUARDRAIL
STA. 194+62.343 RT.
CONST (2) 600 MES
ON EXIST. PIPE
INDEX NO. 273
Conc. Box
BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 195+57.593
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 194+37.500
CONST. 45.720 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN
APPROACH SLAB
STA. 195+57.593
END
APPROACH SLAB
195+78.855
EXIST. BRIDGE NO. 050031
(TO BE WIDENED)
CONST. 34.290 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
STATE ROAD 29
BASELINE
N.37°51'00"E.
90°00'00"
270°00'00"
ALL POINTS ARE
S.C.I.R. LB2220 (5/8")
REFERENCE POINT
P.O.T. STA. 196+00.000
LEGEND
DENOTES PAVED SHOULDER
FOR GENERAL NOTES SEE SHEET 4
B.M. NO. 48
STD. F.D.O.T. CONC. MON.
WITH BRASS DISK
27.233m LT. OF STA. 196+01.130
EL. 11.984
BEGIN BRIDGE WIDENING
STA. 195+63.689
Exist. Profile @ B/L Survey
D.H.W. EL. 11.951
EXISTING SWALE
END BRIDGE WIDENING
STA. 195+72.759
12
10
8
6
12.747
193
194
195
196

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION

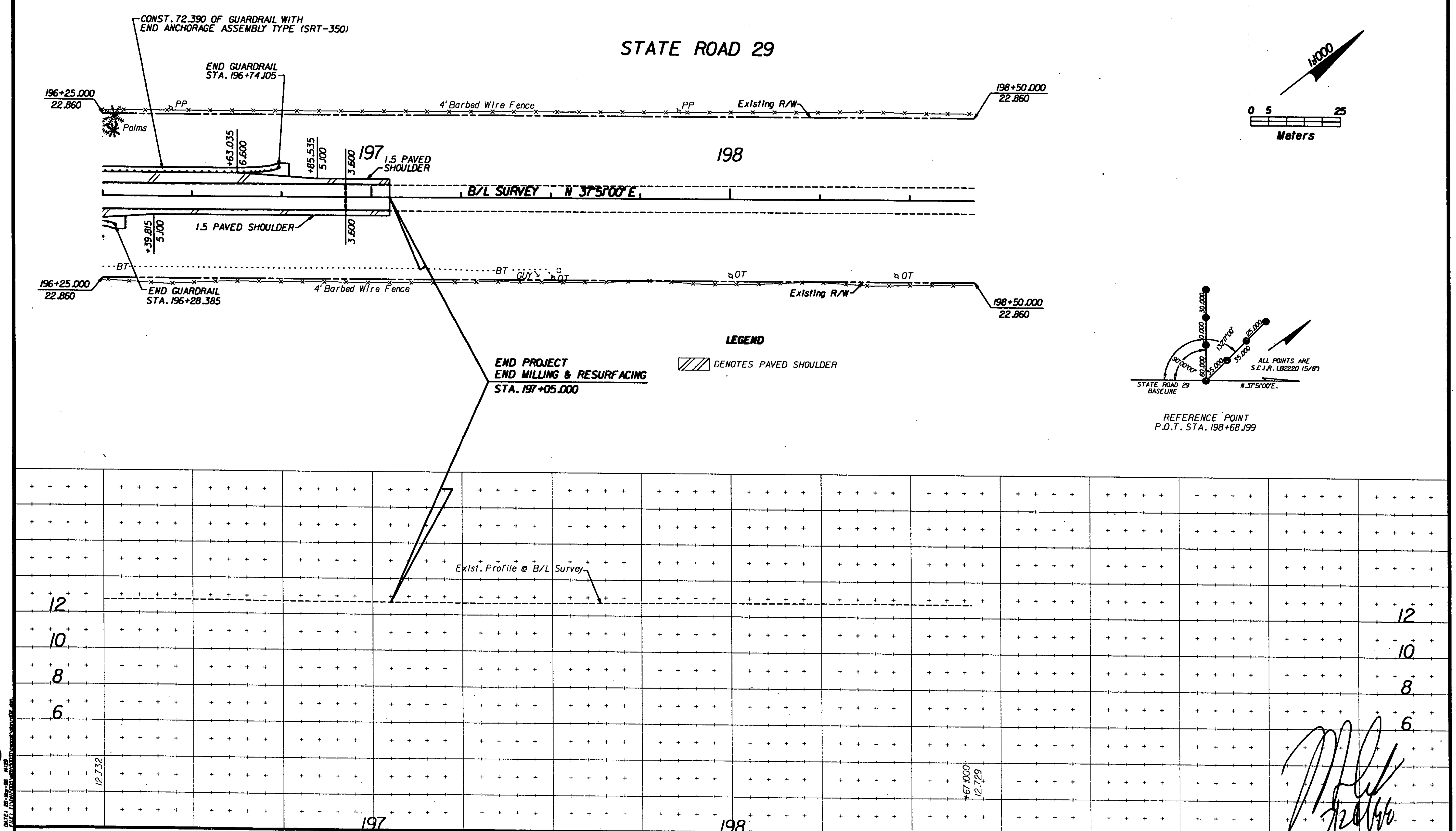
APPROVED BY:

DATE:

ROADWAY PLAN/PROFILE (1)
BRIDGE NO. 050031

7/24/96

STATE PROJ. NO. 05090-3511 | SHEET NO. 13



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

ROADWAY PLAN/PROFILE (2)
BRIDGE NO. 050031

STATE PROJECT NO.	SHEET NO.
05090-3511	14

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH

DATE OF SURVEY: NOV. 30, 1995 TO JAN 16, 1996
SURVEY MADE BY: F. DYER / H. BENNETT
SUBMITTED BY: WILLIAMS EARTH SCIENCES, INC.

DISTRICT: ONE
ROAD NO.: 29
COUNTY: GLADES

PROJECT No.: 05090-3511

CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

BRIDGE NO. 031 SURVEY BEGINS STA. 192+00 — SURVEY ENDS STA. 199+00
BRIDGE NO. 032 SURVEY BEGINS STA. 167+00 — SURVEY ENDS STA. 174+00
BRIDGE NO. 035 SURVEY BEGINS STA. 92+00 — SURVEY ENDS STA. 99+00
BRIDGE NO. 941 SURVEY BEGINS STA. 46+00 — SURVEY ENDS STA. 53+00

	MOISTURE CONTENT		ORGANIC CONTENT		SIEVE ANALYSIS RESULTS % PASS							ATTERBERG LIMITS (%)				L.B.R. TEST			CORROSION TEST RESULTS				
STRATUM NO.	NO. OF TESTS	% MOISTURE	NO. OF TESTS	% ORGANIC	NO. OF TESTS	4 MESH	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT	PLASTIC INDEX	AASHTO GROUP	NO. OF TESTS	LBR VALUE	DESCRIPTION	NO. OF TESTS	RESISTIVITY Ohms cm^3	CHLORIDE ppm	SO_4 ppm	pH
1	-	-	3	2-4	7	90-100	88-100	66-83	40-59	17-29	3-9	-	-	-	A-3	9	12-35	BROWN TO LIGHT BROWN FINE SAND	4	5,100-10,000+	60-120	<2	6.1-7.3
2	4	17-26	-	-	7	98-99	96-100	78-88	52-65	28-37	11-20	2	24-26	6-7	A-2-4	3	16-18	BROWN TO LIGHT BROWN FINE SLIGHTLY CLAYEY TO SILTY FINE SAND	-	-	-	-	-
3	1	28	-	-	1	-	-	-	-	-	27	1	41	26	A-2-6, A-7-6	-	-	BROWN CLAYEY FINE SAND	-	-	-	-	-
4	7	23-61	7	5-14	7	-	100	89	62	44	15-34	-	-	-	A-8	-	-	DARK GRAY SILTY FINE SAND WITH FINELY DIVIDED ORGANIC MATTER	-	-	-	-	-

EMBANKMENT AND SUBGRADE MATERIAL

STRATA BOUNDARIES ARE APPROXIMATE MAKE FINAL CHECK AFTER GRADING.

▽ = WATER TABLE ENCOUNTERED

NOTE #1

THE MATERIAL FROM STRATUM NUMBER 1 APPPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH INDEX 505.

NOTE #2

THE MATERIAL FROM STRATUM NUMBER 2 APPPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH INDEX 505. HOWEVER, THIS MATERIAL IS LIKELY TO RETAIN EXCESS MOISTURE AND MAY BE DIFFICULT TO DRY AND COMPACT. IT SHOULD BE USED IN THE EMBANKMENT ABOVE WATER LEVEL EXISTING AT THE TIME OF CONSTRUCTION.

NOTE #3

THE MATERIAL FROM STRATUM NUMBER 3 IS PLASTIC A-2-6, OR A-7-6 MATERIAL AND SHALL BE REMOVED IN ACCORDANCE WITH INDEX 500. IT MAY REMAIN IN PLACE ABOVE THE EXISTING WATER LEVEL (AT THE TIME of CONSTRUCTION) TO WITHIN 1.2 METERS OF THE PROPOSED BASE. IT SHOULD BE PLACED UNIFORMLY IN THE LOWER PORTION OF THE EMBANKMENT FOR SOME DISTANCE ALONG THE PROJECT RATHER THAN FULL DEPTH FOR SHORT DISTANCES.

NOTE #4

THE MATERIAL FROM STRATUM NUMBER 4 IS MUCK/A-8 MATERIAL AND SHALL BE REMOVED IF ENCOUNTERED DURING CONSTRUCTION BELOW THE PROPOSED WIDENING AREAS, OR IF ENCOUNTERED DURING THE PLACEMENT OF DRAINAGE STRUCTURES.

C311022 SOILSURV

REVISIONS											
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAME	DATE		NAME	DATE
DESIGNED BY	HCB	4-96	DRAWN BY	TEJ	4-96
CHECKED BY	KDB	4-96	CHECKED BY	HCB	4-96
SUPERVISED BY	K. D. BENNETT, P.E.				

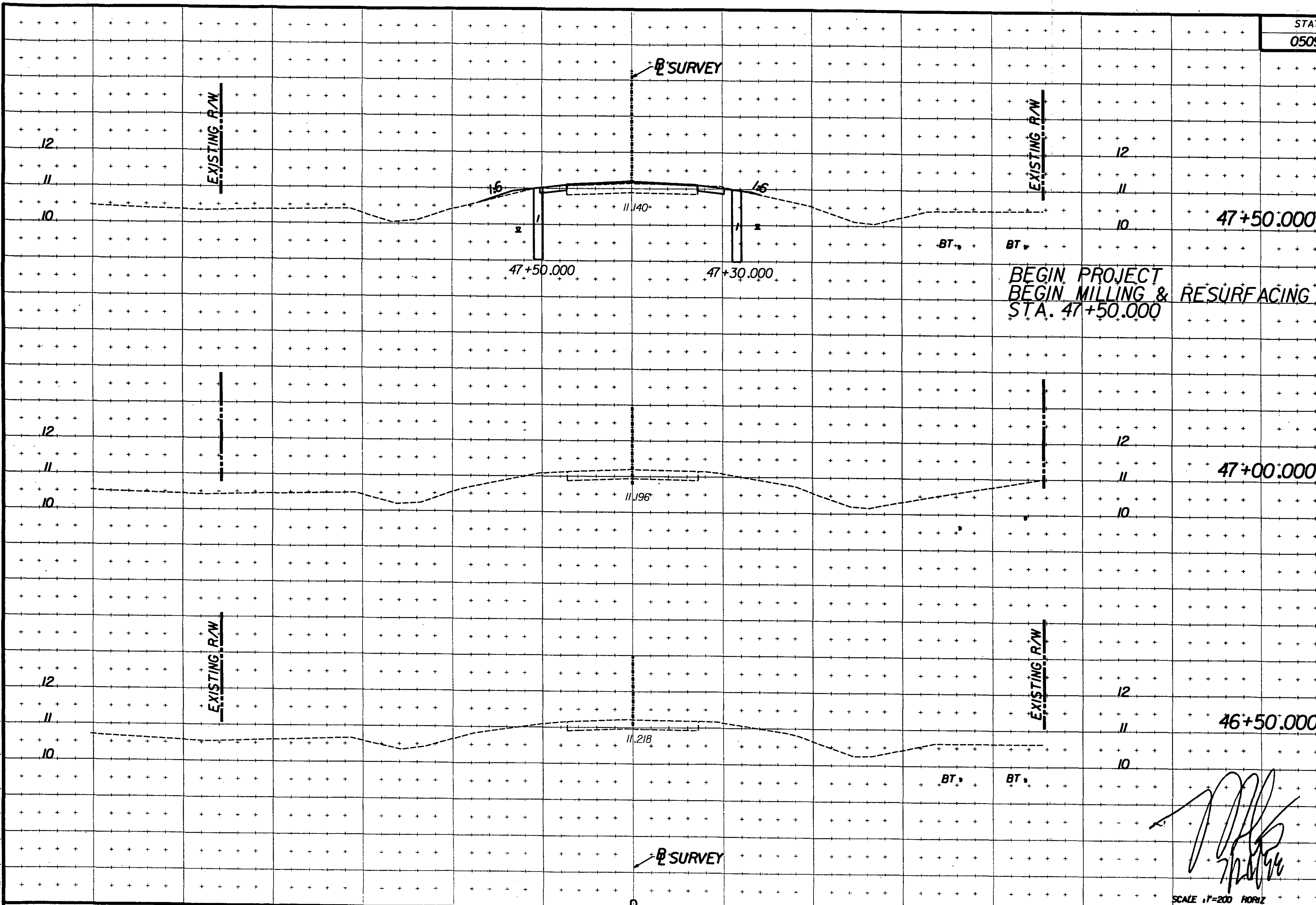
FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY: _____ DATE 5/16/97

WILLIAMS EARTH SCIENCES, INC.

ROADWAY SOILS SURVEY

STATE PROJ. NO.	SHEET NO.
05090-3511	15

A-2,A-3 Matl.			
Rdwy Exc.		Fill	
A	V	A	V
0.5		0.2	
0		0	



DATE: 2-May-96 08:11
FILE: f:0fd110005@e2@0509410xsect0rdxsrd01.sht

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

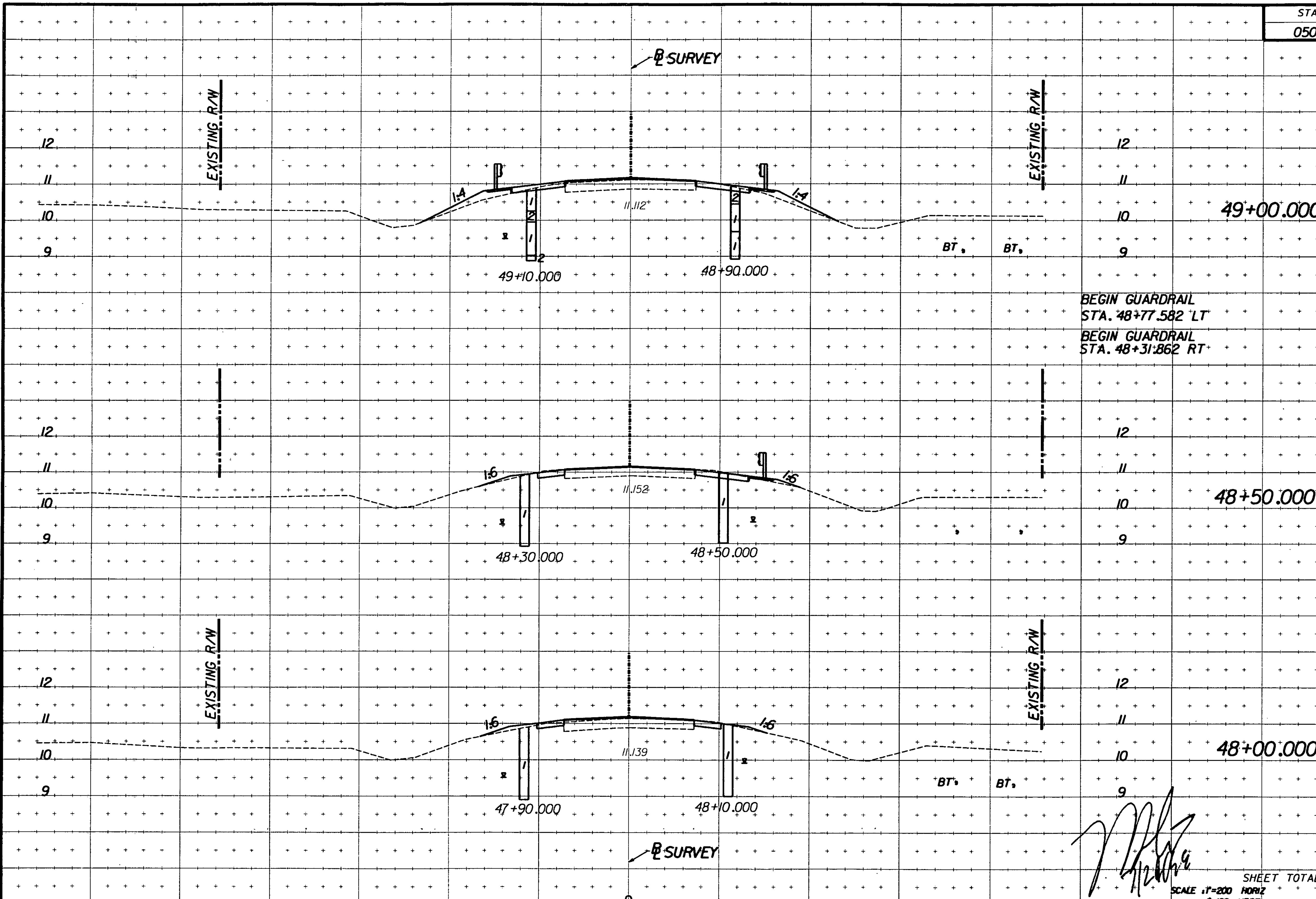
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	DLD	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	TJB	6/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

CROSS SECTIONS (1)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-3511	16



Station	A-2,A-3 Mat'l Rdwy.Exc. A	Rdwy.Exc. V	Fill A	Fill V
49+00.000	0.5		1.2	
		25.0		32.5
48+50.000	0.5		0.1	
		22.5		10.0
48+00.000	0.4		0.3	
		22.5		12.5
SHEET TOTAL		70.0		55.0

SCALE: 1"=200 HORIZ 1"=100 VERT

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	DLD	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	TJB	6/96

SUPERVISED BY: W.J. WARDEN

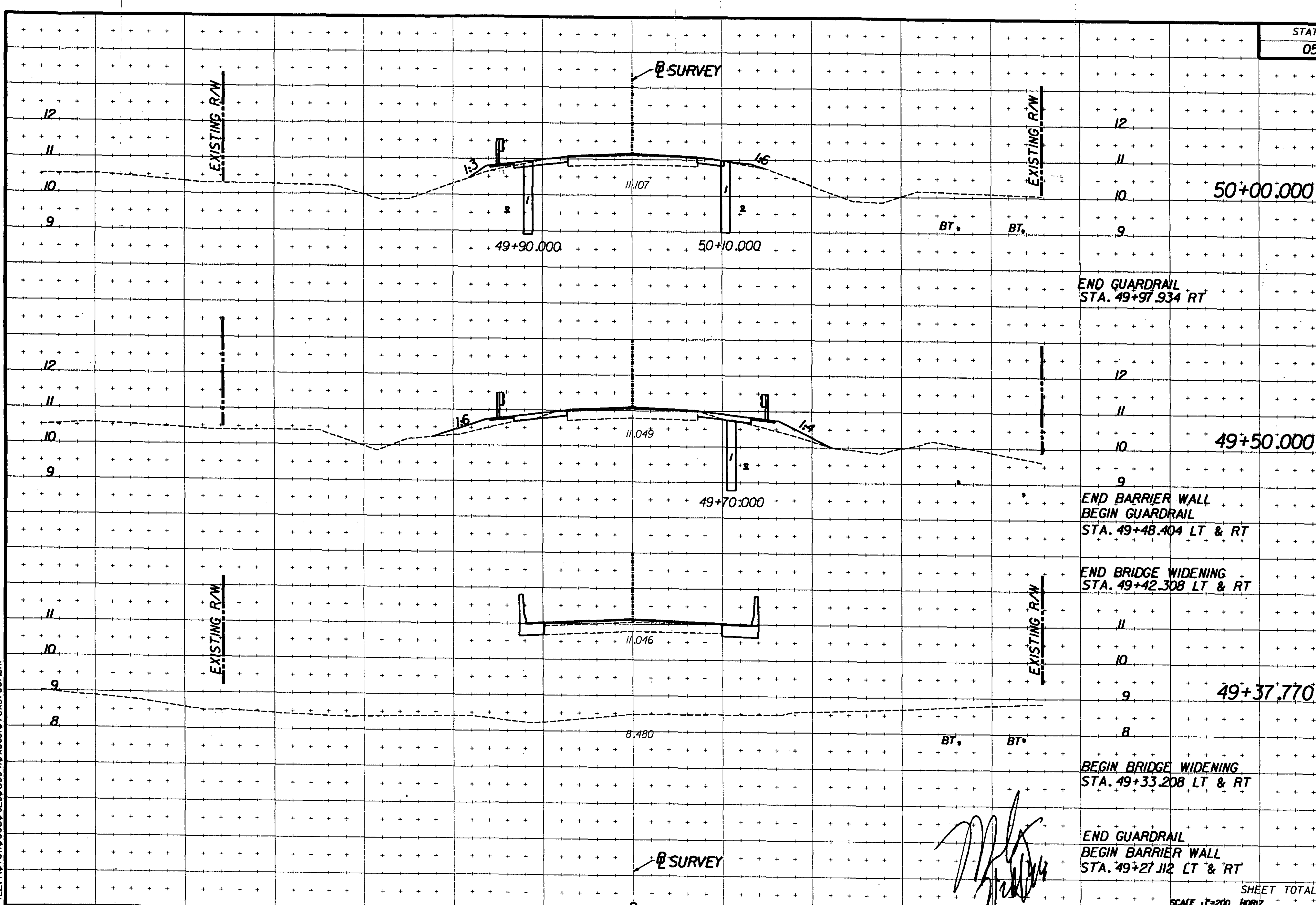
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (2)
BRIDGE NO. 050941

DATE: 2-May-96 08:11
FILE: f:\0d1\0050e2b\050941\xsect\rdxsrd01.sht



STATE PROJ. NO.	SHEET NO.
05090-3511	17

A-2,A-3 Mat'l.

Rdwy Exc. A	Rdwy Exc. V	Fill A	Fill V
0.6		0.3	
	22.5		45.0
0.3		1.5	
	1.8		9.2
0		0	
	9.4		15.1
SHEET TOTAL	33.7		69.3

SCALE: 1"=200 HORIZ 1"=100 VERT

DATE: 2-May-96 08:11
FILE: f:\d\110005\e2b\050941\xsect\rdxsrd01.sht

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	6/96	DRAWN BY	DLD	6/96
CHECKED BY	HFL	6/96	CHECKED BY	TJB	6/96

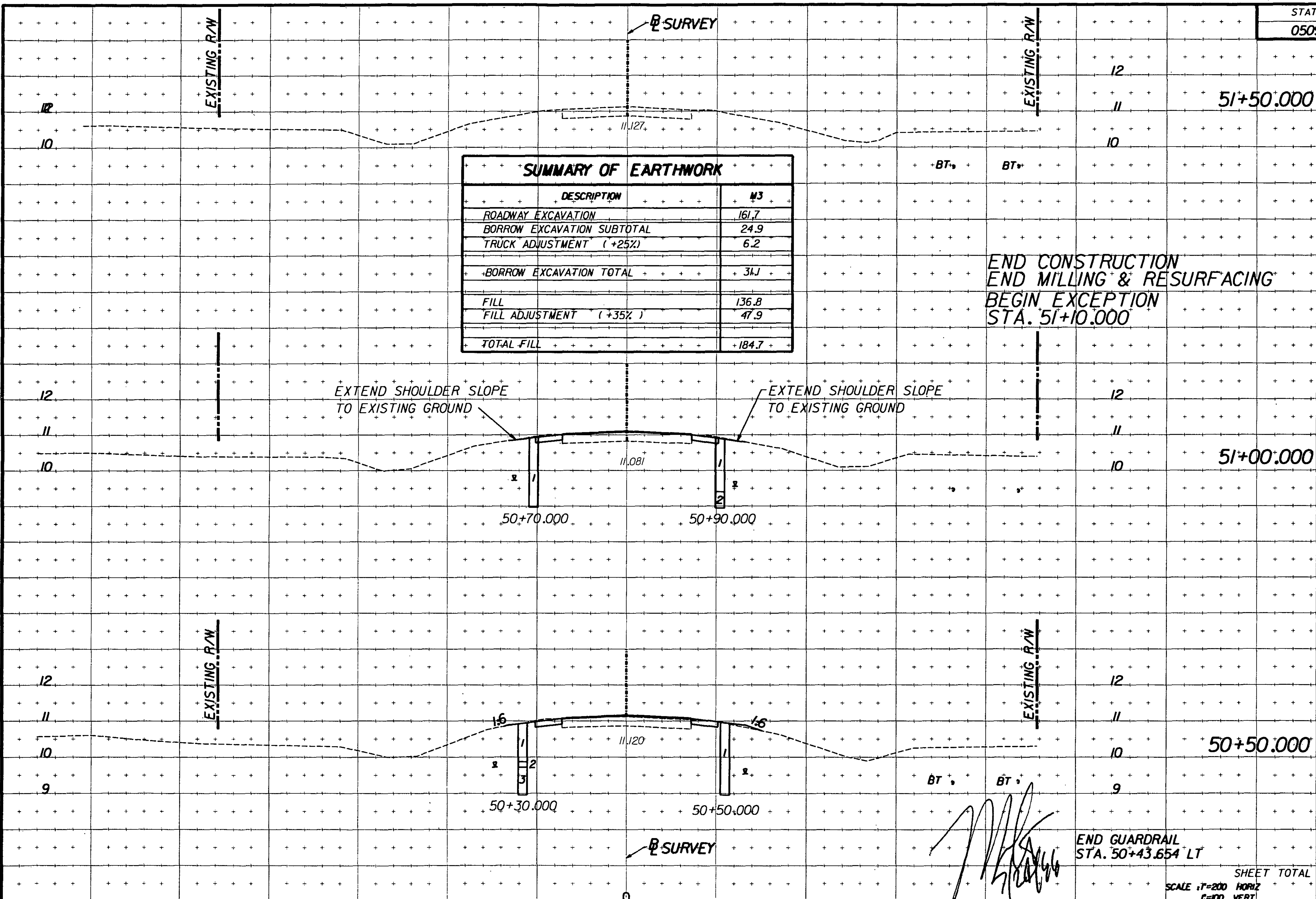
SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (3)
BRIDGE NO. 050941



SUMMARY OF EARTHWORK

DESCRIPTION	M3
ROADWAY EXCAVATION	161.7
BORROW EXCAVATION SUBTOTAL	24.9
TRUCK ADJUSTMENT (+25%)	6.2
BORROW EXCAVATION TOTAL	31.1
FILL	136.8
FILL ADJUSTMENT (+35%)	47.9
TOTAL FILL	184.7

STATE PROJ. NO.	SHEET NO.
05090-3511	18

Station	Rdwy Exc. A	Rdwy Exc. V	Fill A	Fill V
A-2,A-3 Matl.				
51+50.000	0		0	
		3.0		0
51+00.000	0.6		0	
		27.5		2.5
50+50.000	0.5		0.1	
		27.5		10.0
SHEET TOTAL		58.0		12.5

DATE: 2-May-96 08:11
FILE: f:\0fd1\0005\0e2\0050941\0xsect\0rdxsrd01.sht

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS								

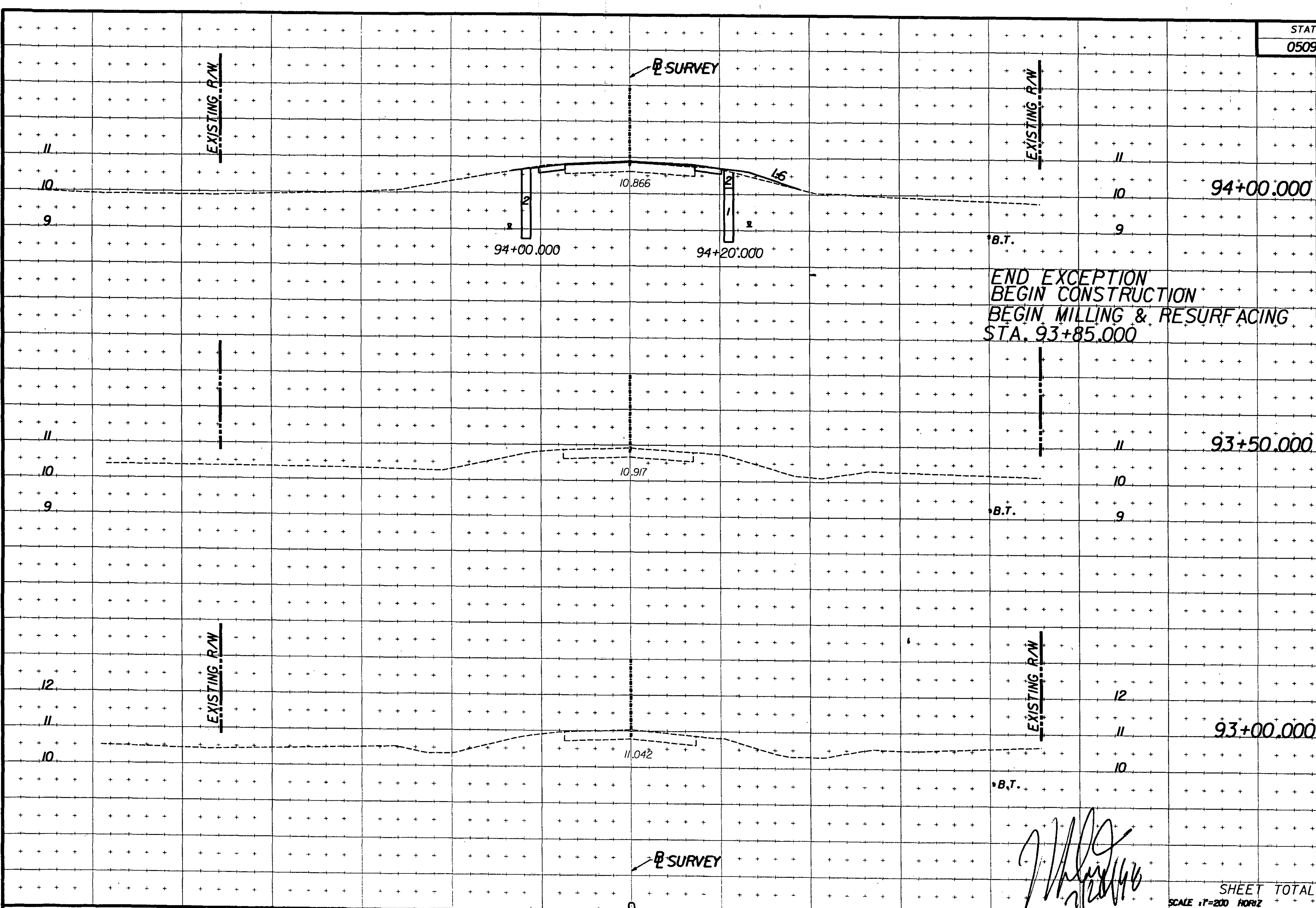
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	6/96	DRAWN BY	DLD	6/96
CHECKED BY	HFL	6/96	CHECKED BY	TJB	6/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

CROSS SECTIONS (4)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-3511	19



A-2,A-3 Mat'l.			
Rdwy Exc.		Fill	
A	V	A	V
0.5		0.3	
	3.8		2.3
0		0	
SHEET TOTAL:	3.8		2.3

SCALE: 1"=200 HORIZ; 1"=100 VERT

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

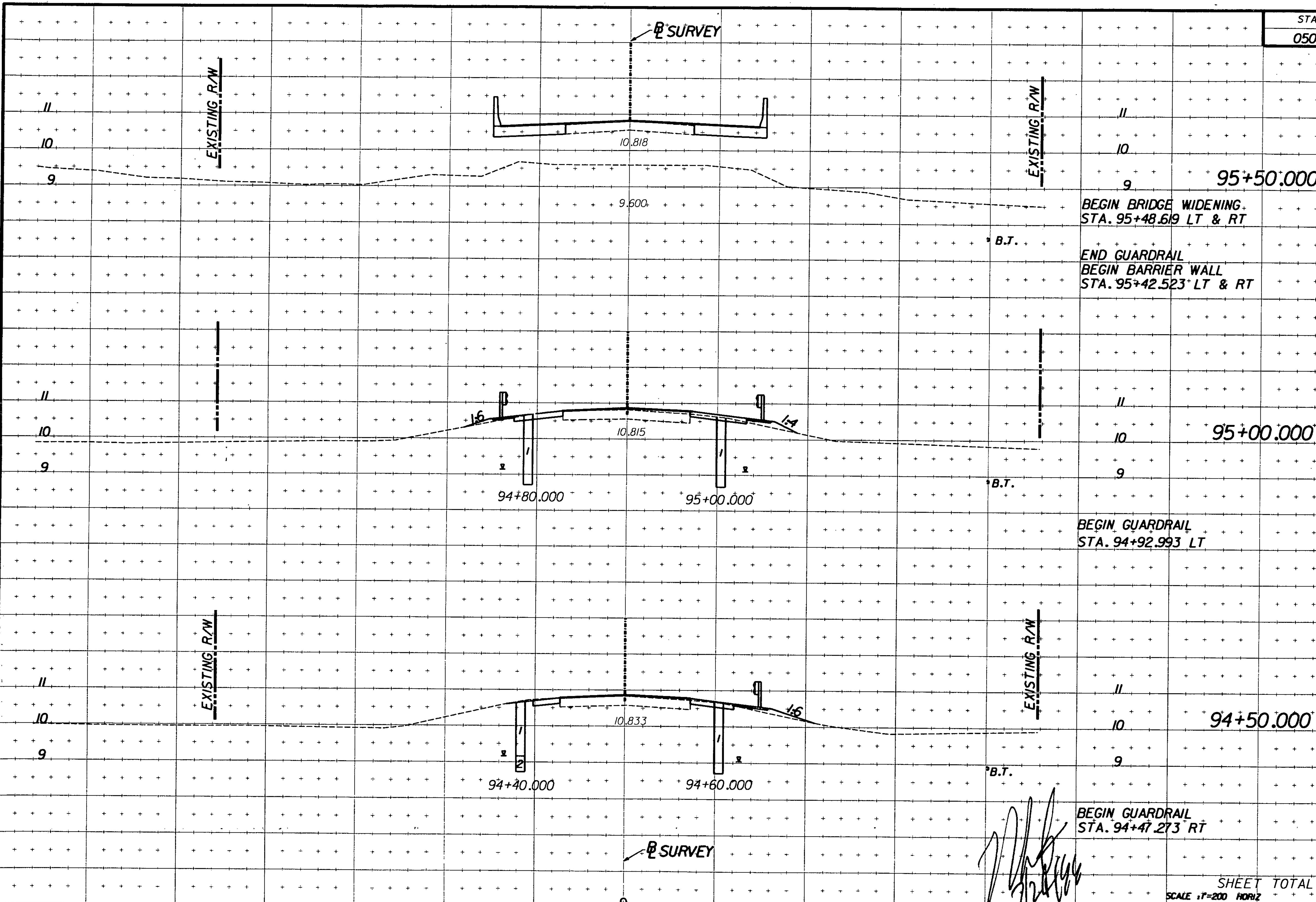
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	DLD	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	TJB	6/96
SUPERVISED BY:	W.J. WARDEN				

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

CROSS SECTIONS (1)
BRIDGE NO. 050035

STATE PROJ. NO.	SHEET NO.
05090-3511	20



Station	A-2, A-3 Matl. Rdwy. Exc. A	Rdwy. Exc. V	Fill A	Fill V
95+50.000	0		0	
		14.6		9.7
95+00.000	0.6		0.4	
		30.0		17.5
94+50.000	0.6		0.3	
		27.5		15.0
SHEET TOTAL		72.1		42.2

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	6/96	DRAWN BY	DLD	6/96
CHECKED BY	HFL	6/96	CHECKED BY	TJB	6/96
SUPERVISED BY:	W.J. WARDEN				

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

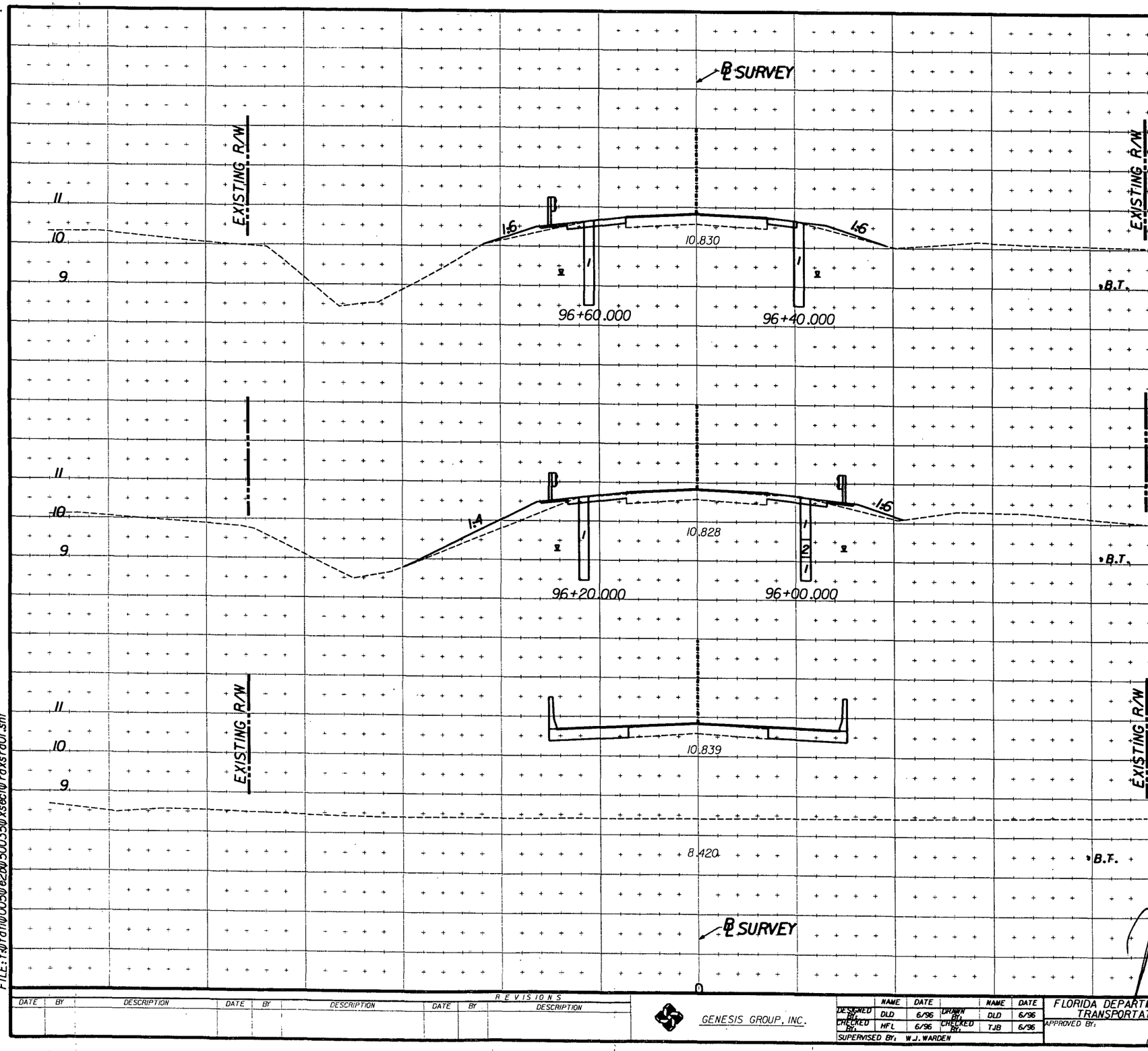
DATE:

CROSS SECTIONS (2)
BRIDGE NO. 050035

DATE: 2-May-96 07:59
FILE: f0fd1f0005f0e2b0500350xsect0rdxsrd01.sht

STATE PROJ. NO.	SHEET NO.
05090-3511	21

	A-2.A-3 Matl.			
	Roay Exc.		Fill	
	A	V	A	V
96+50.000	0.7		0.6	
END GUARDRAIL STA. 96+17.985 RT		37.5		57.5
96+00.000	0.8		1.7	
END BARRIER WALL BEGIN GUARDRAIL STA. 95+68.455 LT. & RT END BRIDGE WIDENING STA. 95+62.359 LT & RT		15.0		32.0
95+55.499	0		0	
		0		0
SHEET TOTAL		52.5		89.5



SCALE: 1"=200 HORIZ
1"=100 VERT

CROSS SECTIONS (3)
BRIDGE NO. 050035

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	DLD	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	TJB	6/96

SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION

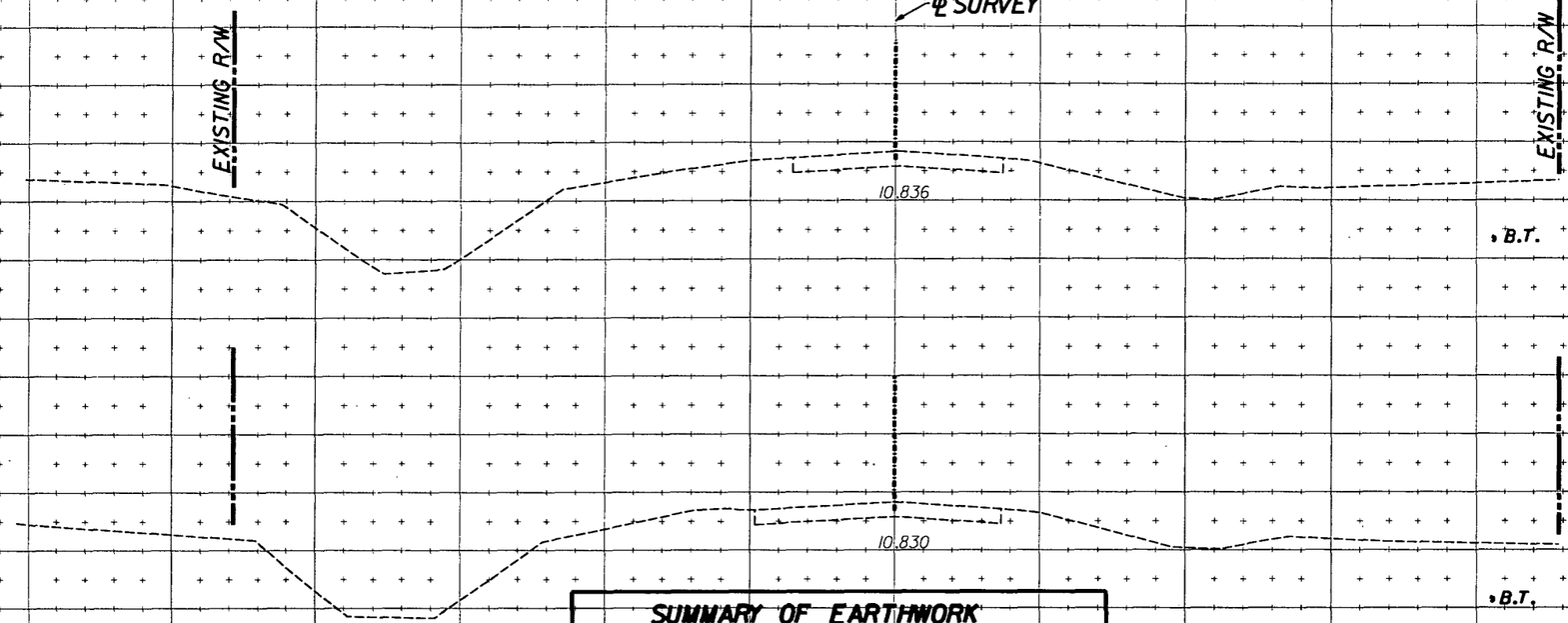
APPROVED BY:

DATE:

DATE: 2-May-96 07:59
FILE: r:\rd10\0050e2\0500350xsect\0 rdxsrd01.sht

STATE PROJ. NO.	SHEET NO.
05090-3511	22

A-2, A-3 Matl.			
Rdwy Exc.		FM	
A	V	A	V



SUMMARY OF EARTHWORK

DESCRIPTION	M3
ROADWAY EXCAVATION	157.2
BORROW EXCAVATION SUBTOTAL	10.6
TRUCK ADJUSTMENT (+25%)	2.7
BORROW EXCAVATION TOTAL	13.3
FILL	167.8
FILL ADJUSTMENT (+35%)	58.7
TOTAL FILL	226.5

98+00.000			
B.T.			
97+50.000			
B.T.			
END CONSTRUCTION END MILLING & RESURFACING BEGIN EXCEPTION STA. 97+25.000	0	0	
	3.8		6.3
97+00.000	0.3	0.5	
B.T.			
END GUARDRAIL STA. 96+63.705 LT	25.0		27.5
SHEET TOTAL	28.8		33.8

SCALE: 1"=200 HORIZ
1"=100 VERT

DATE: 2-May-96 07:59
FILE: f:\fdot\00500\e2b\500350\xsect\rdxsr01.sht

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	DLD	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	TJB	6/96

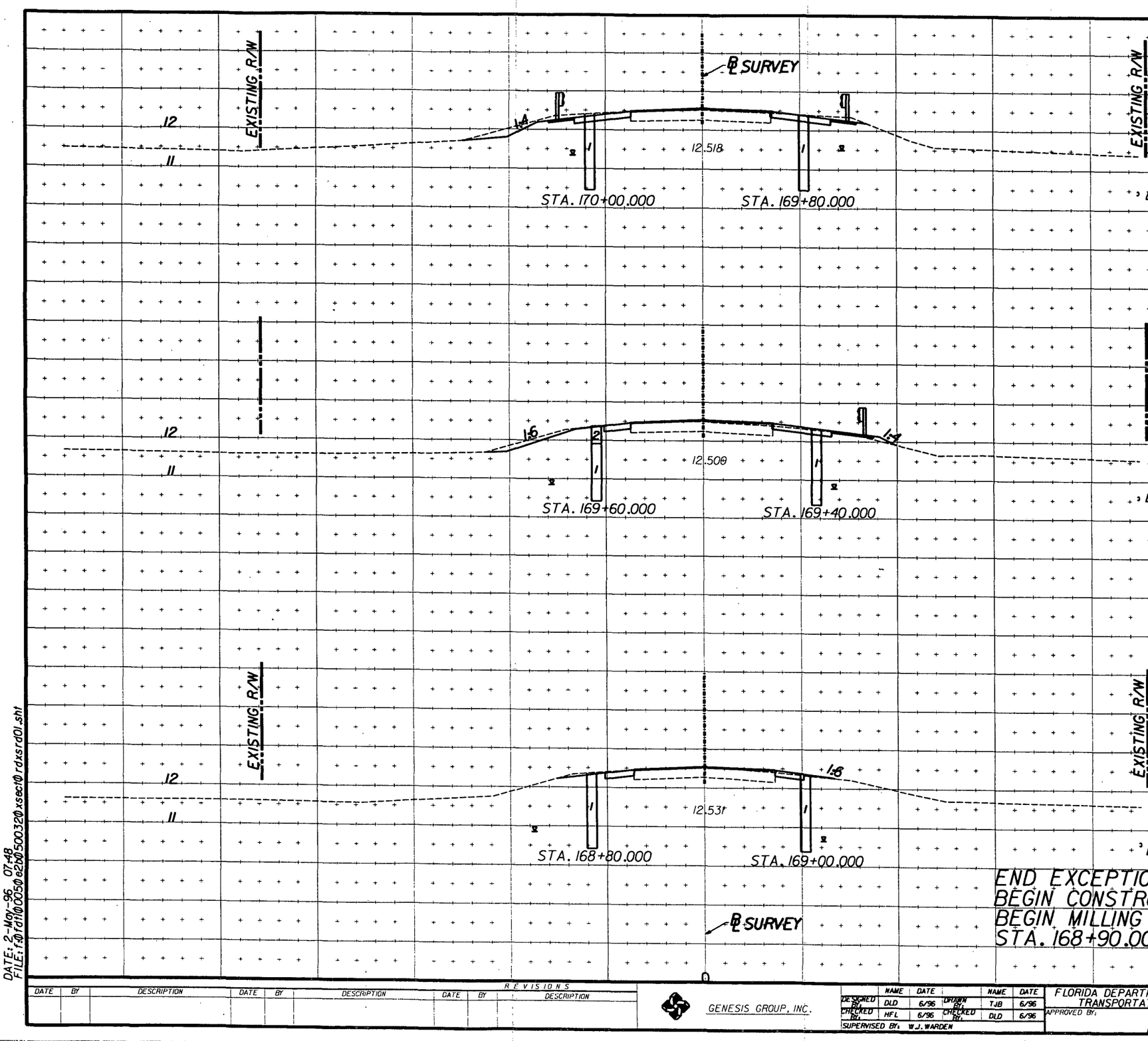
SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (4)
BRIDGE NO. 050035



STATE PROJ. NO.	SHEET NO.
05090-3511	23

	A-2, A-3 Matl.			
	Ridwy Exc.		Fill	
	A	V	A	V
170+00.000	1.9		0	
BEGIN GUARDRAIL STA. 169+73.757 LT.		70.0		2.5
169+50.000	0.9		0.1	
BEGIN GUARDRAIL STA: 169+21.017 RT.		35.0		5.0
169+00.000	0.5		0.1	
		2.5		0.5
END EXCEPTION BEGIN CONSTRUCTION BEGIN MILLING & RESURFACING STA. 168+90.000	0		0	
SHEET TOTAL		107.5		8.0

SCALE: 1"=200 HORIZ
1"=100 VERT

DATE: 2-May-96 07:48
FILE: f:\fdi\0005\e2b\500320\xsec\0rdxsrd01.sht

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	TJB	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	DLD	6/96
SUPERVISED BY:	W.J. WARDEN				

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (1)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	24

	A-2,A-3 Matl.			
	Roway Exc.		Fill	
	A	V	A	V
171+00.000	0.6		0.4	
END GUARDRAIL STA. 170+91.649 RT.		42.5		12.5
170+50.000	1.1		0.1	
END BARRIER WALL BEGIN GUARDRAIL STA. 170+42.119 LT. & RT.				
END BRIDGE WIDENING STA. 170+36.023 LT. & RT.		7.7		0.7
170+29.210	0		0	
BEGIN BRIDGE WIDENING STA. 170+22.363 LT. & RT.		21.2		0
END GUARDRAIL BEGIN BARRIER WALL STA. 170+16.267 LT. & RT.				
SHEET TOTAL		71.4		13.2

SCALE 1"=200 HORIZ
1"=100 VERT.

DATE: 2-May-96 07:48
FILE: f:\rdl\0050\e2b0500320\xsec\0 rdxsrd01.sht

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	6/96	DRAWN BY	TJB	6/96
CHECKED BY	HFL	6/96	CHECKED BY	DLD	6/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

CROSS SECTIONS (2)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	25

A-2,A-3 Matl.			
Roadway Exc.		FM	
A	V	A	V

EXISTING R/W

℄ SURVEY

12.546

12

II

172+50.000

3 B.T.

12.550

172+00.000

SUMMARY OF EARTHWORK

DESCRIPTION	M3
ROADWAY EXCAVATION	235.2
FILL	31.2
FILL ADJUSTMENT (+35%)	11.0
TOTAL FILL	42.2
EXCESS MATERIAL	193.0

END CONSTRUCTION
END MILLING & RESURFACING
BEGIN EXCEPTION
STA. 171+75.000

0		0	
	13.8		0
11		0	
	42.5		10.0
	56.3		10.0

13

12

3 B.T.

171+50.000

12.568

STA. 171+60.000

STA. 171+40.000

END GUARDRAIL
STA. 171+37.369 LT.

SHEET TOTAL

SCALE 1"=200 HORIZ
1"=100 VERT

DATE: 2-May-96 07:48
FILE: f:\rdl\0050\e2\0500320\xsect\0rdxsrd01.sht

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	TJB	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	DLD	6/96

SUPERVISED BY: W.J. WARDEN

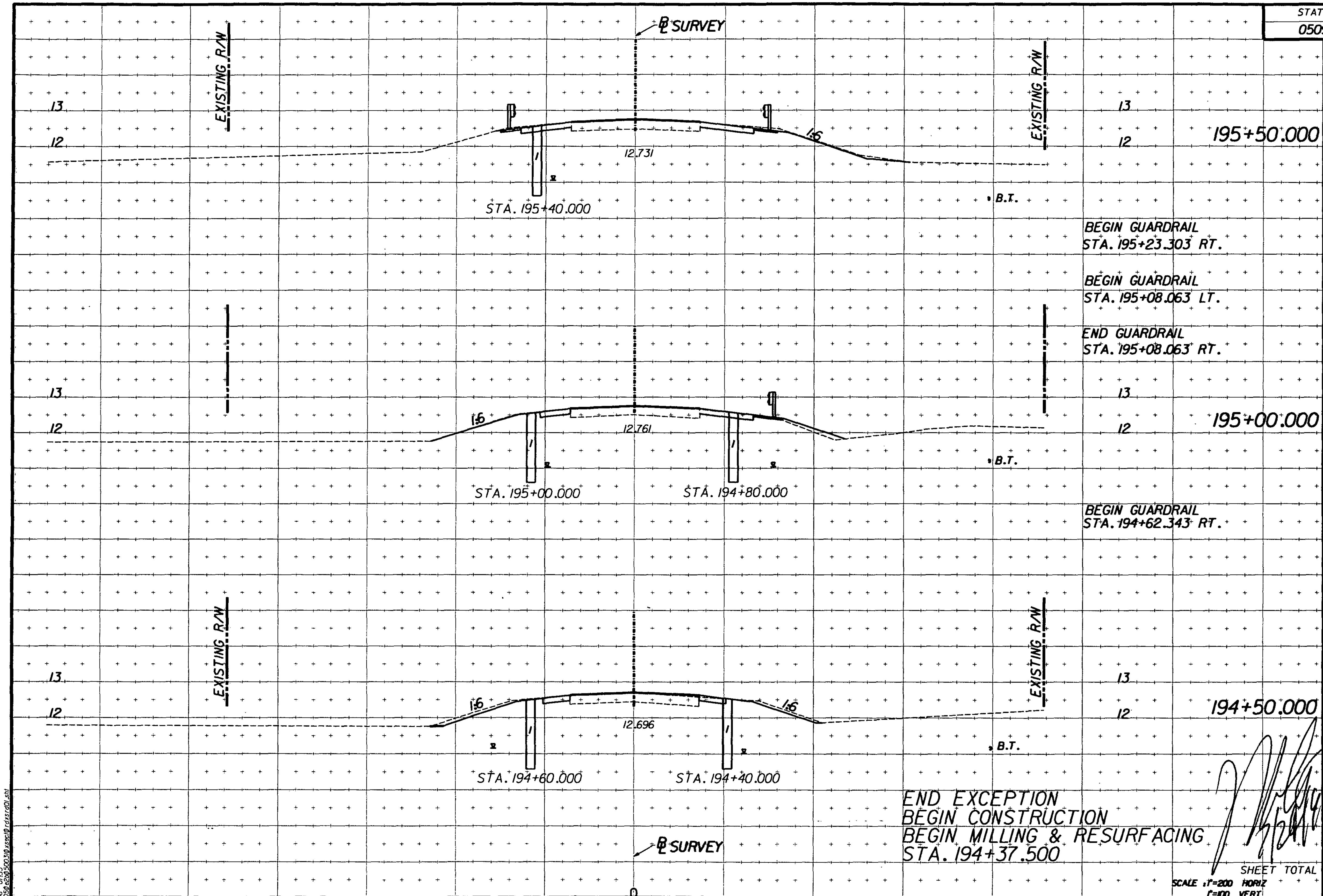
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (3)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	26



Station	A-2,A-3 Mat'l. Rdwy.Exc. A	Rdwy.Exc. V	Fill A	Fill V
195+50.000	1.4		0	
		57.5		7.5
195+00.000	0.9		0.3	
		50.0		7.5
194+50.000	1.1		0	
		14.1		0
	0		0	
SHEET TOTAL		121.6		15

SCALE: 1"=200 HORIZ, 1"=100 VERT

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	TJB	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	DLD	6/96

SUPERVISED BY: W.J. WARDEN

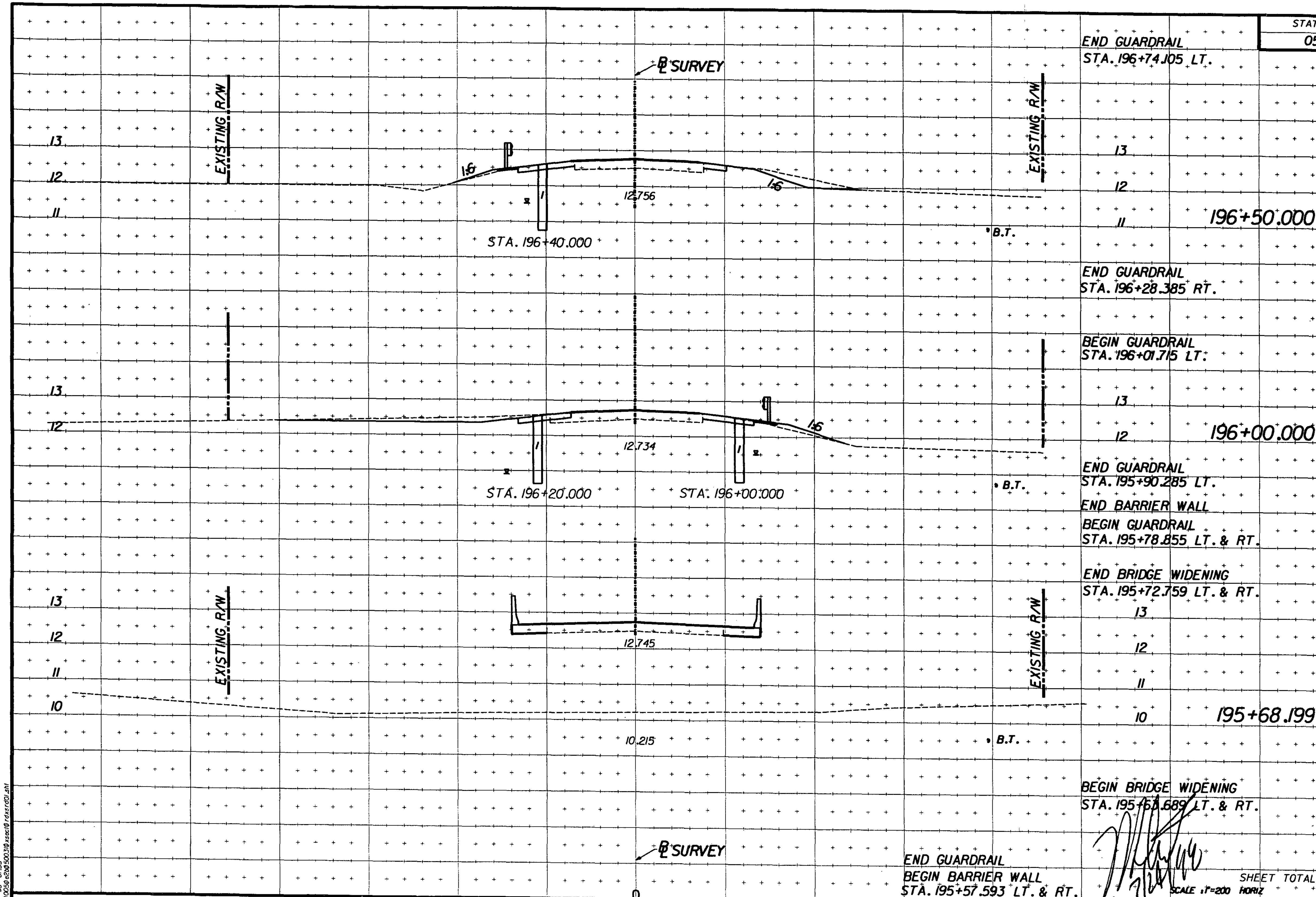
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY: DATE:

CROSS SECTIONS (1)
BRIDGE NO. 050031

DATE: 2-May-96 07:35

STATE PROJ. NO.	SHEET NO.
05090-3511	27



Station	A-2,A-3 Mat'l Rdwy Exc. A	Rdwy Exc. V	Fill A	Fill V
196+50.000	1.5		0.1	
		80.0		10.0
196+00.000	1.7		0.3	
		27.0		4.8
195+68.199	0		0	
		12.7		0
SHEET TOTAL		119.7		14.8

SCALE: 1"=200 HORIZ, 1"=100 VERT

REVISIONS: DATE | BY | DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	TJB	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	DLD	6/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

CROSS SECTIONS (2)
BRIDGE NO. 050031

DATE: 2-May-96 07:35
FILE: f:\d1\10050\e2\05003\\rdxsec\\rdxsr01.sht

STATE PROJ. NO.	SHEET NO.
05090-3511	28

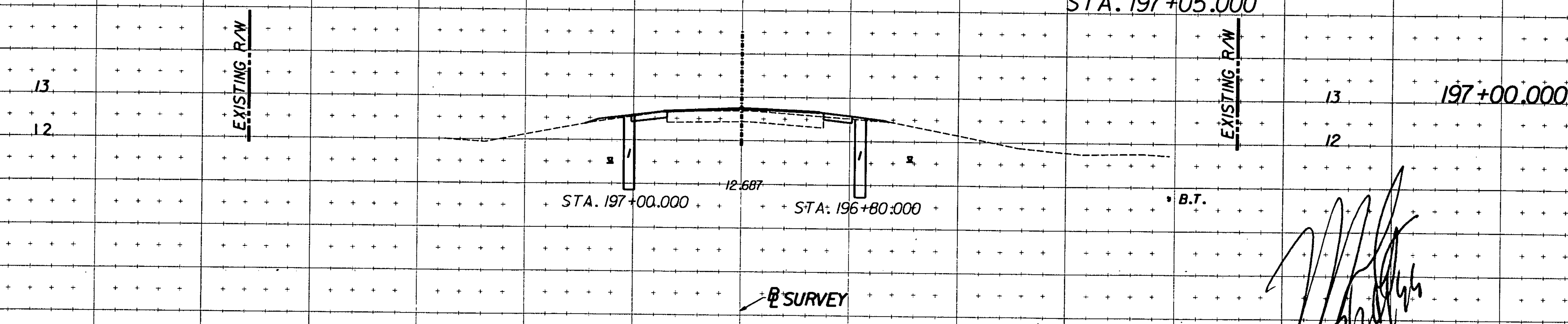
SUMMARY OF PROJECT EARTHWORK

DESCRIPTION	BRIDGE NO. 050941	BRIDGE NO. 050035	BRIDGE NO. 050032	BRIDGE NO. 050031	GRAND TOTAL
	M3	M3	M3	M3	M3
ROADWAY EXCAVATION	161.7	157.2	235.2	287.1	841.2
BORROW EXCAVATION SUBTOTAL	24.9	10.6			35.5
TRUCK ADJUSTMENT (25%)	6.2	2.7			8.9
BORROW EXCAVATION TOTAL	31.1	13.3			44.4
FILL	136.8	167.8	31.2	37.8	373.6
FILL ADJUSTMENT (+35%)	47.9	58.7	11.0	13.2	130.8
TOTAL FILL	184.7	226.5	42.2	51.0	504.4
EXCESS MATERIAL (-BORROW EXCAV.)			193.0	236.1	337.7

SUMMARY OF EARTHWORK

DESCRIPTION	M3
ROADWAY EXCAVATION	287.1
FILL	37.8
FILL ADJUSTMENT (+35%)	13.2
TOTAL FILL	51.0
EXCESS MATERIAL	236.1

END CONSTRUCTION
END MILLING & RESURFACING
BEGIN EXCEPTION
STA. 197+05.000



A-2, A-3 Matl.			
Rdwy. Exc.		Fill	
A	V	A	V
0		0	
	0.8		0.5
0.3		0.2	
	45.0		7.5
SHEET TOTAL	45.8		8.0

SCALE: 1"=200 HORIZ, 1"=100 VERT

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	6/96	DRAWN BY:	TJB	6/96
CHECKED BY:	HFL	6/96	CHECKED BY:	DLD	6/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

CROSS SECTIONS (3)
BRIDGE NO. 050031

DATE: 2-NOV-96 07:35

STATE PROJ. NO.	SHEET NO.
05090-3511	29

TABULATION OF ESTIMATED QUANTITIES

PAY ITEM NO.	ITEM DESCRIPTION	UNIT	BRIDGE NO. 050941						BRIDGE NO. 050035						BRIDGE NO. 050032						BRIDGE NO. 050031						GRAND TOTAL
			PHASE 1		PHASE 2		PHASE 3		PHASE 1		PHASE 2		PHASE 3		PHASE 1		PHASE 2		PHASE 3		PHASE 1		PHASE 2		PHASE 3		
			UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	UNITS/DAY	DAYS	
2102-60	WORK ZONE SIGNS	ED	6 17	2 140	17	140	15	10	6 10	2 140	10	140	8	10	6 10	2 140	10	140	8	10	6 3 16	2 10 140	19	140	3 14	140 10	16208
2102-74-1	BARRICADE (TEMPORARY) (TYPES I, II, VP & DRUM	ED	24	146	24	142	12	2	24	146	24	142	12	2	24	146	24	142	12	2	24	146	24	142	12	2	27744
2102-77	HIGH INTENSITY FLASHING LIGHTS (TEMP - TYPE B)	ED	4	140	4	140	4	10	4	140	4	140	4	10	4	140	4	140	4	10	5	140	5	140	5	10	4930
2102-79	LIGHTS (TEMP-BARR, WALL MOUNT)(TYPE C STEADY BURN)	ED	10	140	10	8	0	0	10	140	10	8	0	0	10	140	10	8	0	0	10	8	10	140	0	0	5920

TABULATION OF ESTIMATED QUANTITIES

PAY ITEM NO.	ITEM DESCRIPTION	UNIT	BRIDGE NO. 050941			BRIDGE NO. 050035			BRIDGE NO. 050032			BRIDGE NO. 050031			GRAND TOTAL
			PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3	PHASE 1	PHASE 2	PHASE 3	
2102-70-11	BARRIER WALL (TEMP) (F&I) (STANDARD) (CONCRETE)	MI	403.2	0	0	403.2	0	0	403.2	0	0	403.2	0	0	1612.8
2102-70-21	BARRIER WALL (TEMP) (REL) (STANDARD) (CONCRETE)	MI	0	403.2	0	0	403.2	0	0	403.2	0	0	403.2	0	1612.8
2102-78	MARKER PAVT REFLECTIVE (TEMPORARY)	EA	60	40	0	60	40	0	60	40	0	60	40	0	400
2102-81-1	IMPACT ATTENUATOR MODULES VEHIC. (INERTA) (TEMP)	EA	18	18	0	18	18	0	18	18	0	18	18	0	144
2102-911-2	PAVEMENT MARKING REMOVABLE (WHITE/BLACK) (SOLID)	MI	120	120	0	120	120	0	120	120	0	120	120	0	960
2102-912-2	PAVEMENT MARKING REMOVABLE (YELLOW) (SOLID)	MI	120	120	0	120	120	0	120	120	0	120	120	0	960
2710-22	TRAFFIC STRIPE SKIP (YELLOW)	GK	0	0	0.090	0	0	0.085	0	0	0.071	0	0	0.067	0.313
2710-23-61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE) 150mm	NK	0.960	0.960	0	0.920	0.920	0	0.810	0.810	0	0.776	0.776	0	6.932
2710-24-61	TRAFFIC STRIPE SOLID (YELLOW) 150mm	NK	0.960	0.960	0	0.920	0.920	0	0.810	0.810	0	0.776	0.776	0	6.932

MOTSR001.DGN

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DBF	9/96	DRAWN BY:	DLD	9/96
CHECKED BY:	DLD	9/96	CHECKED BY:	HFL	9/96

SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

TRAFFIC CONTROL PLAN (1)

STATE PROJ. NO.	SHEET NO.
05090-3511	30

PROPOSED TRAFFIC CONTROL PLAN
S.R. 29 @ FOUR BRIDGE WIDENING
BRIDGE NO. 050941 - OKALOACOOCHEE RIVER
BRIDGE NO. 050035 - LONE PINE CREEK
BRIDGE NO. 050032 - YORK BRANCH
BRIDGE NO. 050031 - TURKEY BRANCH

Maintenance Of Traffic shall conform to the Manual On Uniform Traffic Control Devices for streets and highways part VI (dated 1988), F.D.O.T. Roadway And Traffic Design Standards, Index no's 600 - 650 as applicable (dated January 1998).

GENERAL NOTES:
1. Phasing applies to all four bridge locations on SR 29
2. The work zone speed limit shall be 80 km/h (50 MPH)
3. The maximum work zone length shall be 800, open road, no restrictions.
4. Temporary pavement shall have a paved surface.

PHASE I

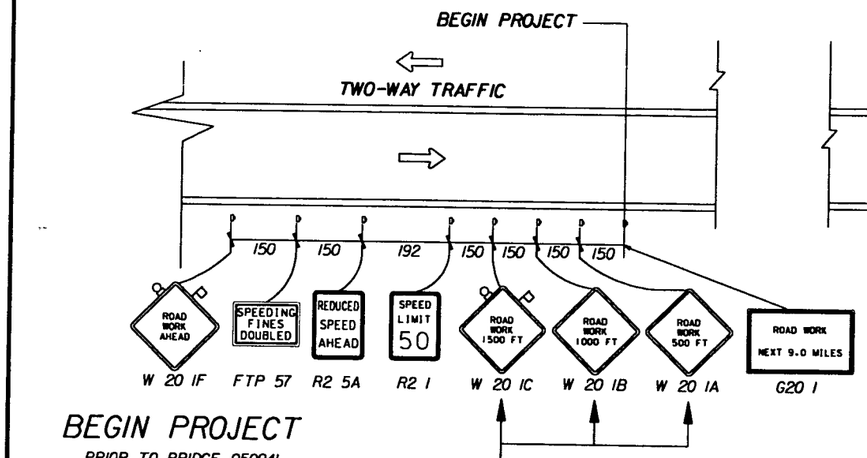
The purpose of Phase I is to construct the right side bridge widening adjacent to the northbound lane. Unless noted differently, perform the following operations utilizing Index No. 602 for operations no closer than 0.6 m of the travel lanes and Index No. 603 for operations between the road centerline and within 0.6 m of the travel lanes.
- Maintain two lane, two way traffic along the existing roadway.
- Install project advance warning signs reducing speed through the work areas to 50 MPH.
- Install erosion control devices.
- Construct temporary pavement adjacent to southbound lane.
- Mill existing pavement full width utilizing index no. 606.
- In order to shift traffic to the left side of the roadway install temporary pavement markings and reflective pavement markers, Index no. 627 optional use.
- Reroute northbound and southbound lanes to the left utilizing the new southbound temporary pavement as part of the temporary southbound lane.
- Install precast concrete temporary barrier wall with attenuator in accordance with Index no. 415.
- Clear and grub widening area behind barrier wall.
- Begin fill and stabilization operation.
- Construct right side bridge widening along with roadway, paved shoulders and structural course.
- Install guardrail and sod.

PHASE II

The purpose of Phase II is to construct the left side bridge widening adjacent to the southbound lane. Unless noted differently, perform the following operations utilizing Index no. 602 for operations no closer than 0.6 m of the travel lanes and Index no. 603 for operations between the road centerline and within 0.6 m of the travel lanes.
- Remove precast concrete temporary barrier wall
- Maintain two lane, two way traffic utilizing Phase I temporary southbound pavement as part of the southbound lane.
- In order to shift traffic to the right side of the roadway, install temporary pavement markings and reflective pavement markers, Index no. 627 optional use. Simultaneously remove conflicting Phase I pavement markings and reflective pavement markers in anticipation of shifting traffic lanes. Contractor is cautioned to fully coordinate the removal of Phase I and placement of Phase II pavement markings to minimize confusion to the traveling public. Flagman, cones, barriers shall be used to facilitate a smooth and safe transition for this operation and will be considered incidental costs to the operation.
- Immediately after completion of the installation of temporary pavement markings and reflective pavement markers, reroute northbound and southbound lanes to the right utilizing the widened northbound pavement and paved shoulder as part of the temporary northbound lane.
- Install precast concrete temporary barrier wall with attenuator in accordance with Index no. 415.
- Remove Phase I temporary pavement and balance of Phase I temporary pavement markings and reflective pavement markers behind wall.
- Clear and grub widening area behind barrier wall.
- Begin fill and stabilization operation.
- Construct left side bridge widening along with roadway, paved shoulders and structural course.
- Install guardrail and sod.

PHASE III

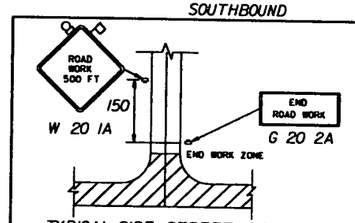
The purpose of Phase III is to place the balance of the Asphaltic Concrete Type S and place the Friction Course. Unless noted differently, perform the following operations utilizing Index No. 602 for operations no closer than 0.6 m of the travel lanes and Index No. 603 for operations between the road centerline and within 0.6 m of the travel lanes. Utilize Index no. 627 for moving operations.
- Remove precast concrete temporary barrier wall.
- Maintain two lane, two way traffic utilizing Phase II traffic pattern on the right side of the roadway.
- In order to shift traffic to the left side of the roadway, install temporary pavement markings and reflective pavement markers, Index no. 627 optional use.
- Simultaneously remove conflicting Phase II pavement markings and reflective pavement markers in anticipation of shifting traffic lanes. Contractor is cautioned to fully coordinate the removal of Phase II and placement of Phase III pavement markings to minimize confusion to the traveling public. Flagman, cones, barriers shall be used to facilitate a smooth and safe transition for this operation and will be considered incidental costs to the operation.
- Immediately after completion of the installation of temporary pavement markings and reflective pavement markers, reroute southbound traffic to the west utilizing the widened southbound lane.
- Construct balance of Asphaltic Concrete type S.
- Construct Friction Course full width in accordance with index no. 627.
- Install permanent pavement markings (paint) and permanent reflective pavement markers.



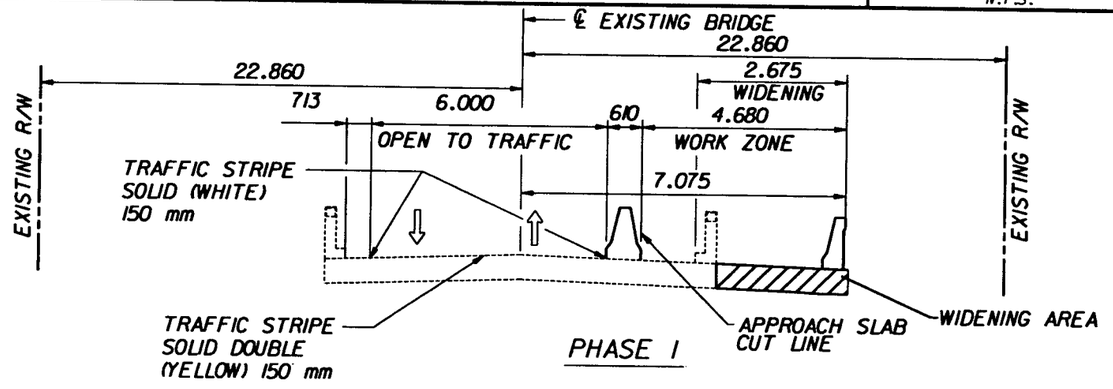
BEGIN PROJECT
PRIOR TO BRIDGE 050941 NORTHBOUND
PRIOR TO BRIDGE 050031 SOUTHBOUND

END PROJECT
AFTER BRIDGE 050031 NORTHBOUND
AFTER BRIDGE 050941 SOUTHBOUND

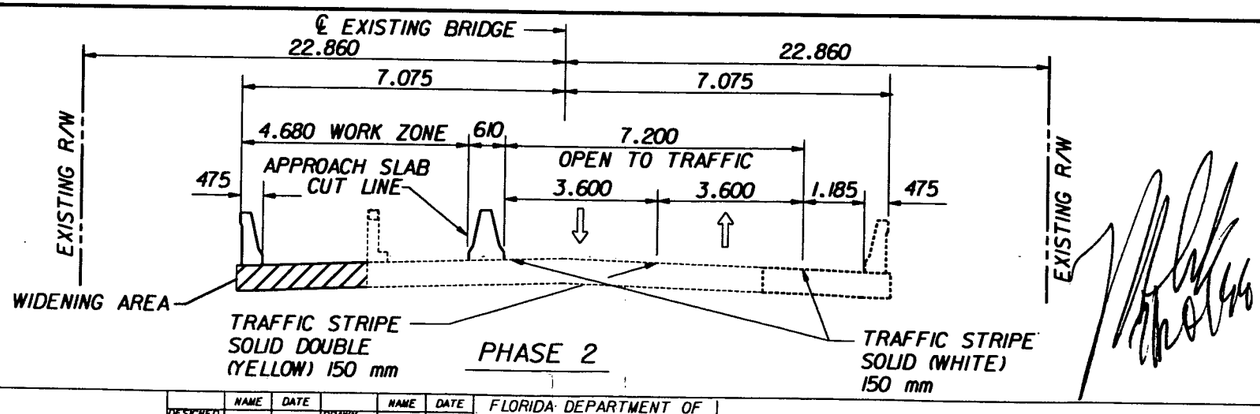
TYPICAL ADVANCE WARNING SIGNS
NORTHBOUND & SOUTHBOUND ROADWAYS
N.T.S.



TYPICAL SIDE STREET SIGNING
N.T.S.



PHASE I



PHASE 2

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DBF	9/96	DRAWN BY:	DLD	9/96
CHECKED BY:	DLD	9/96	CHECKED BY:	HFL	9/96

SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

TRAFFIC CONTROL PLAN (2)

MOTSRD01.DGN

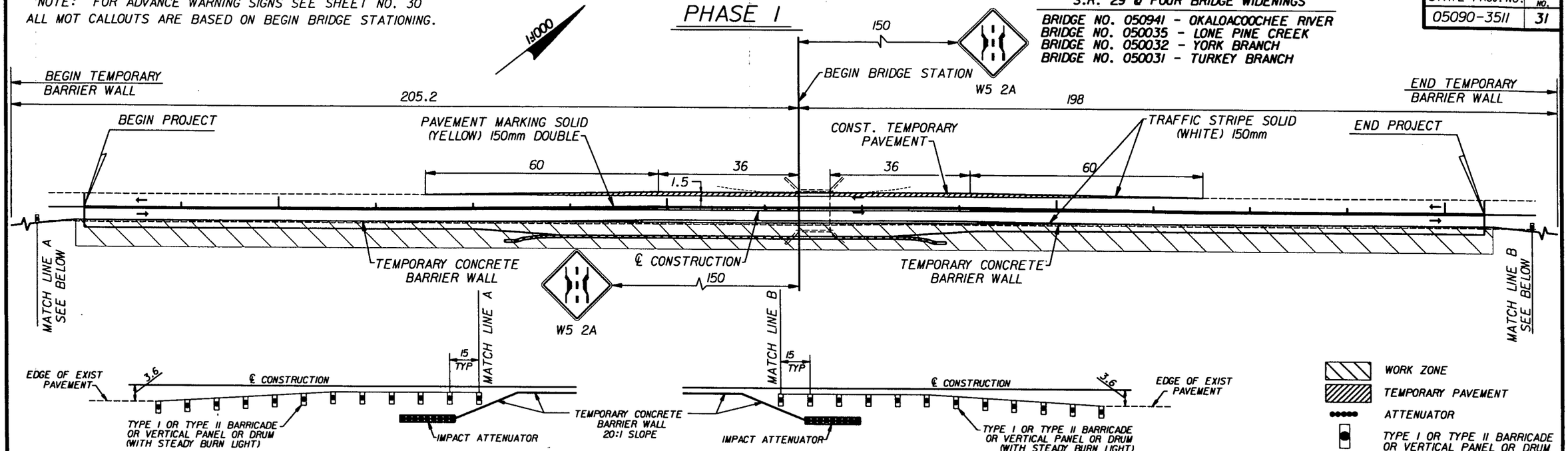
NOTE: FOR ADVANCE WARNING SIGNS SEE SHEET NO. 30
ALL MOT CALLOUTS ARE BASED ON BEGIN BRIDGE STATIONING.

PHASE 1

1:1000

S.R. 29 @ FOUR BRIDGE WIDENINGS
BRIDGE NO. 050941 - OKALOACOOCHEE RIVER
BRIDGE NO. 050035 - LONE PINE CREEK
BRIDGE NO. 050032 - YORK BRANCH
BRIDGE NO. 050031 - TURKEY BRANCH

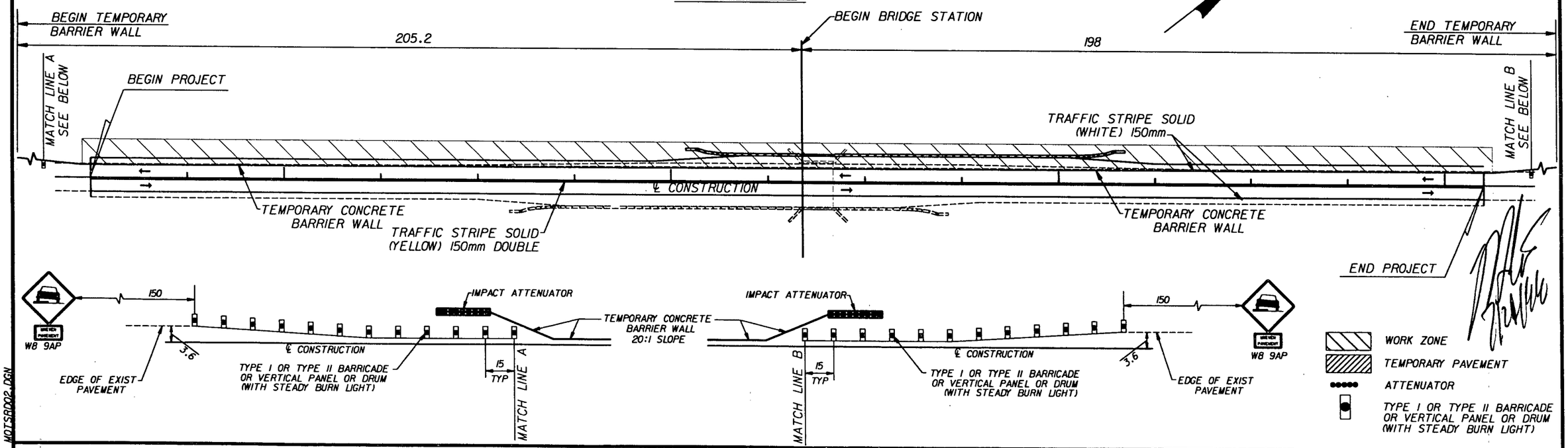
STATE PROJ. NO.	SHEET NO.
05090-3511	31



NOTE: FOR ADVANCE WARNING SIGNS SEE SHEET NO. 30

PHASE 2

1:1000



MOTSR002.DGN

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DBF	9/96	DRAWN BY:	DLD	9/96
CHECKED BY:	DLD	9/96	CHECKED BY:	HFL	9/96

SUPERVISED BY: W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

TRAFFIC CONTROL PLAN (3)

STATE PROJ. NO.	SHEET NO.
05090-3511	32

1:1000

0 5 25
Meters

STATE ROAD 29

BEGIN BRIDGE WIDENING
STA. 49+33.208

END BRIDGE WIDENING
STA. 49+42.308

OKALOACOOCHEE RIVER

CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)

BEGIN GUARDRAIL
STA. 48+77.582 LT.

FDOT Marker

WETLAND LINES

CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)

BEGIN GUARDRAIL
END BARRIER WALL RT. & LT.
STA. 49+48.404

46+75.000
22.860

4' Barbed Wire Fence

Existing R/W

PP

OE (TO REMAIN)

50+25.000
22.860

47 48 49 50

EXIST. BRIDGE NO. 050941
(TO BE WIDENED)

+66.512 5.100

+89.012 6.600

3.600

1.5 PAVED SHOULDER

N 37°51'00" E

B/L SURVEY

+20.792 5.100

+43.292 6.500

+86.864 6.600

+09.364 5.100

BT (TO REMAIN)

BT

B.T. BOXES

B.T. Box

ele box

BEGIN PROJECT
BEGIN MILLING & RESURFACING
STA. 47+50.000

BEGIN GUARDRAIL
STA. 48+31.862 RT.

CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)

BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 49+27.112

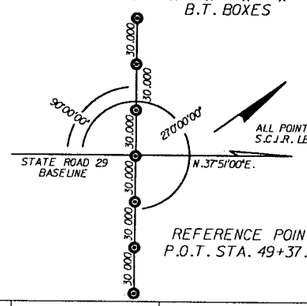
CABLE MARKER

END GUARDRAIL
STA. 49+97.934 RT.

CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)

BEGIN APPROACH SLAB
STA. 49+27.112

END APPROACH SLAB
STA. 49+48.404



REFERENCE POINT
P.O.T. STA. 49+37.770

LEGEND

DENOTES PAVED SHOULDER

B.M. NO. 32
STD. F.D.O.T. CONC. MON. W/BRASS DISK
26.218m LT. OF STA. 49+00.740
EL 10.283

Exist. Profile @ B/L Survey

BEGIN BRIDGE WIDENING
STA. 49+33.208

END BRIDGE WIDENING
STA. 49+42.308

D.H.W. EL. 10.200

12 10 8 6

1. UTILITIES ARE TO BE ADJUSTED BY OTHERS AS DIRECTED BY THE PROJECT ENGINEER.
2. THE LOCATION OF UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR DURING CONSTRUCTION.
3. FOR UTILITY ADJUSTMENT SYMBOLS, SEE INDEX NO. 002.
4. THE CONTRACTOR IS HEREBY NOTIFIED THAT ABOVE GROUND OR UNDERGROUND UTILITIES MAY BE IN THE AREA OF THIS CONTRACT.
5. THE CONTRACTOR SHOULD CALL THE SUNSHINE STATE ONE CALL AT 1-800-432-4770 AND THE UTILITY OWNERS 48 HOURS BEFORE BEGINNING WORK. ALL UTILITY OWNERS MAY NOT BE A MEMBER, REQUIRING DIRECT CONTACT.
6. THE CONTRACTOR IS TO BID THIS PROJECT AND OPERATE ANY CRANE OR SPECIAL EQUIPMENT TO CONSTRUCT THIS PROJECT WITH THE EXISTING POWER POLES AND CONDUCTORS IN THEIR CURRENT/EXISTING LOCATIONS.
6. UTILITY OWNERS: ELECTRIC - GLADES ELECTRIC (941) 946-0061
ELECTRIC - FLORIDA POWER AND LIGHT (941) 332-9214
TELEPHONE - SPRINT-FLORIDA, INC. (941) 675-2703

11.193

11.119

47 48 49 50

DATE: 01-October-96 44
FILE: f:\dtl\s2b\5094\geopak\utadrd01.dgn

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

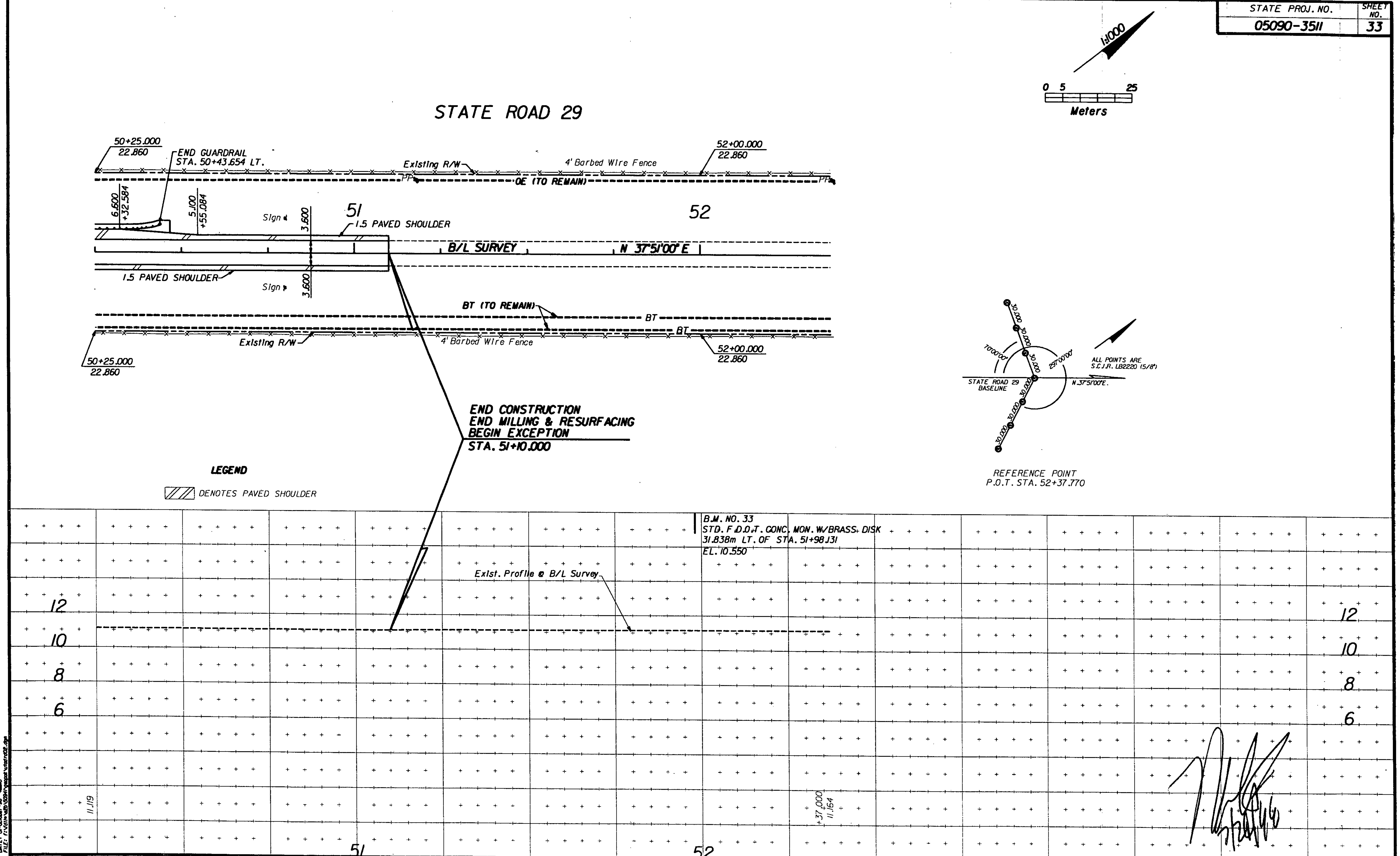
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY:	W.J. WARDEN				

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

UTILITY ADJUSTMENT SHEET (1)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-3511	33



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REVISIONS								

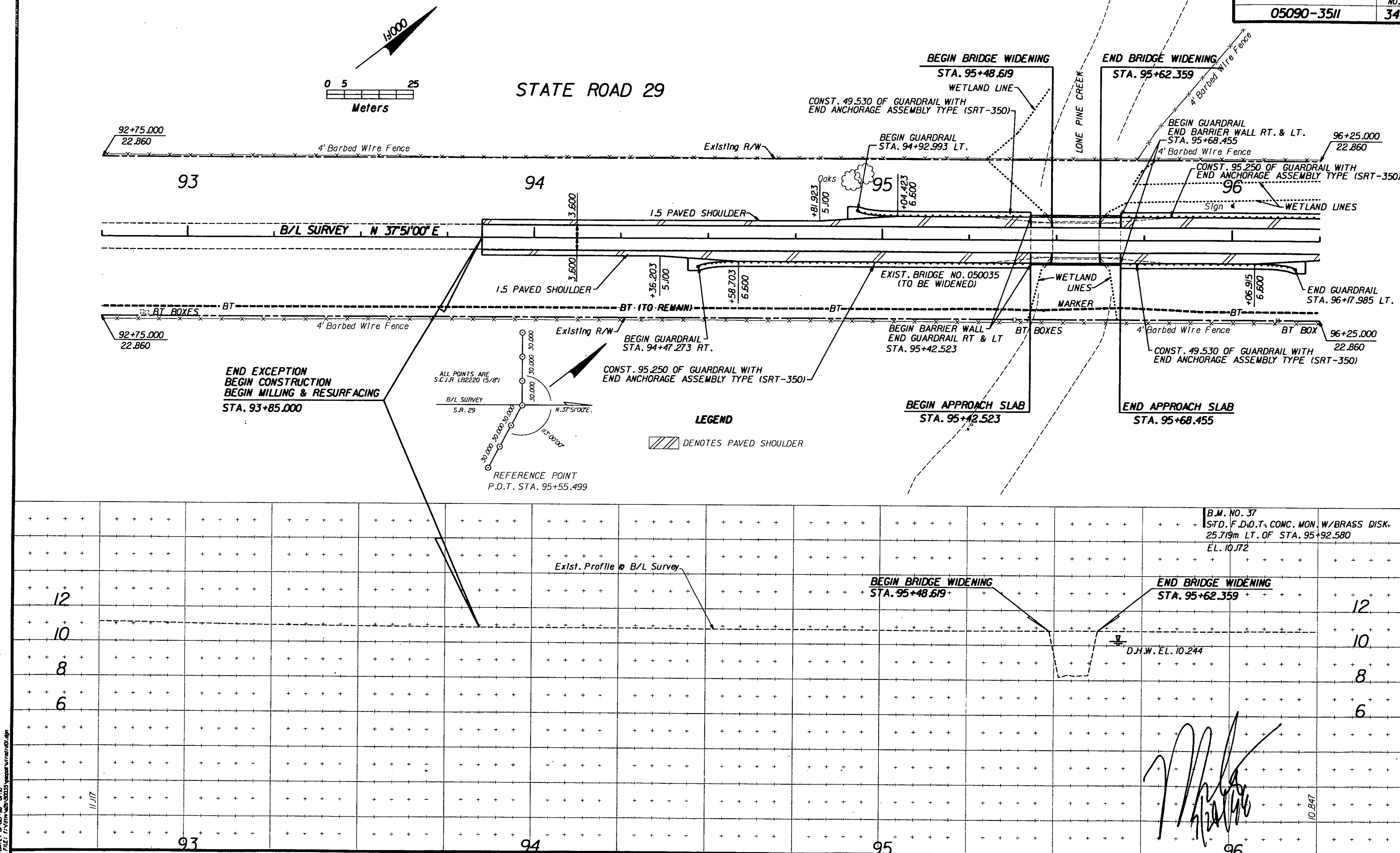
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

UTILITY ADJUSTMENT SHEET (2)
BRIDGE NO. 050941

STATE PROJ. NO.	SHEET NO.
05090-3511	34



1:1000
0 5 25
Meters
STATE ROAD 29
92+75.000
22.860
4' Barbed Wire Fence
Existing R/W
93
94
95
96
B/L SURVEY N 37°51'00" E
1.5 PAVED SHOULDER
3.600
BEGIN BRIDGE WIDENING
STA. 95+48.619
WETLAND LINE
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN GUARDRAIL
STA. 94+92.993 LT.
Oaks
+81.923
5.100
+04.423
6.600
LONE PINE CREEK
END BRIDGE WIDENING
STA. 95+62.359
4' Barbed Wire Fence
BEGIN GUARDRAIL
END BARRIER WALL RT. & LT.
STA. 95+68.455
96+25.000
22.860
CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
Sign
WETLAND LINES
+36.203
5.100
+58.703
6.600
EXIST. BRIDGE NO. 050035 (TO BE WIDENED)
WETLAND LINES
MARKER
+06.915
6.600
END GUARDRAIL
STA. 96+17.985 LT.
BT BOXES
BT
BT (TO REMAIN)
BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 95+42.523
BT BOXES
BT BOX
BEGIN GUARDRAIL
STA. 94+47.273 RT.
CONST. 49.530 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 93+85.000
ALL POINTS ARE S.C.I.R LB2220 (5/8")
B/L SURVEY
S.R. 29
N.37°51'00"E.
30.000
REFERENCE POINT
P.O.T. STA. 95+55.499
CONST. 95.250 OF GUARDRAIL WITH END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN APPROACH SLAB
STA. 95+42.523
END APPROACH SLAB
STA. 95+68.455
LEGEND
DENOTES PAVED SHOULDER
B.M. NO. 37
STD. F.D.O.T. CONC. MON. W/BRASS DISK
25.719m LT. OF STA. 95+92.580
EL. 10.172
Exist. Profile @ B/L Survey
BEGIN BRIDGE WIDENING
STA. 95+48.619
END BRIDGE WIDENING
STA. 95+62.359
D.H.W. EL. 10.244
12
10
8
6
11.117
10.847

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS								

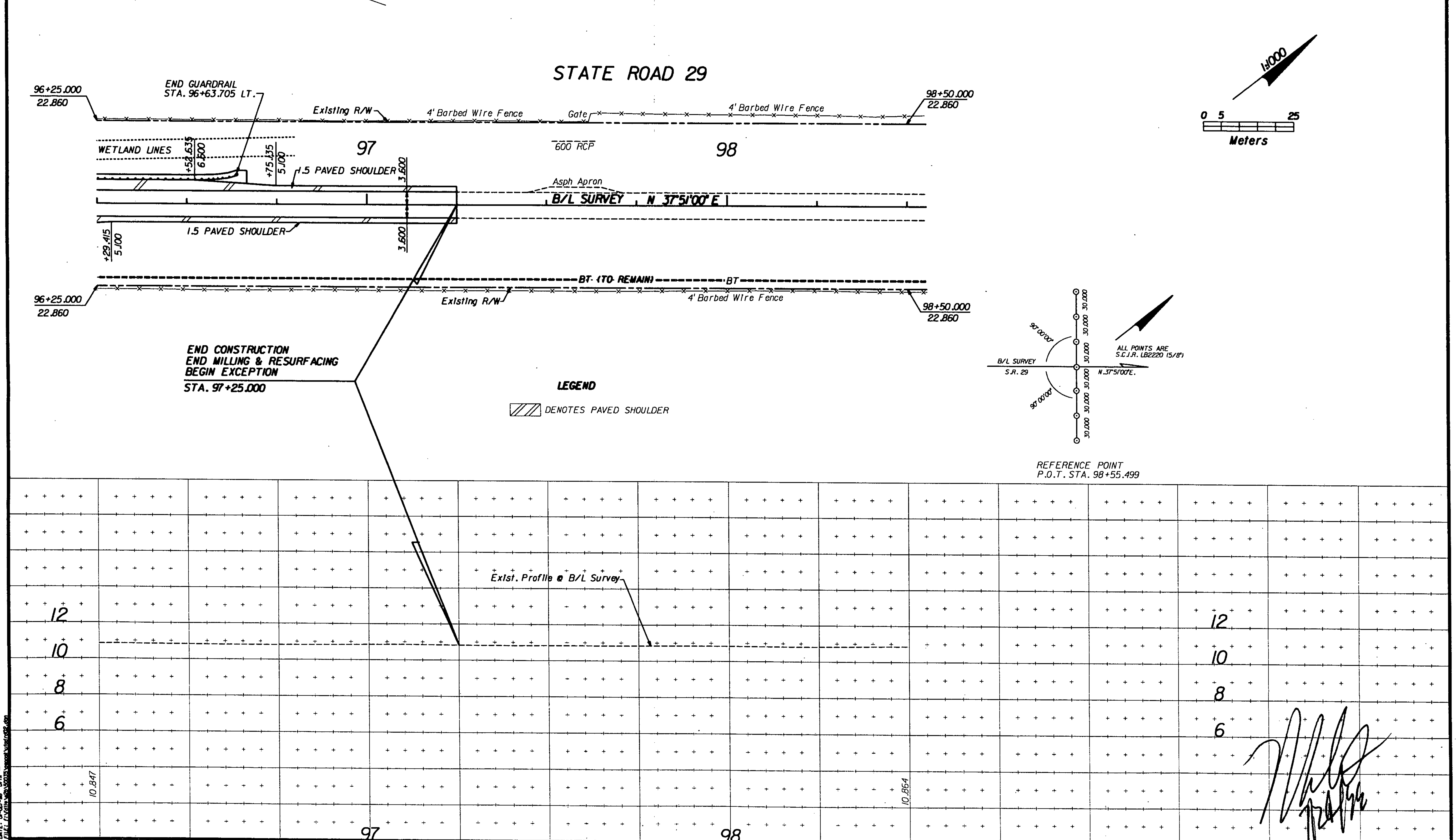
GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

UTILITY ADJUSTMENT SHEET (I)
BRIDGE NO. 050035

STATE PROJ. NO.	SHEET NO.
05090-3511	35



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

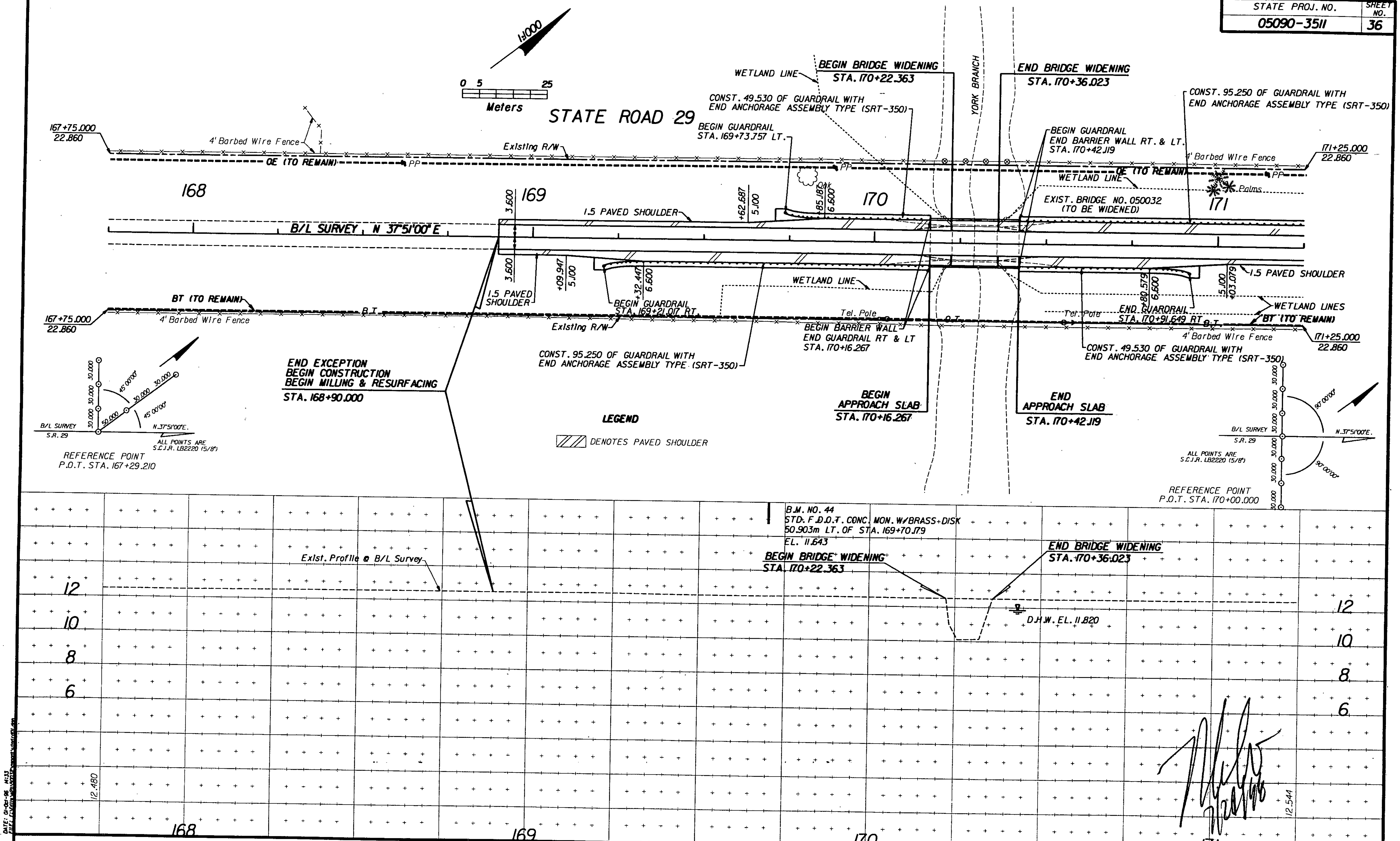
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

UTILITY ADJUSTMENT SHEET (2)
BRIDGE NO. 050035

STATE PROJ. NO.	SHEET NO.
05090-3511	36


1:1000
0 5 25
Meters
STATE ROAD 29
167+75.000
22.860
4' Barbed Wire Fence
Existing R/W
OE (TO REMAIN)
PP
WETLAND LINE
BEGIN BRIDGE WIDENING
STA. 170+22.363
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN GUARDRAIL
STA. 169+73.757 LT.
YORK BRANCH
END BRIDGE WIDENING
STA. 170+36.023
CONST. 95.250 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN GUARDRAIL
END BARRIER WALL RT. & LT.
STA. 170+42.119
171+25.000
22.860
Oak
Palms
168
169
170
171
3.600
1.5 PAVED SHOULDER
+62.687
5.100
85.181
6.600
EXIST. BRIDGE NO. 050032
(TO BE WIDENED)
B/L SURVEY N 37°51'00" E
+09.947
5.100
+32.447
6.600
1.5 PAVED SHOULDER
BT (TO REMAIN)
WETLAND LINE
BEGIN GUARDRAIL
STA. 169+21.017 RT.
Tel. Pole
BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 170+16.267
+80.579
6.600
END GUARDRAIL
STA. 170+91.649 RT
5.100
+03.079
WETLAND LINES
BT (TO REMAIN)
CONST. 95.250 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 168+90.000
BEGIN
APPROACH SLAB
STA. 170+16.267
END
APPROACH SLAB
STA. 170+42.119
LEGEND
DENOTES PAVED SHOULDER
B/L SURVEY
S.R. 29
N.37°51'00"E.
45°00'00"
ALL POINTS ARE
S.C.I.R. LB2220 (5/8")
REFERENCE POINT
P.O.T. STA. 167+29.210
90°00'00"
REFERENCE POINT
P.O.T. STA. 170+00.000
B.M. NO. 44
STD. F.D.O.T. CONC. MON. W/BRASS DISK
50.903m LT. OF STA. 169+70.179
EL. 11.643
Exist. Profile @ B/L Survey
BEGIN BRIDGE WIDENING
STA. 170+22.363
END BRIDGE WIDENING
STA. 170+36.023
D.H.W. EL. 11.820
12
10
8
6
12.480
12.544

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY	DLD	5/96	DRAWN BY	DLD	5/96
CHECKED BY	HFL	5/96	CHECKED BY	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

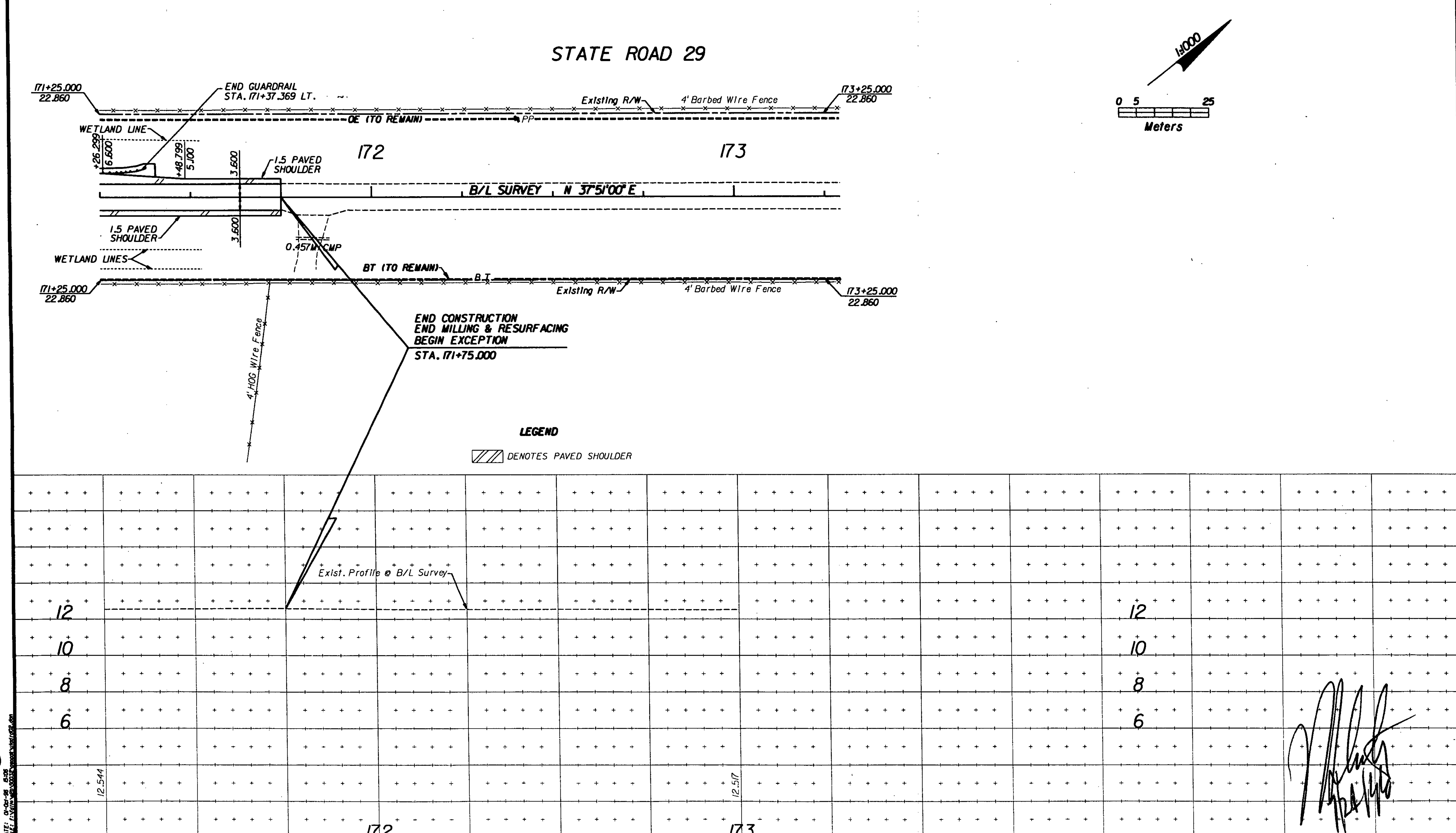
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

UTILITY ADJUSTMENT SHEET (1)
BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	37



REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/95	DRAWN BY:	DLD	5/95
CHECKED BY:	HFL	5/95	CHECKED BY:	TJB	5/95
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION

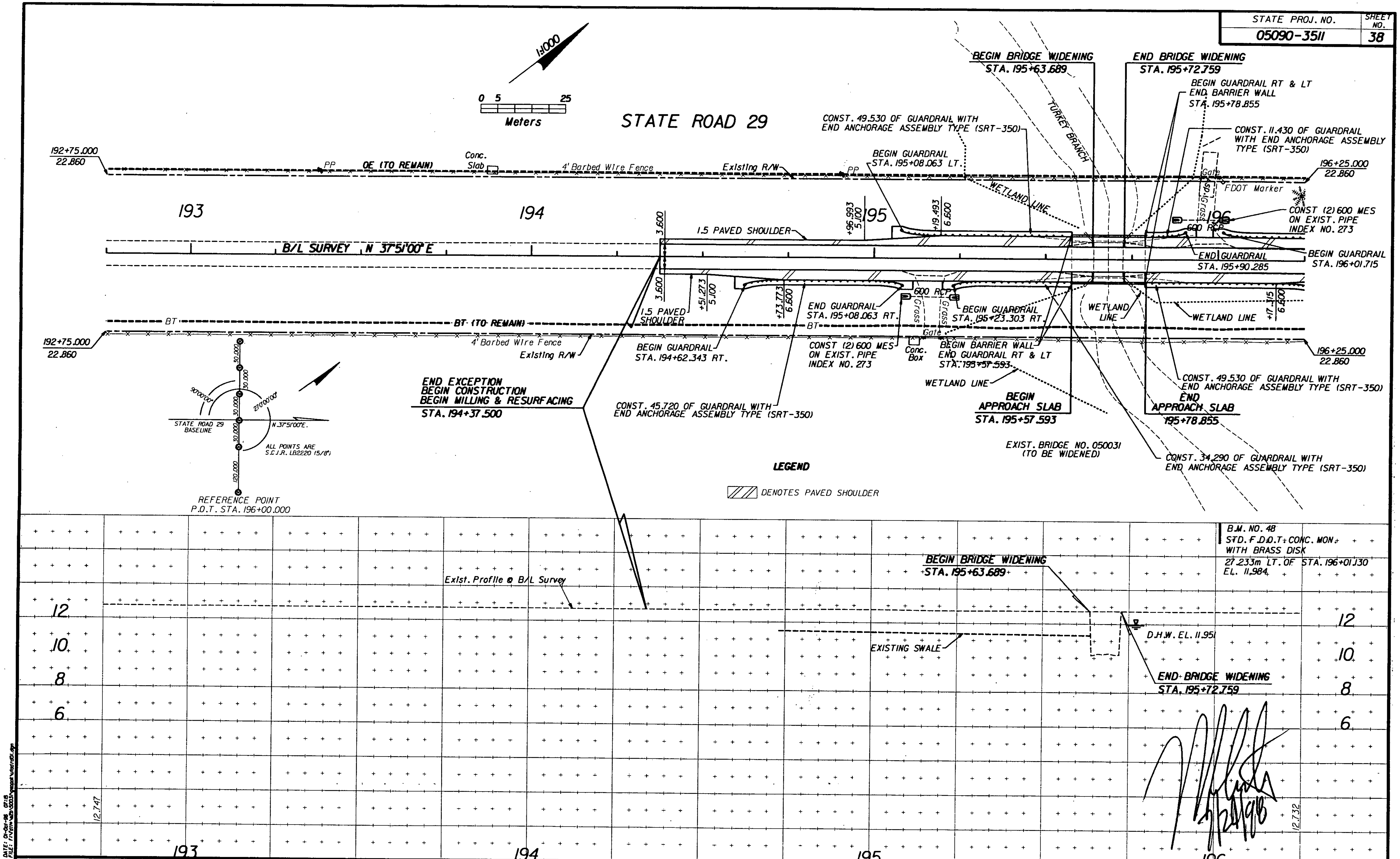
APPROVED BY:

DATE:

UTILITY ADJUSTMENT SHEET (2)

BRIDGE NO. 050032

STATE PROJ. NO.	SHEET NO.
05090-3511	38



STATE ROAD 29
1:1000
0 5 25
Meters
192+75.000
22.860
PP
OE (TO REMAIN)
Conc. Slab
4' Barbed Wire Fence
Existing R/W
193
194
195
196
B/L SURVEY N 37°51'00" E
1.5 PAVED SHOULDER
BT
BT (TO REMAIN)
196+25.000
22.860
BEGIN BRIDGE WIDENING
STA. 195+63.689
END BRIDGE WIDENING
STA. 195+72.759
BEGIN GUARDRAIL RT & LT
END BARRIER WALL
STA. 195+78.855
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
CONST. 11.430 OF GUARDRAIL
WITH END ANCHORAGE ASSEMBLY
TYPE (SRT-350)
BEGIN GUARDRAIL
STA. 195+08.063 LT.
TURKEY BRANCH
WETLAND LINE
FDOT Marker
Gate
CONST (2) 600 MES
ON EXIST. PIPE
INDEX NO. 273
600 RCP
END GUARDRAIL
STA. 195+90.285
BEGIN GUARDRAIL
STA. 196+01.715
+96.993
5.100
+19.493
6.600
3.600
+51.273
5.100
+73.773
6.600
+17.715
6.600
1.5 PAVED SHOULDER
END GUARDRAIL
STA. 195+08.063 RT.
BEGIN GUARDRAIL
STA. 195+23.303 RT.
WETLAND LINE
BEGIN GUARDRAIL
STA. 194+62.343 RT.
CONST (2) 600 MES
ON EXIST. PIPE
INDEX NO. 273
Conc. Box
BEGIN BARRIER WALL
END GUARDRAIL RT & LT
STA. 195+57.593
CONST. 49.530 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END EXCEPTION
BEGIN CONSTRUCTION
BEGIN MILLING & RESURFACING
STA. 194+37.500
CONST. 45.720 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
BEGIN APPROACH SLAB
STA. 195+57.593
END APPROACH SLAB
195+78.855
EXIST. BRIDGE NO. 050031
(TO BE WIDENED)
CONST. 34.290 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
STATE ROAD 29 BASELINE
N 37°51'00" E.
90°00'00"
270°00'00"
30.000
120.000
ALL POINTS ARE S.C.I.R. LB2220 (5/8")
REFERENCE POINT
P.O.T. STA. 196+00.000
LEGEND
DENOTES PAVED SHOULDER
B.M. NO. 48
STD. F.D.O.T. CONC. MON.
WITH BRASS DISK
27.233m LT. OF STA. 196+01.130
EL. 11.984
BEGIN BRIDGE WIDENING
STA. 195+63.689
Exist. Profile @ B/L Survey
EXISTING SWALE
D.H.W. EL. 11.951
END BRIDGE WIDENING
STA. 195+72.759
12
10
8
6
12.747
12.732

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY:	W.J. WARDEN				

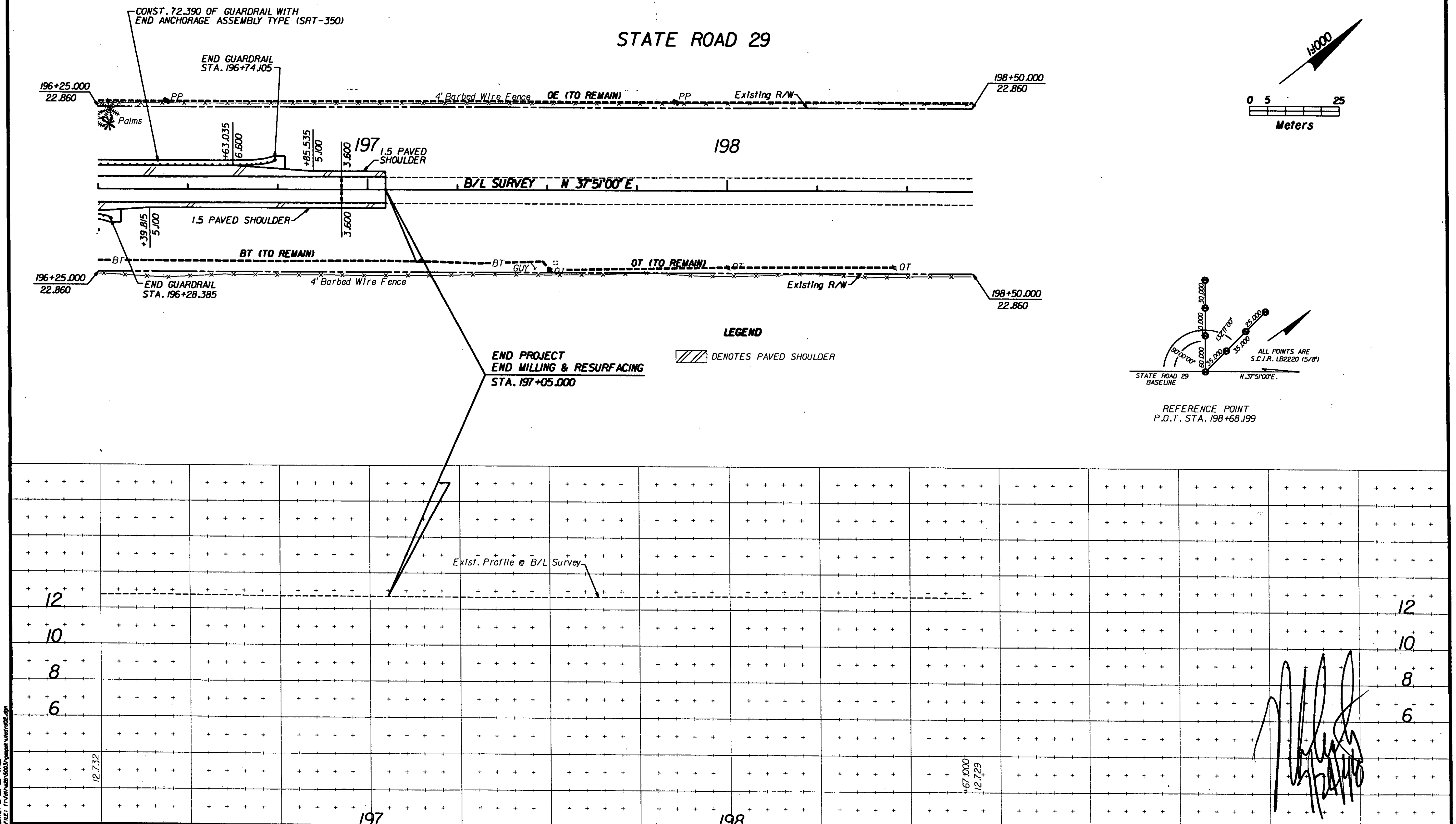
FLORIDA DEPARTMENT OF TRANSPORTATION

APPROVED BY:

DATE:

UTILITY ADJUSTMENT SHEET (1)
BRIDGE NO. 050031

STATE PROJ. NO.	SHEET NO.
05090-3511	39


STATE ROAD 29
CONST. 72.390 OF GUARDRAIL WITH
END ANCHORAGE ASSEMBLY TYPE (SRT-350)
END GUARDRAIL
STA. 196+74.105
196+25.000
22.860
PP
Palms
4' Barbed Wire Fence
OE (TO REMAIN)
Existing R/W
198+50.000
22.860
+63.035
6.600
+85.535
5.100
3.600
197
198
1.5 PAVED SHOULDER
B/L SURVEY N 37°51'00" E
1.5 PAVED SHOULDER
+39.815
5.100
3.600
BT
BT (TO REMAIN)
GUY
OT (TO REMAIN)
OT
196+25.000
22.860
END GUARDRAIL
STA. 196+28.385
4' Barbed Wire Fence
Existing R/W
198+50.000
22.860
END PROJECT
END MILLING & RESURFACING
STA. 197+05.000
LEGEND
DENOTES PAVED SHOULDER
1:1000
0 5 25
Meters
30.000
10.000
60.000
35.000
35.000
25.000
90°00'00"
132°17'00"
ALL POINTS ARE
S.C.I.R. LB2220 (5/8")
STATE ROAD 29
BASELINE
N.37°51'00"E.
REFERENCE POINT
P.O.T. STA. 198+68.199
Exist. Profile @ B/L Survey
12
10
8
6
12.732
+67.000
12.729
197
198

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

	NAME	DATE		NAME	DATE
DESIGNED BY:	DLD	5/96	DRAWN BY:	DLD	5/96
CHECKED BY:	HFL	5/96	CHECKED BY:	TJB	5/96
SUPERVISED BY: W.J. WARDEN					

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY:
DATE:

UTILITY ADJUSTMENT SHEET (2)
BRIDGE NO. 050031

FORM 744-02 (SIGN. & MARK.)

STATE PROJ. NO.	SHEET NO.
05090-3511	40

SUMMARY OF SIGNING AND PAVEMENT MARKING QUANTITIES

BID ITEM NO.	DESCRIPTION	* LOCATION STATION TO STATION	UNIT	SHEET NUMBERS 6 ORIG.	6 FINAL	7 ORIG.	7 FINAL	8 ORIG.	8 FINAL	9 ORIG.	9 FINAL	10 ORIG.	10 FINAL	11 ORIG.	11 FINAL	12 ORIG.	12 FINAL	13 ORIG.	13 FINAL	TOTAL THIS SHEET ORIG.	TOTAL THIS SHEET FINAL	GRAND TOTAL ORIG.	GRAND TOTAL FINAL	REF. SHEET
	BRIDGE NO. 050941																							
2710-25-61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150 MM) (EDGE LINE)	46+90.000-51+70.000	MI	670.0		290.0														960.0		960.0		
2710-28	TRAFFIC STRIPE SKIP (YELLOW)	46+90.000-51+70.000	MI	167.5		72.5														240.0		240.0		
2706-3	RETRO REFLECTIVE PAVEMENT MARKER AMBER/AMBER	46+90.000-51+70.000	EA	56		24														80		80		
	BRIDGE NO. 050035																							
2710-25-61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150 MM) (EDGE LINE)	93+25.000-97+85.000	MI					600.0		320.0										920.0		920.0		
2710-28	TRAFFIC STRIPE SKIP (YELLOW)	93+25.000-97+85.000	MI					150.0		80.0										230.0		230.0		
2706-3	RETRO REFLECTIVE PAVEMENT MARKER AMBER/AMBER	93+25.000-97+85.000	EA					50		26										76		76		
	BRIDGE NO. 050032																							
2710-25-61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150 MM) (EDGE LINE)	168+30.000-172+35.000	MI									590.0		220.0						810.0		810.0		
2710-28	TRAFFIC STRIPE SKIP (YELLOW)	168+30.000-172+35.000	MI									147.5		55.0						202.5		202.5		
2706-3	RETRO REFLECTIVE PAVEMENT MARKER AMBER/AMBER	168+30.000-172+35.000	EA									50		18						68		68		
	BRIDGE NO. 050031																							
2710-25-61	TRAFFIC STRIPE SOLID (WHITE/BLACK/BLUE 150 MM) (EDGE LINE)	193+77.500-197+65.000	MI													495.0		280.0		775.0		775.0		
2710-28	TRAFFIC STRIPE SKIP (YELLOW)	193+77.500-197+65.000	MI													123.8		70.0		193.8		193.8		
2706-3	RETRO REFLECTIVE PAVEMENT MARKER AMBER/AMBER	193+77.500-197+65.000	EA													42		22		64		64		

* QUANTITIES ABOVE INCLUDE 60m TRANSITION AT EACH END OF BRIDGE PROJECT.
THE PERMANENT REMOVAL OF SIGNS WITHIN THE LIMITS OF THIS PROJECT IS NOT REQUIRED IF THEY ARE NOT SHOWN IN THESE PLANS.
ANY REQUIRED ADJUSTMENT OF THESE SIGNS BY THE CONTRACTOR SHALL BE COVERED UNDER SECTION 7-11.4 OF THE DEPARTMENT'S STANDARD SPECIFICATIONS.
ALL PAVEMENT MARKINGS SHALL BE PAINT UNLESS OTHERWISE NOTED IN THE PLANS. THE QUANTITY FOR PAVEMENT MARKINGS INDICATED IN THE SIGNING AND PAVEMENT MARKING PLANS ARE INCLUDED IN THE QUANTITIES FOR PAVEMENT MARKINGS SHOWN IN THE SUMMARY OF ROADWAY PAY ITEMS.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

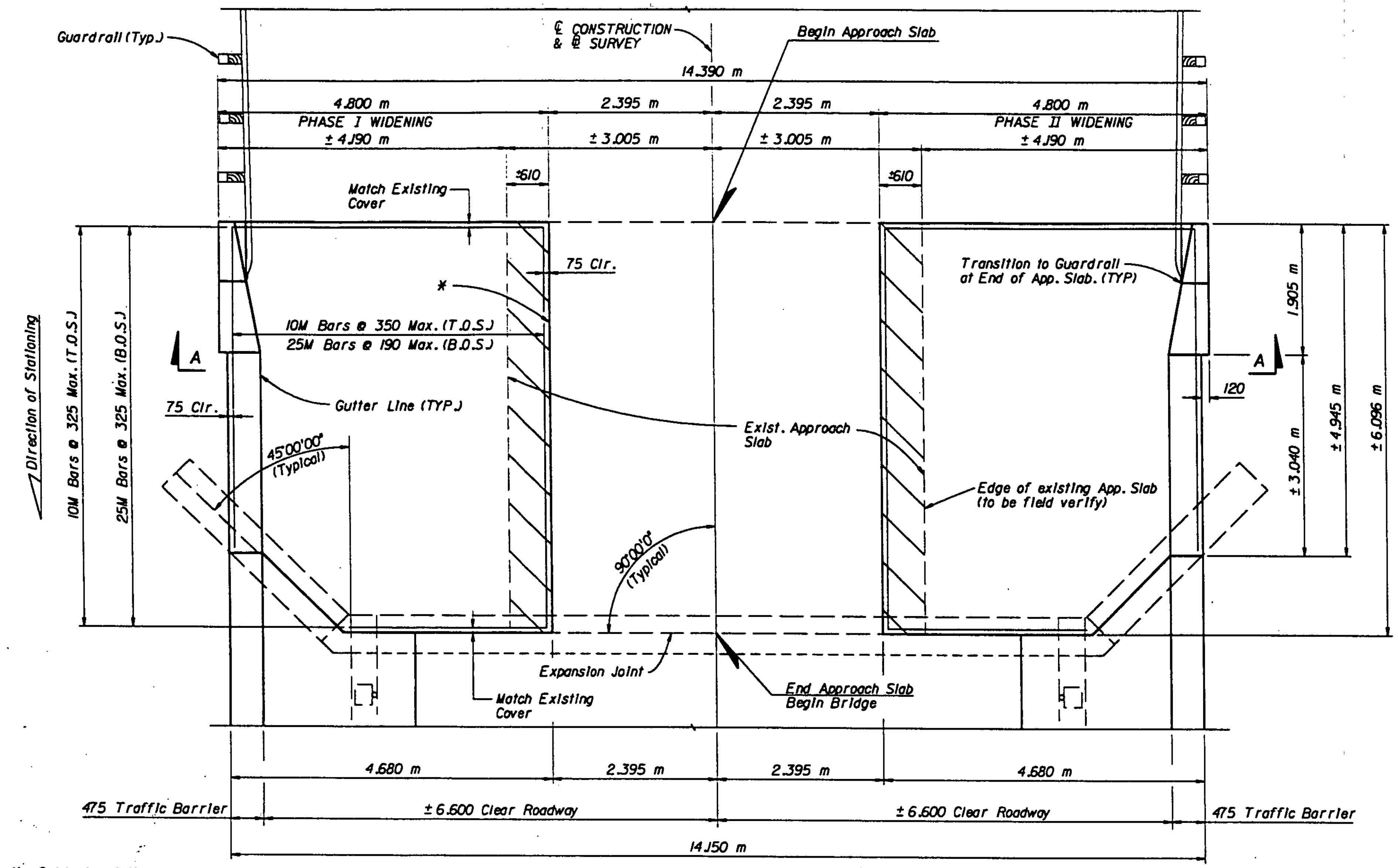
	NAME	DATE		NAME	DATE
DESIGNED BY	HFL	9/96	DRAWN BY	HFL	9/96
CHECKED BY	DLD	9/96	CHECKED BY	DBF	9/96

SUPERVISED BY : W.J. WARDEN

FLORIDA DEPARTMENT OF TRANSPORTATION
APPROVED BY :
DATE :

SUMMARY OF QUANTITIES
SIGNING AND PAVEMENT MARKINGS

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	05090-3511		41

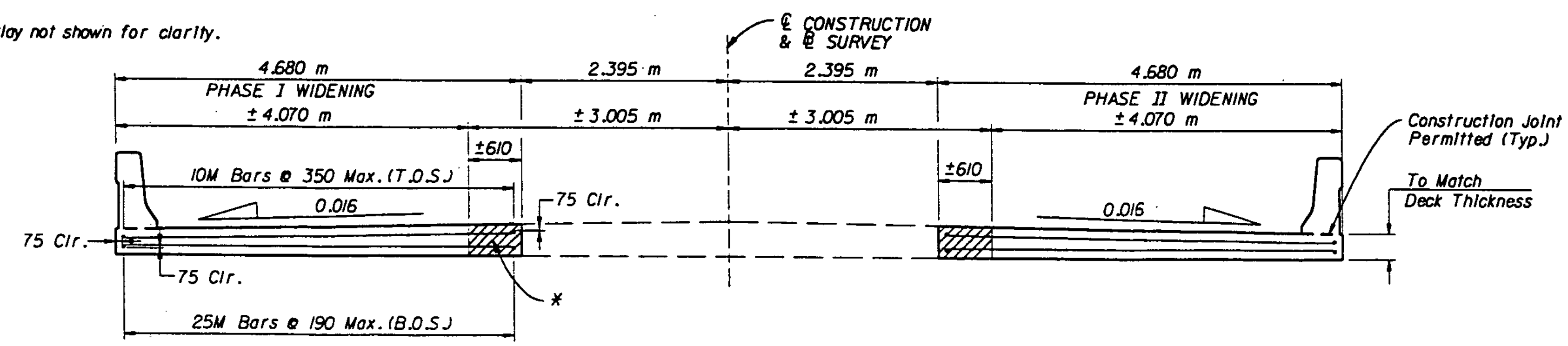


PLAN VIEW

(TYPICAL SOUTH APPROACH SLAB SHOWN - NORTH APPROACH SLAB MIRROR IMAGE)

* Cut back existing app. slab exposing ±610mm of existing reinforcement. If reinforcing is missing or damaged new reinforcing is to be doweled into existing slab.

NOTE: Asphalt overlay not shown for clarity.



SECTION A-A

GENERAL NOTES

GENERAL SPECIFICATIONS: Florida Department of Transportation Standard Specifications for Road and Bridge Construction, current edition and Supplements thereto.

DESIGN SPECIFICATIONS: Standard specifications for Highway Bridges (AASHTO) current edition and appproved revisions.

DESIGN LOADING: MS18

CONCRETE: Class II (Bridge Deck) All environments.

REINFORCING STEEL: ASTM A615M Grade 400

SURFACE TREATMENT: Same as Bridge.

TRAFFIC RAILING BARRIER: The cost of the traffic railing barrier supported by the approach slabs shall be included under Pay Item No. 2360-71, Concrete Approach Slab (Widening).

PAYMENT: Payment shall be made under Pay Item No. 2360-71, Concrete Approach Slab (Widening) The work shall comply with details on this sheet, Section 360 of the Standard Specifications, Bridge Plans and Roadway Plans. The bid price and payment shall be full compensation for all work and materials required to complete the approach slab widening.

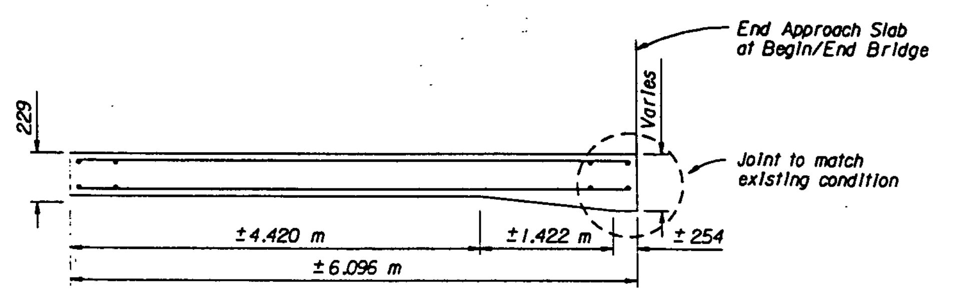
The areas of approach slab removal are included in Bid Item No. 2110-3.

EXPANSION JOINT: Existing joints are to be thoroughly cleaned and resealed. Refer to Page A-8 for Joint Construction. All work pertaining to Expansion Joints shall be paid under Pay Item 2350-72.

*** ESTIMATED QUANTITIES**

ITEM	UNIT	PHASE I	PHASE II
Concrete	m^3	16.6	16.6
Reinforcing Steel	kg	2075	2075
Barrier-Concrete **	m^3	1.50	1.50
Barrier-Reinforcing Steel	kg	472	472

* The Quantities shown are based on an assumed configuration. The contractor is responsible for providing reinforcing and slab thickness that matches the existing Approach Slab as a minimum.



LONGITUDINAL SECTION THROUGH SLAB

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REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ML	8-97
Checked by	SB	8-97
Designed by	SB	8-97
Checked by	RB	8-97
Approved by	R.T. Carballo P.E.	

ENGINEER OF RECORD: JMI ENGINEERS, INC. 900 Winderley Place, Ste. 148 Maitland, Florida 32751 Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD: CORZO CASTELLA CARBALLO THOMPSON SALMAN P.A. ENGINEERS•ARCHITECTS•PLANNERS 901 PONCE DE LEON BLVD., SUITE 900 CORAL GABLES, FLORIDA 33134 MIAMI (305)-445-2900 FLORIDA (800)-448-8227 FL REGISTRATIONS: EB0005022 AAC002142

SEAL: 9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

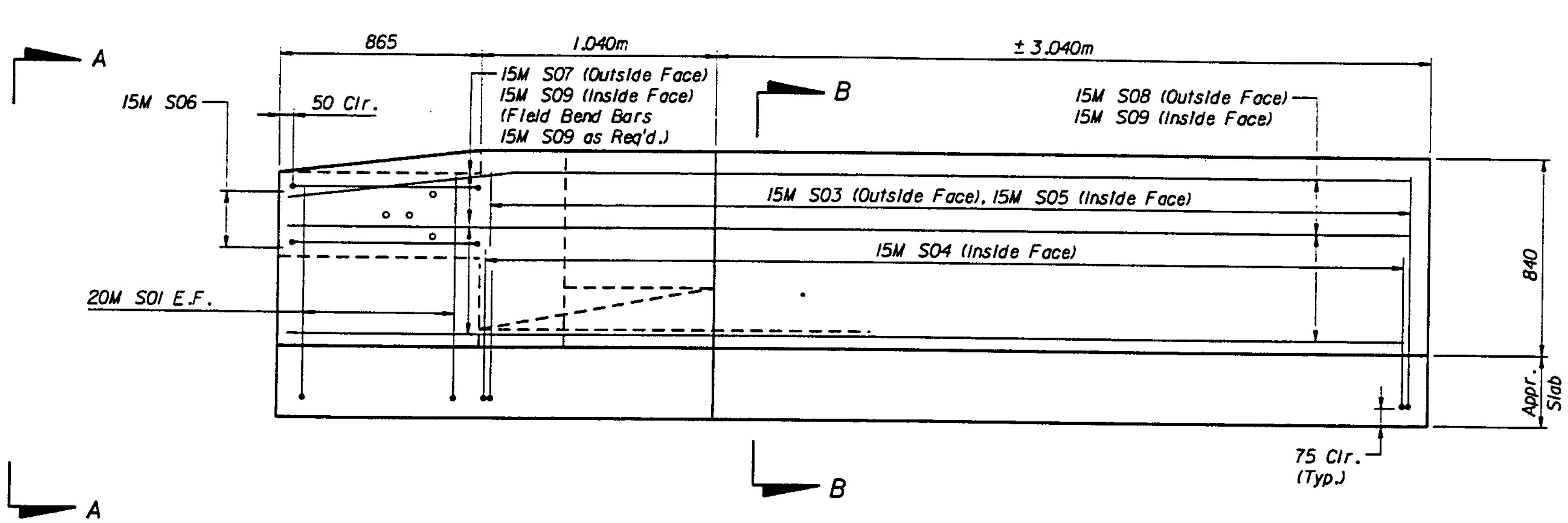
ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: APPROACH SLABS

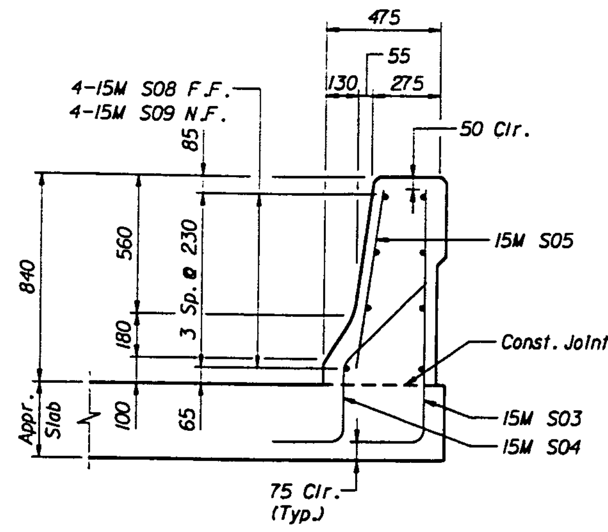
PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

Drawing No.

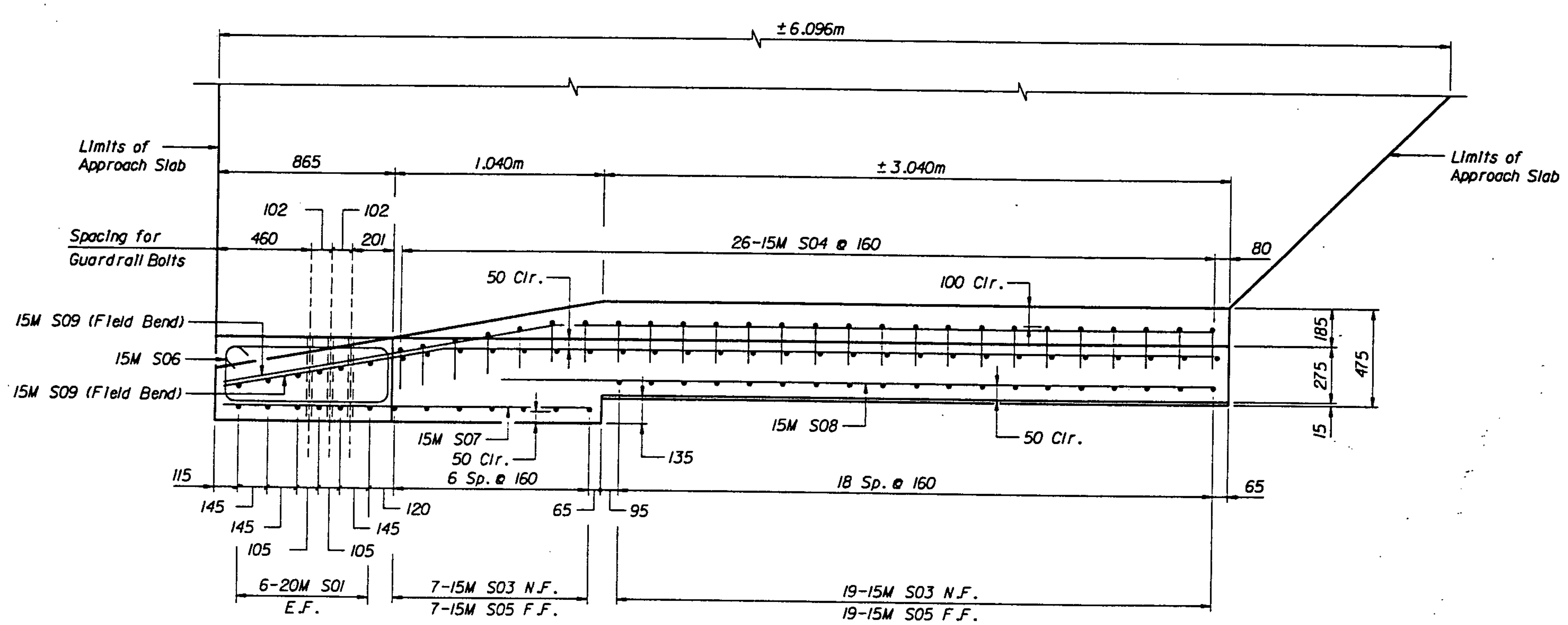
Index No.



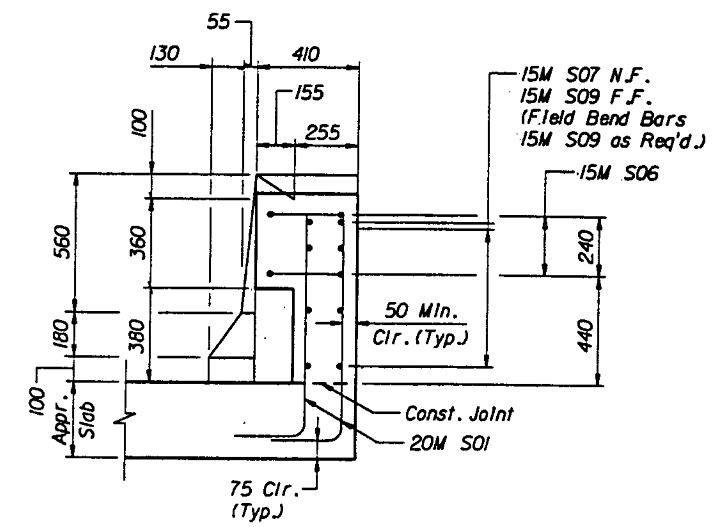
ELEVATION
(Barrier on Approach Slab)



SECTION B-B



PLAN
(Barrier on Approach Slab)



SECTION A-A

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REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	R.T. Carballo P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD:
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FL REGISTRATIONS: EB0005822 AAC002142

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: APPROACH SLAB DETAILS
PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031
Drawing No.
Index No.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-1

INDEX OF SHEETS FOR NORTH OKALOACOOCHEE, LONE PINE CREEK, YORK BRANCH AND TURKEY BRANCH

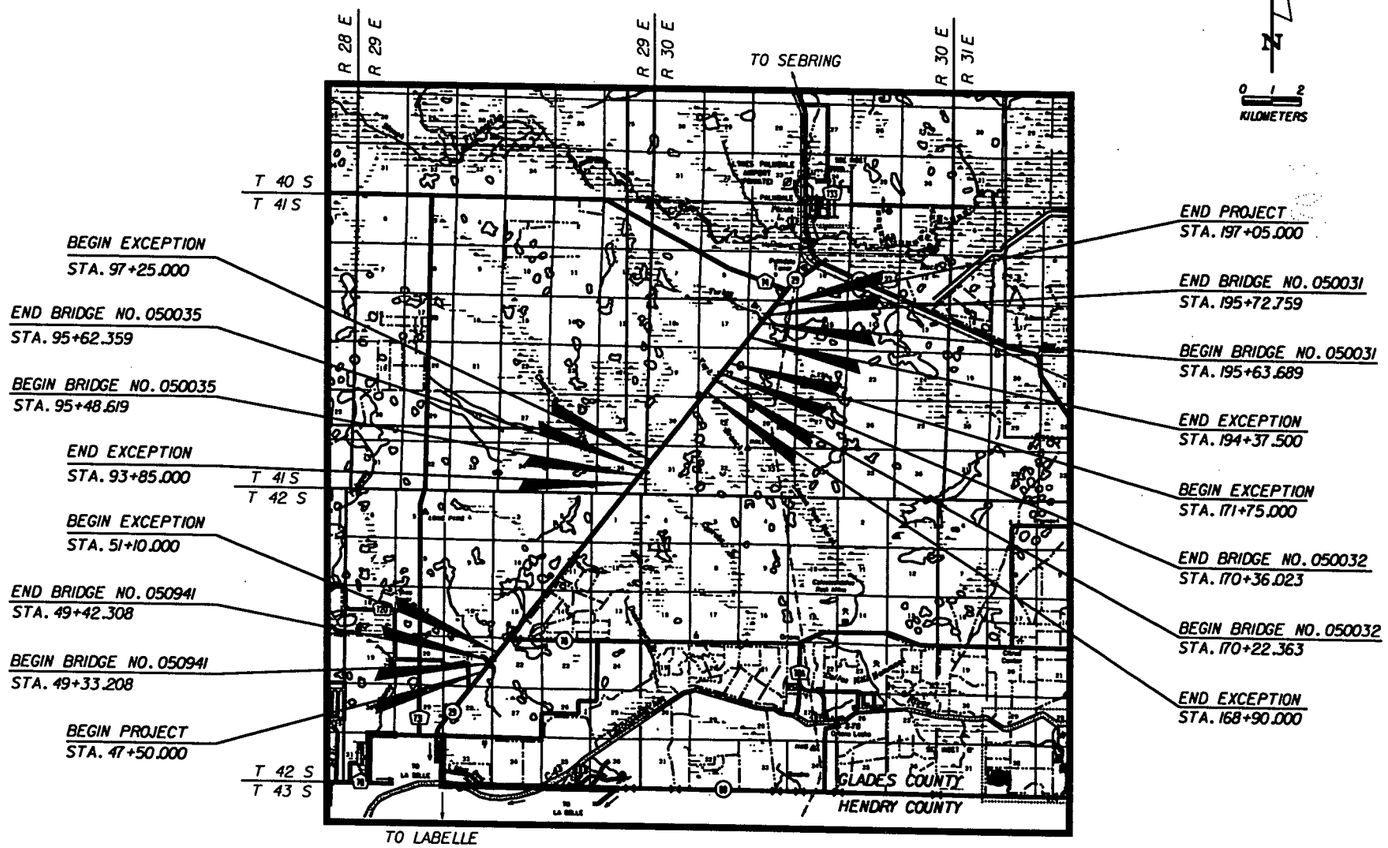
INDEX OF SHEETS FOR NORTH OKALOACOOCHEE (BRIDGE NO. 050941)

INDEX OF SHEETS FOR LONE PINE CREEK (BRIDGE NO. 050035)

INDEX OF SHEETS FOR YORK BRANCH (BRIDGE NO. 050032)

INDEX OF SHEETS FOR TURKEY BRANCH (BRIDGE NO. 050031)

INDEX OF EXISTING STRUCTURE DRAWINGS FOR NORTH OKALOACOOCHEE, LONE PINE CREEK, YORK BRANCH AND TURKEY BRANCH



LOCATION MAP

THIS IS A METRIC UNIT PROJECT.

REVISIONS						Names	Dates
Date	By	Description	Date	By	Description	Drawn by	ISW 8-97
						Checked by	HSH 8-97
						Designed by	HSH 8-97
						Checked by	JR 8-97
						Approved by	J. Jordan, P.E.

ENGINEER OF RECORD:
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Maitland, Florida 32751
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ENGINEER OF RECORD:
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CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2988 FLORIDA (888)-448-6227
FL REGISTRATIONS: EB8805822 AAC002142

SEAL

6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

W.P.I. NO. 1110874

SHEET TITLE: INDEX OF BRIDGE SHEETS & PROJECT LOCATION MAP

PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

Drawing No.

Index No.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-2

GENERAL NOTES

GENERAL SPECIFICATIONS: Florida Department of Transporation Standard Specifications for Road and Bridge Construction (1996 Edition) and Supplements thereto. Technical Special Provision Section 402 Gunite.

DESIGN SPECIFICATIONS: American Association of State Highway and Transportation Officials (AASHTO) Standard Specifications for Highway Bridges (1992 Edition)) and all applicable interims thru 1995.

GUIDELINES: Florida Department of Transportation "Structures Design Guidelines" 1994, including all subsequent revisions.

DESIGN LOADING: MS-18 with impact modified for military loading as required for all new construction.

FUTURE WEARING SURFACE: Design includes an allowance of 1.420 kN/m^2 of total asphalt on the bridges. For any future wearing surface, the existing asphalt must be milled first and then resurfaced. Under no circumstance can the depth of any future asphalt be greater than the depth of the existing asphalt.

CONCRETE: All concrete shall be in accordance with Section 346.

Class	Minimum 28-Day Compressive Strength (MPa)	Location of Concrete in Structure
II	f'c = 23	C.I.P. Barrier
IV	f'c = 38	C.I.P. Deck Slab/Approach Slab Barrier
IV	f'c = 38	C.I.P. Substructure
V (Special)	f'c = 41	Prestressed Piling

REINFORCING STEEL: All reinforcing steel shall be ASTM A615M-92, Grade 420. See Standard Drawings for additional requirements.

CONCRETE COVER: Concrete cover shown in the plans does not include reinforcement placement and fabrication tolerances unless shown as "minimum cover". See FDOT Standards Specifications for allowable tolerances. "Minimum Cover" may be abbreviated as "Clr." in the plans.

ENVIRONMENT CLASSIFICATION:

North Okaloacoochee (Bridge No. 050941):	Superstructure - Slightly Aggressive Substructure - Moderately Aggressive (Water - pH=5.9)
Lone Pine Creek (Bridge No. 050035):	Superstructure - Slightly Aggressive Substructure - Moderately Aggressive (Water - pH=5.0)
York Branch (Bridge No. 050032):	Superstructure - Slightly Aggressive Substructure - Extremely Aggressive (Water - pH=4.7)
Turkey Branch (Bridge No. 050031):	Superstructure - Slightly Aggressive Substructure - Moderately Aggressive (Water - pH=5.5)

DESIGN METHOD: All structural elements of the existing bridges were designed using Working Stress Design. All widening construction has been designed using Working Stress Design to match the original design method. The Deck Slab design was verified by the Load Factor Design Method.

UTILITIES: See Bridge Plan and Elevation Sheets for the location of existing utilities.

SURFACE FINISH: A Class 5 Applied Finish Coating shall be applied to the following exposed surfaces: the inside, outside and top faces of the traffic barrier; the bridge deck fascia; the inside, outside and top faces of the wingposts.

SCOUR: Scour has been considered in the design of the prestressed concrete piles with scour elevations based on the 100 year design flood. The scour elevations are shown on the Foundation Layout & Finished Grade Elevations Sheet.

DATUM: All elevations are referenced to the National Geodetic Vertical Datum (NGVD) of 1929 and have been converted to metric.

DIMENSIONS: All dimensions are in millimeters (mm) except as noted.

REMOVAL OF EXISTING STRUCTURE: See the Bridge Plan and Elevation, Abutment Modifications and Superstructure Sheets for limits where an existing portion of the structure is to be removed. Concrete surfaces shall be scored to a minimum depth of 25mm in order to provide a straight edge to construct new portions of each structure. Concrete shall be removed in a manner to prevent damage to the existing reinforcement.

EXISTING TRANSVERSE REINFORCEMENT: The existing reinforcement to remain in place shall be cleaned, straightened and embedded into the new portions of slab and abutments. If bars are broken or determined to be unsatisfactory by the Engineer, they shall be replaced by dowel bars. All contacting surfaces between the existing and the new concrete shall be cleaned and thoroughly coated with a 3:1 Portland Cement slurry mixture immediately before pouring concrete.

VERIFICATION OF PHYSICAL DIMENSION LOCATIONS: The Contractor shall be responsible for verification of locations and dimensions in order to provide widening of structures as described in the plans. Existing plans are provided as reference only, and are not to be considered as "As-Built" drawings. Variations between actual "As-Built" conditions and these plans due to construction tolerances shall not be cause for additional compensation or change in scope of work.

CONSTRUCTION REQUIREMENTS: The Contractor shall not be allowed to place temporary fill pads within the creek for equipment access. Work shall be preformed in a manner to prevent concrete fragments from being thrown into the creek.

BID ITEM NOTES

A. For a Summary of Bridge Pay Items, see Roadway Plans.

B. Payment for incidential items not specifically covered in the individual Bid Items shall be included in the Contract Unit Price for Bid Items.

C. For Maintenance of Traffic, see Roadway Plans.

D. Bid Item No. 2110-3 provides for the removal of portions of the existing structures. The following gives the estimated quantities (plan area) for each of the structures. In addition to these quantities, a ± 610 mm width on both sides of the existing approach slab will be required to be removed. The length of each approach slab is ± 6.096 m.

North Okaloacoochee (Bridge No. 050941) = 27 m^2.
Lone Pine Creek (Bridge No. 050035) = 34 m^2.
York Branch (Bridge No. 050032) = 34 m^2.
Turkey Branch (Bridge No. 050031) = 25 m^2.

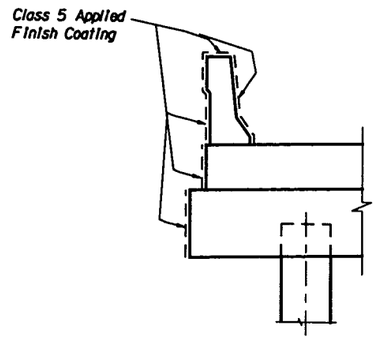
F. Bid Item No. 2360-71 provides for approach slab widening. The total estimated plan area of approach slab widening required for each of the structures is as follows

North Okaloacoochee (Bridge No. 050941) = 111 m^2.
Lone Pine Creek (Bridge No. 050035) = 111 m^2.
York Branch (Bridge No. 050032) = 111 m^2.
Turkey Branch (Bridge No. 050031) = 111 m^2.

G. Bid Item 2401-70 provides for restoring spalled areas. The work to be done under this pay item shall be done in accordance with Standard Specifications Section 125 and all associated costs shall be included under this pay item

H. Pay Item 2400-143 Cleaning and Coating Concrete Surfaces per Sq. Meter provides for the Class 5 Applied Finish Coating as shown on detail below. The estimated quantity for each bridge is as follows:

North Okaloacoochee (Bridge No. 050941) = 91.8 m^2.
Lone Pine Creek (Bridge No. 050035) = 112.7 m^2.
York Branch (Bridge No. 050032) = 112.3 m^2.
Turkey Branch (Bridge No. 050031) = 91.7 m^2.



APPLIED FINISH DETAIL

REVISIONS						
Date	By	Description	Date	By	Description	

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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901 PONCE DE LEON BLVD., SUITE 900
CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-9227
FL REGISTRATIONS: EB0005822 AAC002142

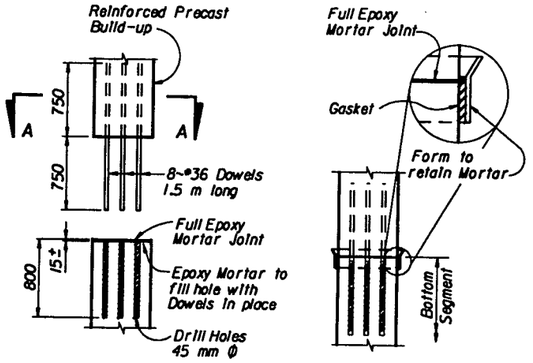
SEAL:
6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: GENERAL NOTES & APPLIED FINISH DETAIL
PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031
Drawing No.
Index No.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-3



BEFORE BONDING AFTER BONDING

NOTE: Dowels shown for 610 Pile. See Sect. A-A for spacing and number of Dowels for each Pile.

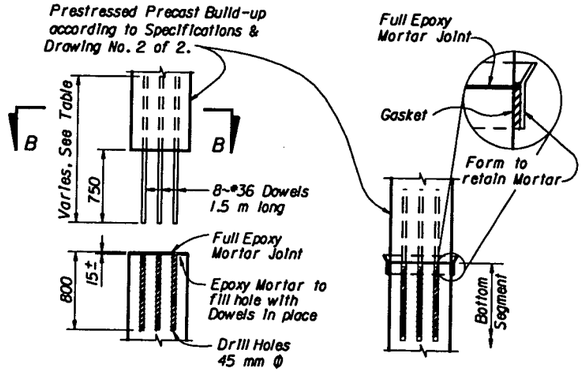
REINFORCED PRECAST SPLICES

(Extensions 610 mm Min. but less than 1.525 m) (Not Drivable)

NOTE: The reinforced precast Build-up shall conform with the Specificatons and Section A-A. Spiral ties pitch shall be 150 mm Max.

TABLE OF BONDED SPLICE DATA		
Drivable Splice	Min. Splice Length	ø36 Dowel Length
YES	3.050 m	2.3 m
NO *	1.525 m	1.5 m

* For Splices less than 1.525 m (not Drivable), use the Reinforced Precast Splice.



BEFORE BONDING AFTER BONDING

NOTE: Dowels shown for 610 Pile. See Sect. B-B for spacing and number of Dowels for each Pile.

PRESTRESSED PRECAST SPLICES

(Extensions 1.525 m or longer)

DETAILS FOR REINFORCED PRECAST & PRESTRESSED PRECAST PILE SPLICES

PILE NOTES

SPIRAL TIES: Each wrap of spirals shall be tied to at least two corner strands or bars. One turn required for spiral splices. Spirals shall be manufactured from cold-drawn steelwire meeting the requirements of ASTM A82.

PILE CUT OFF: Piles required to be cut off shall be sawcut at the pile cut off elevation shown on the plans with an abrasive saw. Unless otherwise noted on the plans, the cut shall be made to the depth into the pile necessary to cleanly cut through the prestressing strands.

CONCRETE CLASS: Concrete for all piles shall be Class V (Special) or Class V (Special) (Microsilica). Class V (Special) and Class V (Special) (Microsilica) Concrete shall conform to all requirements for Class V Concrete except for the 28-day strength as noted below.

CONCRETE STRENGTH: The cylinder strength shall be 41 MPa minimum at 28 days and 28 MPa minimum at transfer of the Prestressing Force.

SPLICED PILES: Piles may be spliced in accordance with Subart. A455-5.7 of the Specifications. Precast buildups shall be prestressed or reinforced according to pile details for the "head" section of the pile shown on this Standard. Drivable spliced piles may be driven after splice is two days old.

PICK-UP POINTS: Piles shall be marked at the pick-up points to indicate proper points for attaching handling lines.

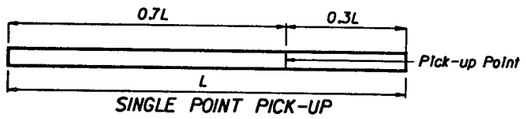
STORAGE AND TRANSPORTATION: Piles shall be supported on adequate dunnage both in the precasting yard and at the jobsite and shall be supported and tied down during transit in accordance with the following schedule:

Type Pickup Required by Pile Length	Type Storage and Transportation Support Detail
Single or Double	2, 3 or 4 Point Support
Triple	3 or 4 Point Support

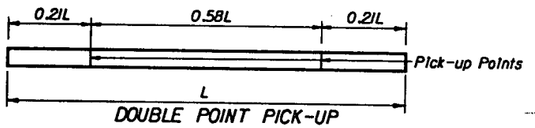
REINFORCING STEEL: All Reinforcing Steel except spiral ties shall be ASTM A615M-96, Grade 420.

STRAND NOMENCLATURE:

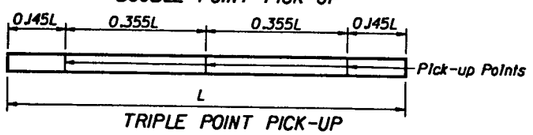
S.R. = Stress Relieved Strand
L.R.S. = Low-Relaxation Strand
No. 13 (Spec.): A_s = 107.74 mm²
No. 14 (Spec.): A_s = 126.45 mm²



SINGLE POINT PICK-UP

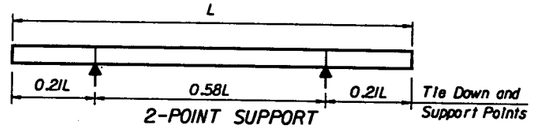


DOUBLE POINT PICK-UP

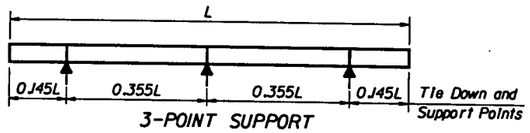


TRIPLE POINT PICK-UP

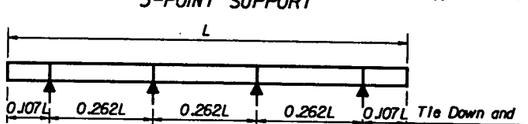
PILE PICK-UP DETAILS



2-POINT SUPPORT



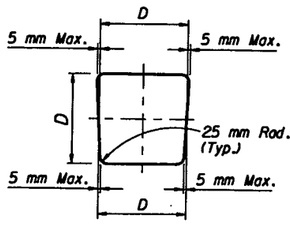
3-POINT SUPPORT



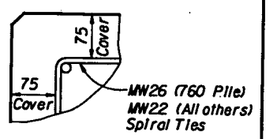
4-POINT SUPPORT

STORAGE AND TRANSPORTATION SUPPORT DETAILS

PILE SIZE	MAX. LENGTH "L" (METERS) FOR PICK-UP		
	SINGLE POINT	DOUBLE POINT	TRIPLE POINT
305	15	21	L > 21
355	17	23	L > 23
455	18	27	L > 27
510	20	29	L > 29
610	21	30	L > 30
760	27	38	L > 38



TYPICAL PILE SHAPE FOR MOLD FORMS



TYPICAL DETAIL SHOWING COVER DIMENSION

NOTE: All dimensions are in millimeters (mm), except as noted.

REVISIONS					
Date	By	Description	Date	By	Description
			97R		

	Names	Dates
Drawn by	SHM	3-96
Checked by	TJB	7-96
Designed by		
Checked by		
Approved by	REN	

ENGINEER OF RECORD:
STRUCTURES DESIGN OFFICE
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605 Suwannee Street, MS 33
Tallahassee, Florida 32399-0450

LOGO:

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 305, 355, 455, 510, 610 AND 760 PRESTRESSED CONCRETE PILES

Drawing No. 1 of 3

PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

Index No. 600

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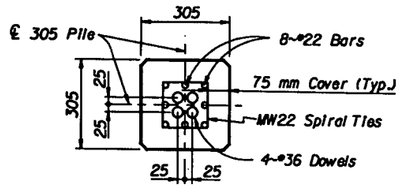
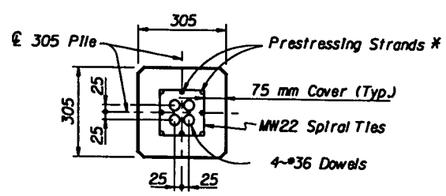
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-4

*For actual prestressing strand pattern, see Drawing 3 of 3.

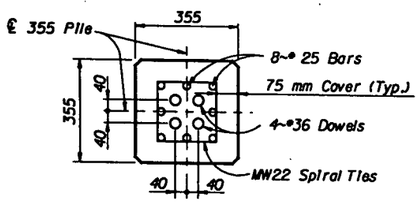


SECTION A-A
(See Reinf. Precast Splice Detail)

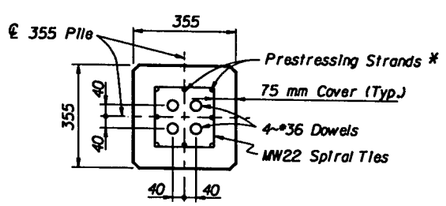


SECTION B-B
(See Prstr. Precast Splice Detail)

305 PILE

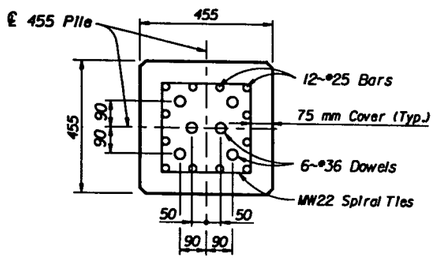


SECTION A-A
(See Reinf. Precast Splice Detail)

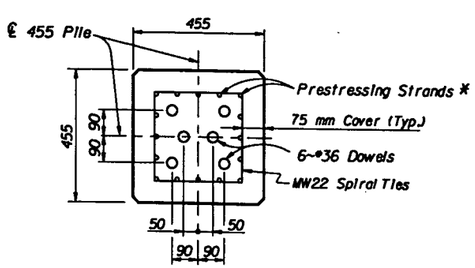


SECTION B-B
(See Prstr. Precast Splice Detail)

355 PILE

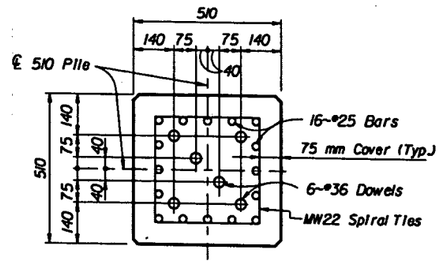


SECTION A-A
(See Reinf. Precast Splice Detail)

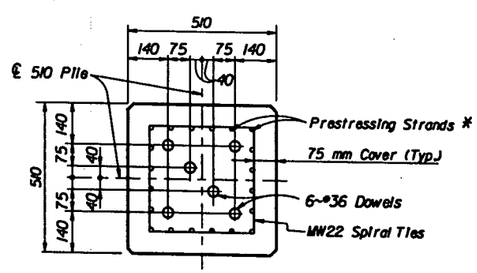


SECTION B-B
(See Prstr. Precast Splice Detail)

455 PILE

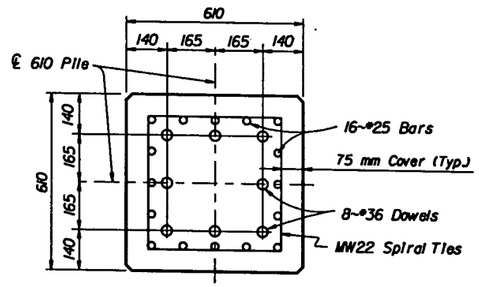


SECTION A-A
(See Reinf. Precast Splice Detail)

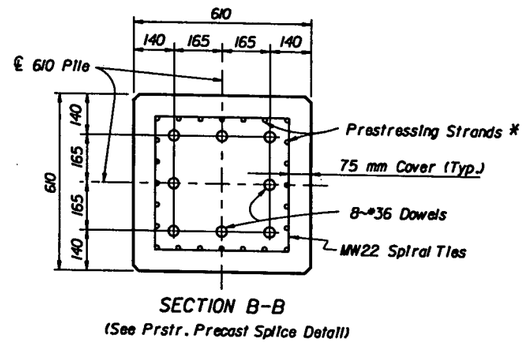


SECTION B-B
(See Prstr. Precast Splice Detail)

510 PILE

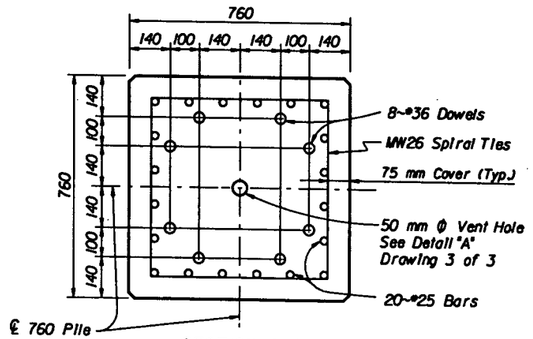


SECTION B-B
(See Reinf. Precast Splice Detail)

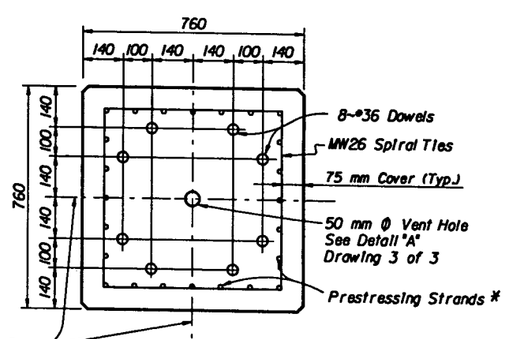


SECTION B-B
(See Prstr. Precast Splice Detail)

610 PILE



SECTION A-A
(See Reinf. Precast Splice Detail)



SECTION B-B
(See Prstr. Precast Splice Detail)

760 PILE

SEE SPLICE DETAILS & PILE NOTES ON SHEET 1 OF 3

NOTE: All dimensions are in millimeters (mm), except as noted.

REVISIONS						
Date	By	Description	Date	By	Description
			97R		

	Names	Dates
Drawn by	SHM	3-96
Checked by	TJB	7-96
Designed by		
Checked by		
Approved by	REN	

ENGINEER OF RECORD:
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LOGO:

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 305, 355, 455, 510, 610 AND 760 PRESTRESSED CONCRETE PILES

PROJECT NAME: S.R. 29 BRIDGE NOS. 050041, 050035, 050032 & 050031

Drawing No. 2 of 3

Index No. 600

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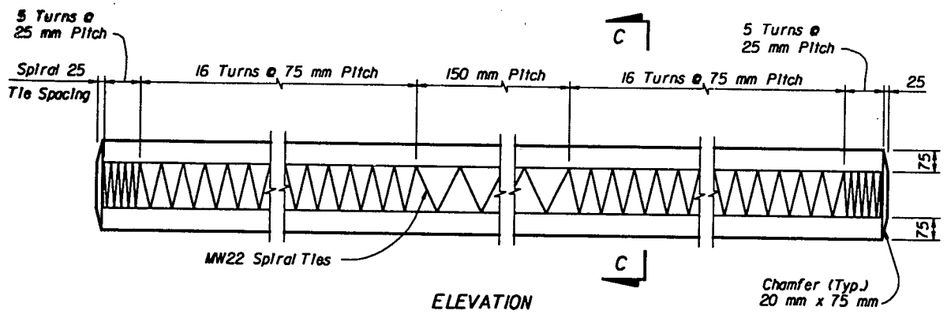
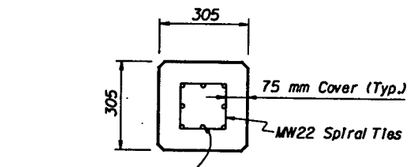
FILE NAME	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-5



ELEVATION

(All Piles except 760 Piles)

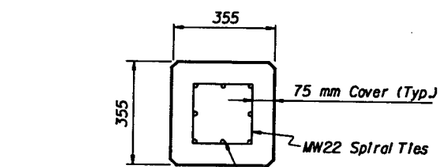


ALTERNATE STRAND PATTERN ***

8 ~ No. 11, Grade 1860 LRS at 96.5 kN each
8 ~ No. 13, Grade 1725 SR at 107.2 kN each
12 ~ No. 9, Grade 1860 LRS at 65.8 kN each
12 ~ No. 9, Grade 1860 SR at 69.4 kN each

SECTION C-C

305 PILE

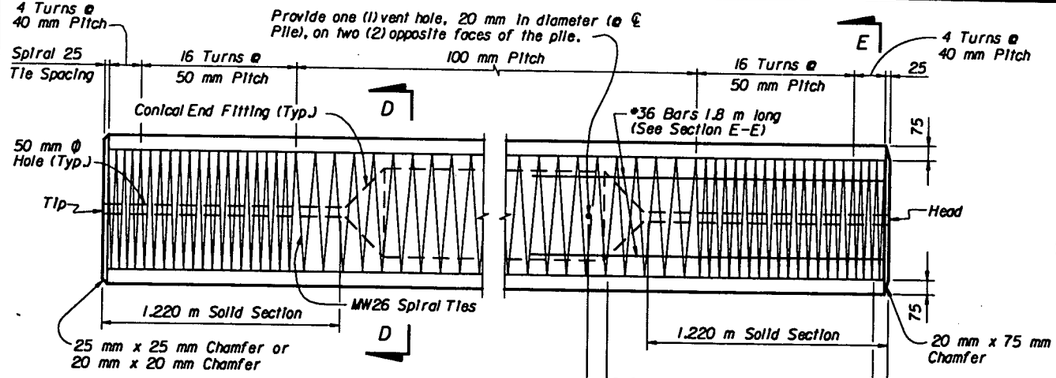


ALTERNATE STRAND PATTERN ***

8 ~ No. 13, Grade 1860 (Spec.) LRS at 133.4 kN each
8 ~ No. 13, Grade 1860 (Spec.) SR at 140.4 kN each
8 ~ No. 13, Grade 1860 LRS at 131.2 kN each
12 ~ No. 11, Grade 1860 SR at 94.3 kN each
12 ~ No. 13, Grade 1725 SR at 100.5 kN each
16 ~ No. 9, Grade 1860 SR at 71.5 kN each

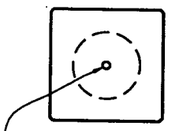
SECTION C-C

355 PILE

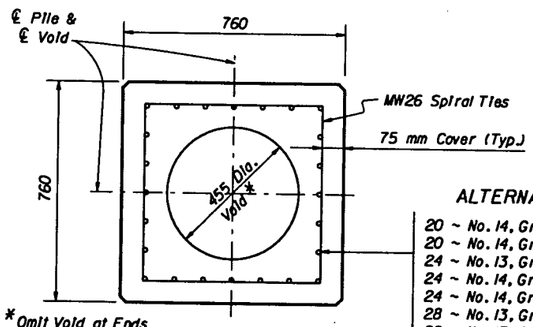


ELEVATION

(760 Piles)



DETAIL "A"

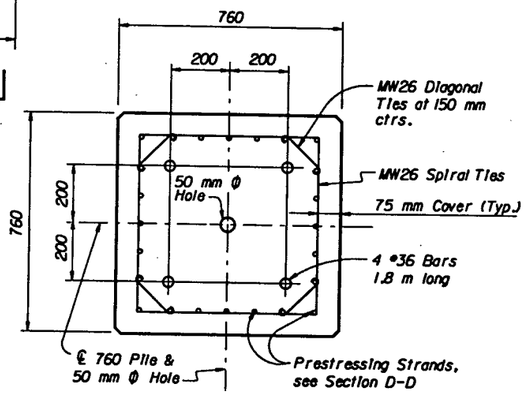


SECTION D-D

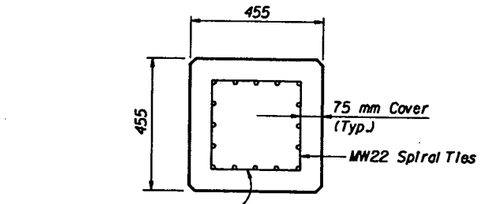
760 PILE

ALTERNATE STRAND PATTERN ***

20 ~ No. 14, Grade 1860 (Spec.) LRS at 171.7 kN each
20 ~ No. 14, Grade 1860 LRS at 172.9 kN each
24 ~ No. 13, Grade 1860 (Spec.) LRS at 143.7 kN each
24 ~ No. 14, Grade 1860 SR at 155.7 kN each
24 ~ No. 14, Grade 1860 (Spec.) SR at 156.6 kN each
28 ~ No. 13, Grade 1860 LRS at 125.0 kN each
28 ~ No. 13, Grade 1860 (Spec.) SR at 134.3 kN each



SECTION E-E

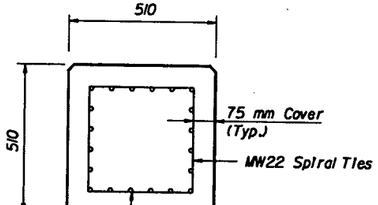


ALTERNATE STRAND PATTERN ***

12 ~ No. 13, Grade 1860 (Spec.) LRS at 144.1 kN each
12 ~ No. 14, Grade 1860 SR at 156.1 kN each
16 ~ No. 13, Grade 1860 SR at 119.2 kN each
20 ~ No. 11, Grade 1860 LRS at 89.0 kN each
20 ~ No. 11, Grade 1860 SR at 93.9 kN each
24 ~ No. 9, Grade 1860 LRS at 72.5 kN each.

SECTION C-C

455 PILE

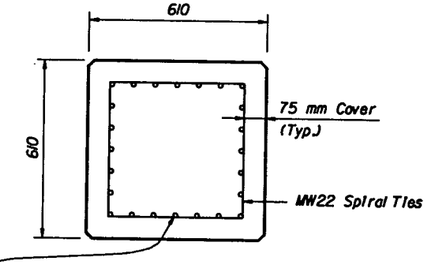


ALTERNATE STRAND PATTERN ***

16 ~ No. 13, Grade 1860 LRS at 133.4 kN each
16 ~ No. 13, Grade 1860 (Spec.) SR at 140.4 kN each
20 ~ No. 13, Grade 1860 SR at 117.9 kN each
24 ~ No. 11, Grade 1860 LRS at 91.2 kN each
24 ~ No. 11, Grade 1860 SR at 96.7 kN each

SECTION C-C

510 PILE



ALTERNATE STRAND PATTERN ***

20 ~ No. 13, Grade 1860 (Spec.) LRS at 150.4 kN each
20 ~ No. 14, Grade 1860 SR at 161.4 kN each
20 ~ No. 14, Grade 1860 (Spec.) SR at 164.8 kN each
24 ~ No. 13, Grade 1860 LRS at 129.0 kN each
24 ~ No. 13, Grade 1860 (Spec.) SR at 140.4 kN each

SECTION C-C

610 PILE

NOTES

** The 455 mm ϕ Void in the pile shall be positively vented to water or air after the final pile installation. If the 20 mm ϕ vents are included in the pile cut-off section, two (2) new holes, 20 mm in diameter , shall be drilled on two (2) opposite faces of the pile below the bottom of substructure elevation. If the pile void can not be vented directly to water or air, then venting shall be provided by the use of a 25 mm ϕ P.V.C. conduit through the 50 mm ϕ hole(s) or the 455 mm ϕ void to the outside. This might involve venting through a substructure cap or column. Voids between segments of spliced piles shall be connected by 50 mm ϕ hole(s). See Detail "A".

CONTRACTOR OPTION: The 760 mm pile may be cast SOLID by omitting the 455 mm void, the 50 mm holes, and the 20 mm vent holes. In this event, the Contractor shall submit for approval calculations and a proposed strand configuration that provide net prestressing after losses equal to 6.89 MPa.

*** Any of the given Alternate Strand Patterns may be utilized. The strands shall be located as follows : place one strand at each corner and place the remaining strands equally spaced between the corner strands.
The Total strand pattern shall be concentric with the nominal concrete section of the pile.

NOTE: All dimensions are in millimeters (mm), except as noted.

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REVISIONS						
Date	By	Description	Date	By	Description
			97R		

	Names	Dates
Drawn by	SHW	3-96
Checked by	TJB	7-96
Designed by		
Checked by		
Approved by	REN	

ENGINEER OF RECORD:
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LOGO:

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

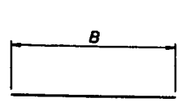
SHEET TITLE: 305, 355, 455, 510, 610 AND 760 PRESTRESSED CONCRETE PILES

Drawing No. 3 of 3

PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

Index No. 600

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-6



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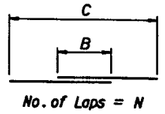

No. of Laps = N

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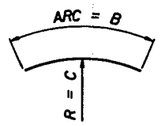

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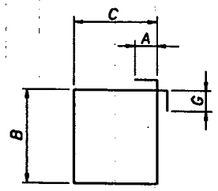

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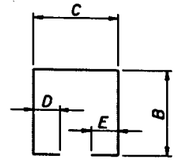

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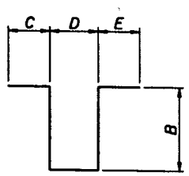

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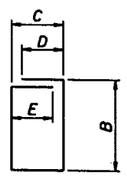

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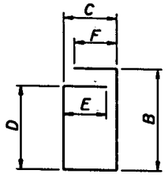

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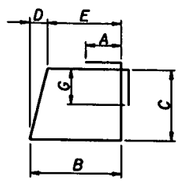

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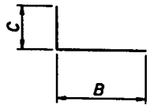

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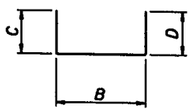

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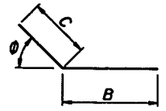

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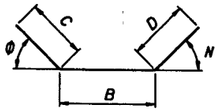

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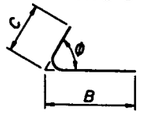

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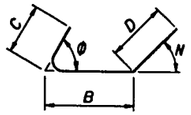

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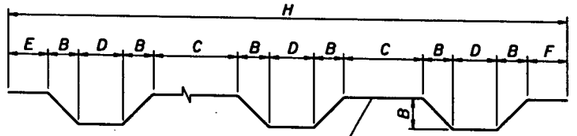
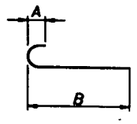


TYPE 16

Number of Beams or Walls = N
Number of D's = N-1
Number of B's = 2N-2
Number of C's = N-2
45° Typical



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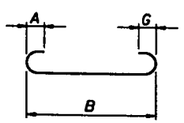
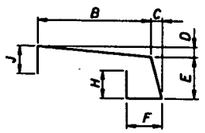
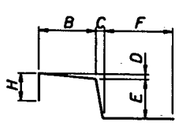


TYPE 18

NOTE: Type 17 Bars used in Superstructures shall be tilted to obtain Minimum cover.



TYPE 19



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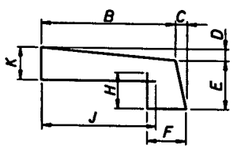

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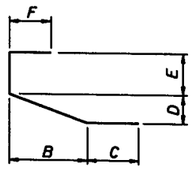

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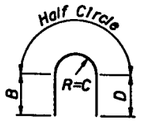
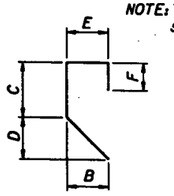


TYPE 23

TYPE 24



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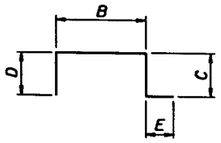
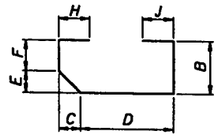


TYPE 26



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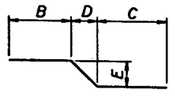
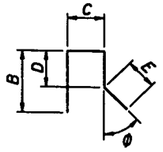


TYPE 28



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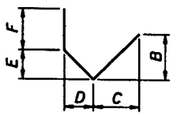
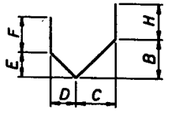
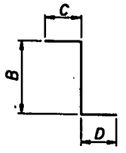


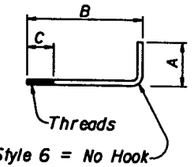
TYPE 30



TYPE 31

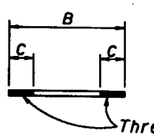


TYPE 32

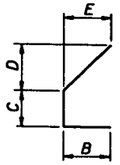


Style 6 = No Hook

TYPE 33



TYPE 34



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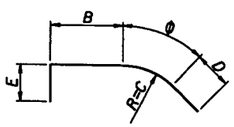

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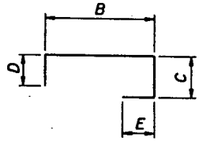

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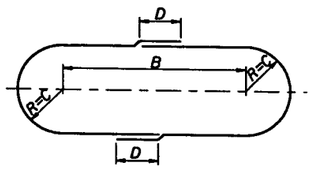
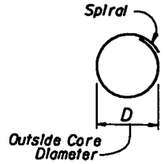
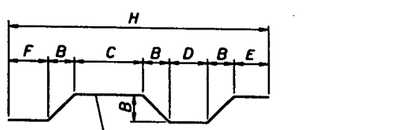


TYPE 38



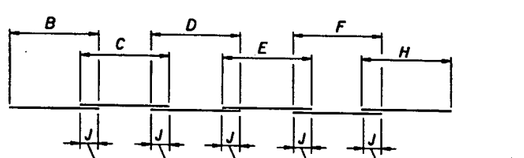
TYPE 39

C = Pitch
B = Overall Height
Φ = Spirals shall be made of ASTM A615M Grade 420 billet steel using either plain or deformed bars ASTM A615M or Cold drawn steel wire ASTM A82.
N = Total number of closed turns at Top and Bottom of columns
Splices may be accomplished by lapping 1.5 turns. Cost of Channel Spacers and Splices shall be included in the Contract Unit Price for Reinf. Steel (Substr.)

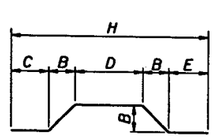


Number of Beams or Walls = N
Number of D's = N-1
Number of B's = 2N-1
Number of C's = N-1
45° Typical

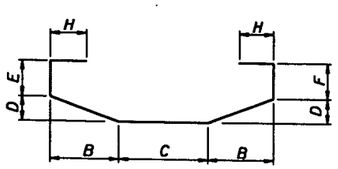
TYPE 40



TYPE 41



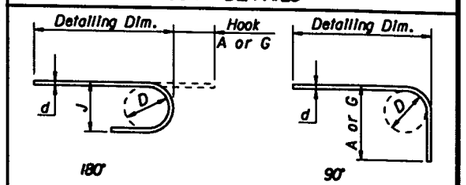
TYPE 42



TYPE 43

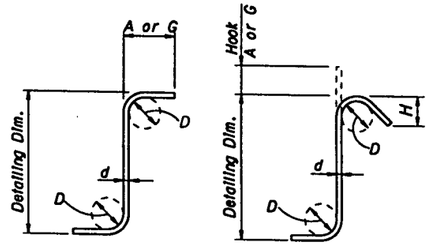
NOTE: For Bar Dimensions See REINFORCING BAR LIST Sheet.

HOOK DETAILS



180° 90°

BAR SIZE	D	180° HOOKS A OR G	180° HOOKS J	90° HOOKS A OR G
#10	60	125	80	150
#13	80	150	105	200
#16	95	175	130	250
#19	115	200	155	300
#22	135	250	180	375
#25	155	275	205	425
#29	240	375	300	475
#32	275	425	335	550
#36	305	475	375	600
#43	465	675	550	775
#57	610	925	725	1050
STYLE		1		3



90° 135°

STIRRUPS (TIES SIMILAR)

RECOMMENDED STIRRUP & TIE HOOK DIMENSIONS

BAR SIZE	D	90° HOOKS A or G	135° HOOKS A or G	135° HOOKS H*
#10	40	105	105	65
#13	50	115	115	80
#16	65	155	140	95
#19	115	305	205	115
#22	135	355	230	135
#25	155	410	270	155
STYLE		4	5	

STYLE 6 = NO HOOK

* Dimension is approximate.

Hook Styles Detailed on this sheet are for illustration Only.

Actual Hook Style for any particular bar will be shown under A or G Heading on REINFORCING BAR LIST sheet.

All dimensions are in millimeters (mm), except as noted.

All Dimensions are out-to-out.

REVISIONS						
Date	By	Description	Date	By	Description
			97R		

	Names	Dates
Drawn by	DJR	3-96
Checked by	TJB	6-96
Designed by		
Checked by		
Approved by	TJB	

ENGINEER OF RECORD:
STRUCTURES DESIGN OFFICE
CENTRAL OFFICE
605 Suwannee Street, MS 33
Tallahassee, Florida 32399-0450

LOGO:

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: STANDARD BAR BENDING DETAILS

Drawing No. 1 of 1

PROJECT NAME: S.R. 29 BRIDGE NOS. 050041, 050035, 050032 & 050031

Index No. 1300

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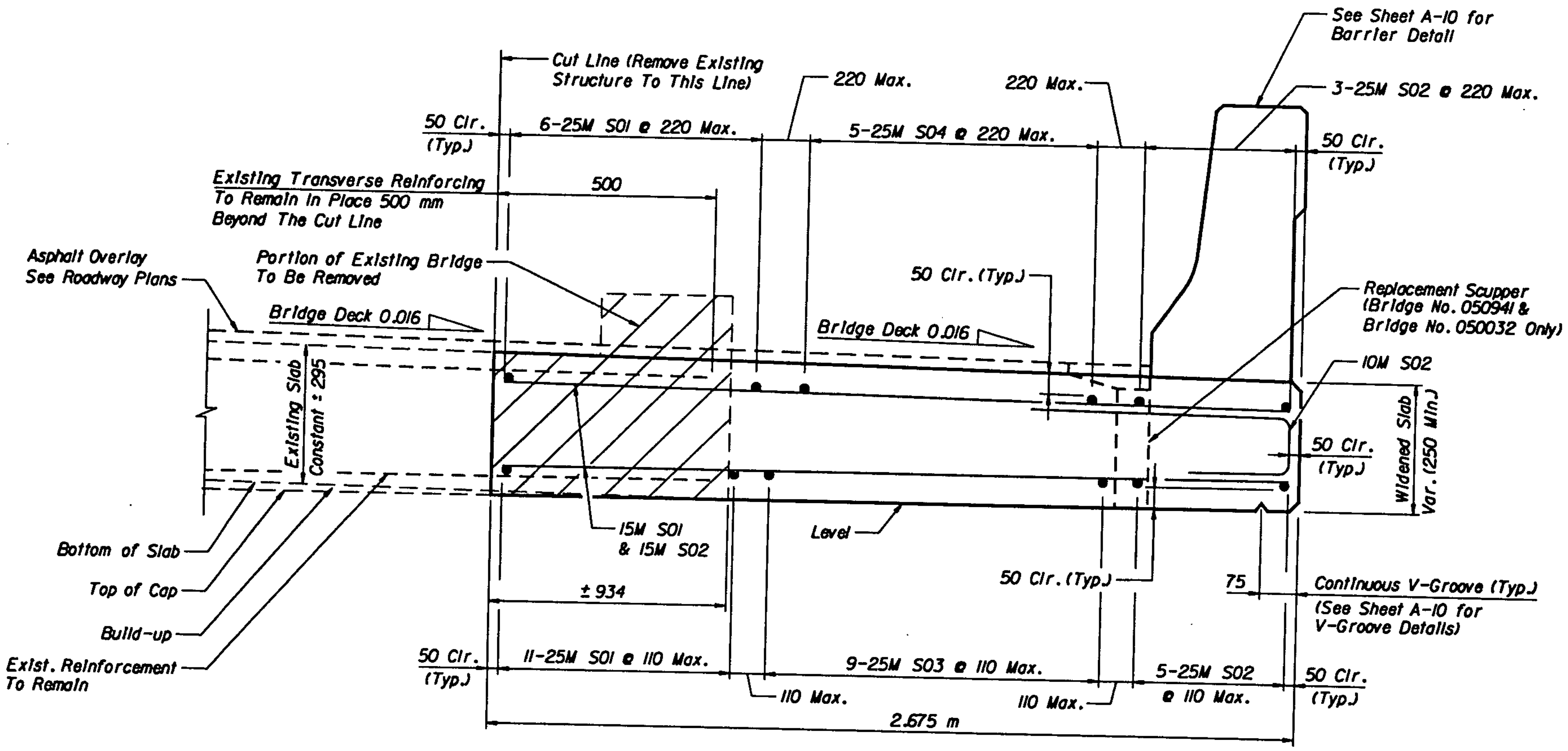
23 JUN 98

Fed. Road Div. No.	State	Project No.	Fiscal Year	Sheet No.
3	FLA.			A-7



DETAIL A

NOTES:

1. The existing deck slab shall be scored along the cut line for the full length of each span by sawing to the top of the reinforcing bars. The Contractor shall avoid damaging the reinforcing steel during the sawing operation and slab removal.

2. The existing transverse reinforcing is to remain in place. The bars shall be cleaned, straighted and embedded in the widened slab. If bars are broken or otherwise determined to be unsatisfactory by the Engineer, they shall be replaced by dowel bars.

3. All contacting surfaces between the old and new concrete shall be cleaned immediately before casting concrete.

4. Dowels shall be set in approved epoxy or capsule adhesive (Class IV). Where reinforcing is encountered, shift hole to clear. The cost of approved epoxy or capsule adhesive and installing dowels shall be included in the Contract Unit Price of Item No. 2400-4-4, Class IV Concrete (Superstructure).

5. Dowel bar holes shall be cleaned thoroughly and free of moisture prior to anchor installation. See adhesive manufacture's instructions for specific installation procedures.

6. The cost of dowel bars required to replace broken or unsatisfactory existing transverse reinforcing shall be included in the Contract Unit Price of Item No. 2415-1-4, Reinforcing Steel (Superstructure).

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
ENGINEERS•ARCHITECTS•PLANNERS
901 PONCE DE LEON BLVD., SUITE 900
CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-8227
FL REGISTRATIONS: EB0005822 AAC002142

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: MISCELLANEOUS DETAILS

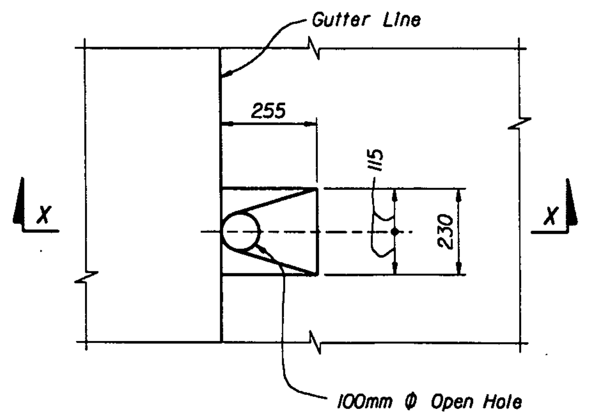
PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

Drawing No. 1 of 2

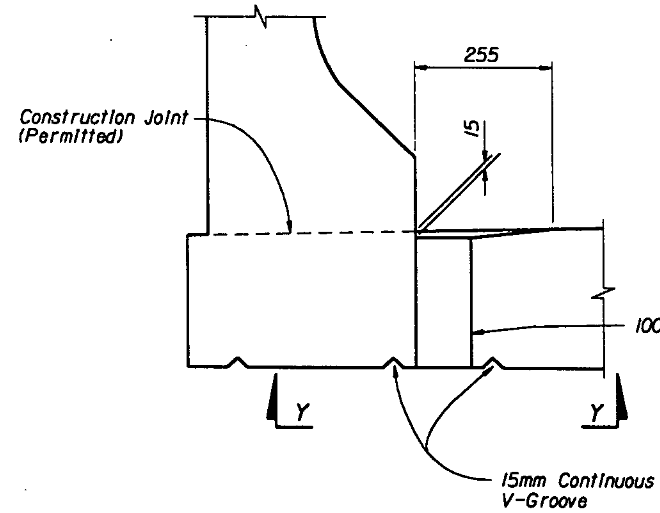
Index No.

23 JUN 98 11:32:11 \\projects\9523-01\drawings\working\greeted01.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-8

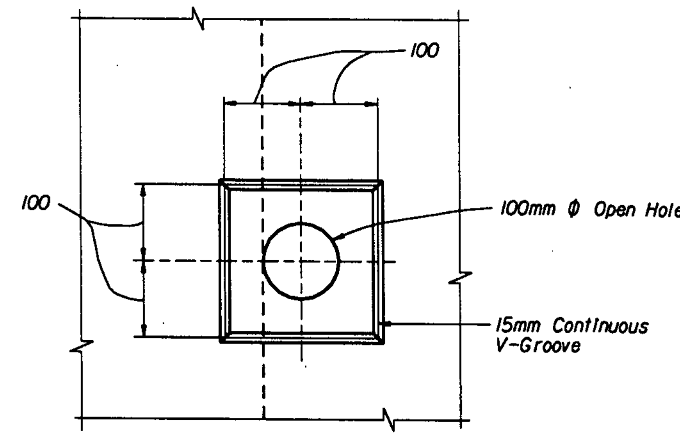


PLAN

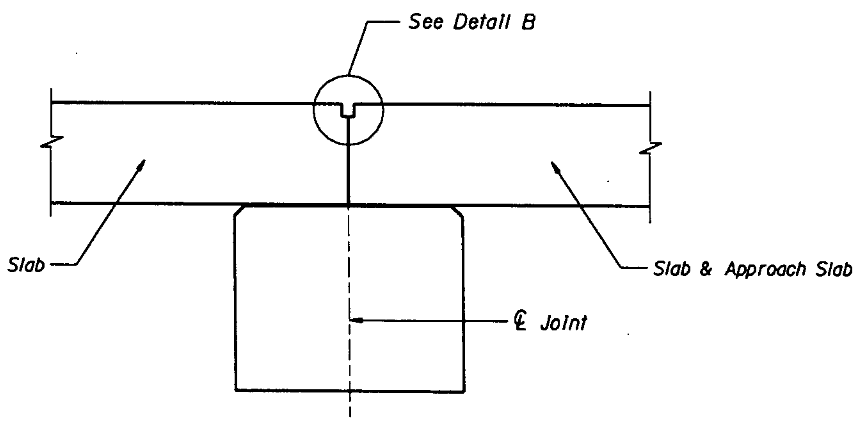


SECTION X-X
REPLACEMENT SCUPPER
DRAIN DETAILS

* The cost of Scuppers shall be included in the Cost of Pay Item 2400-4-4 Concrete Class IV (Superstructure).



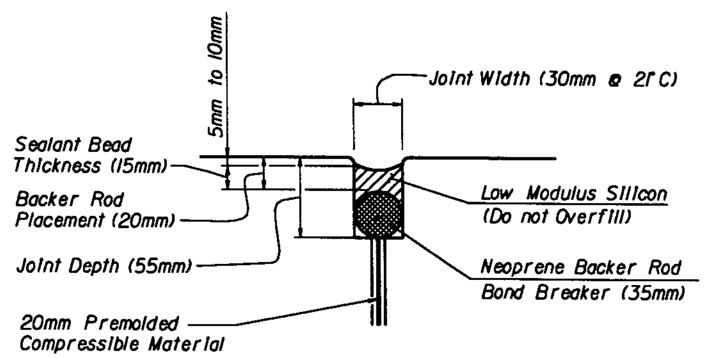
VIEW Y-Y



SECTION AT JOINT (TYP)

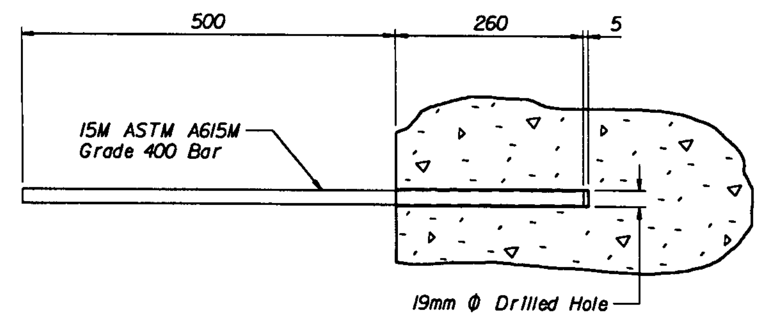
Reinforcing in Cap omitted for clarity.

NOTE: Clean existing joints thoroughly and place throughout entire joints new Neoprene Backer Rod and Low Modulus Silicon. Cleaning and resealing shall be paid for under Pay Item 2350-72.



DETAIL "B"

* The cost of joint construction as shown in Detail "B" shall be included in the Cost of Pay Item Number 2350-72.



DOWEL DETAIL

(For broken or unsatisfactory existing transverse reinforcing)

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by		

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
ENGINEERS•ARCHITECTS•PLANNERS
901 PONCE DE LEON BLVD., SUITE 900
CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-0227
FL REGISTRATIONS: EB0005022 AAC002142

SEAL

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: MISCELLANEOUS DETAILS

PROJECT NAME: S.R. 29 BRIDGE NOS. 050941, 050035, 050032 & 050031

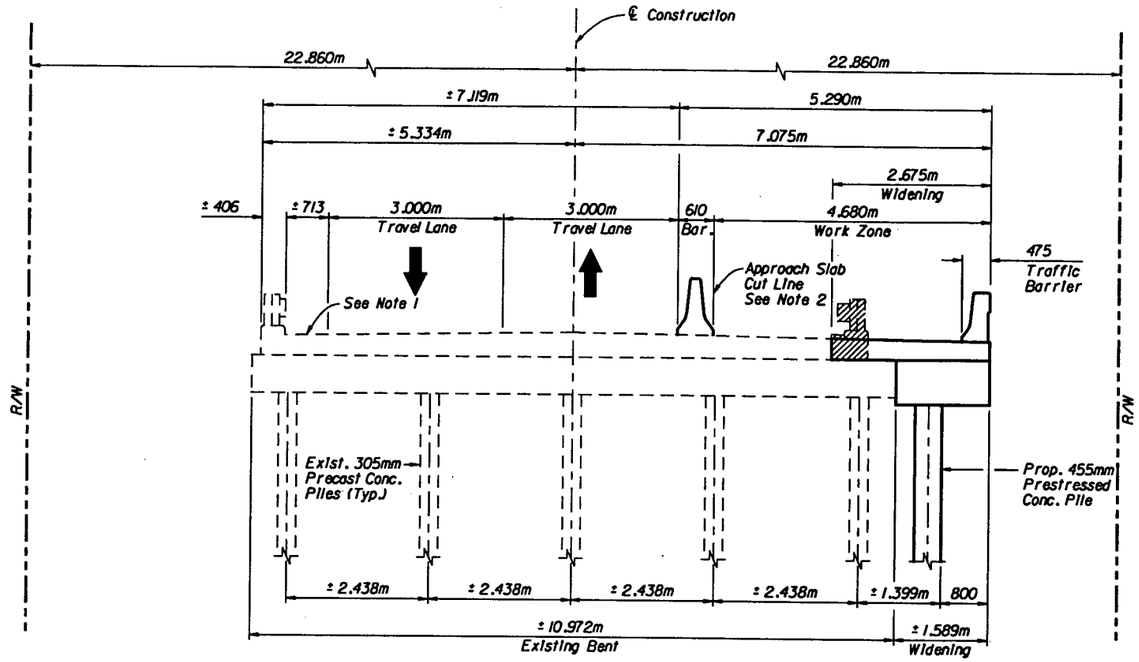
Drawing No. 2 of 2

Index No.

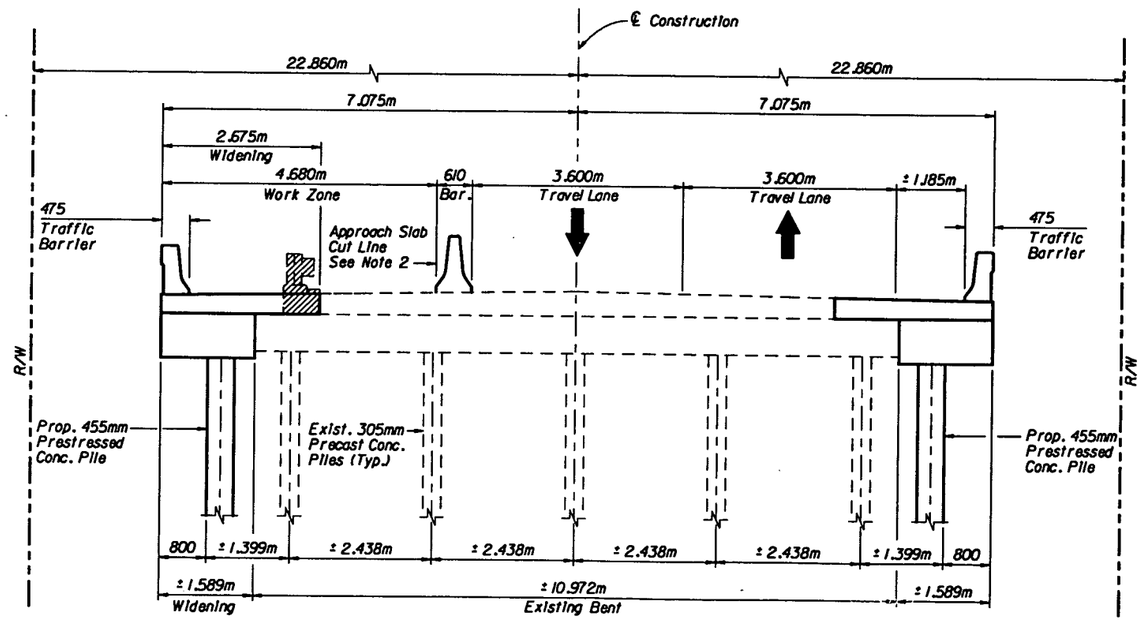
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-9

NOTES:

1. Temporary Pavement will be added along the existing roadway edge of pavement at the bridge approaches to accommodate Phase I Maintenance of Traffic. Please refer to the Roadway Plans for the TCP.
2. See the Approach Slab Sheet in Roadway Plans for details.
3. Asphalt on the existing bridge deck and on the proposed widening deck is not shown for clarity. See Roadway Plans for details.



PHASE I CONSTRUCTION



PHASE II CONSTRUCTION

PHASING NOTES:

PHASE I

Mill and Resurface as per Roadway Plans.

Install temporary concrete barrier as indicated on the Traffic Control Plans.

Widen East side of approach slab. Remove portion of existing wingwalls and cut piles to the elevation as shown in the abutment detail drawings. Remove existing railing and scuppers. Drive 455mm prestressed concrete pile at each intermediate bent location. Cast new portion of wingwall and widen existing deck over modified wingwalls and modified intermediate bents.

Place asphalt layer over widened deck according to the Roadway Plans.

PHASE II

Install temporary concrete barrier as indicated on the Traffic Control Plans.

Widen West side of approach slab. Remove portion of existing wingwalls and cut piles to the elevation as shown in the abutment detail drawings. Remove existing railing and scuppers. Drive 455mm prestressed concrete pile at each intermediate bent location. Cast new portion of wingwall and widen existing deck over modified wingwalls and modified intermediate bents.

PHASE III

Remove temporary concrete barrier.

Resurface according to the Roadway Plans. See Traffic Control Plans.

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23 JUN 98 12:59:27

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	BL	8-97
Checked by	SB	8-97
Designed by	SB	8-97
Checked by	RTC	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
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Tel: 407-875-1550 Fax: 407-875-0560

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
ENGINEERS • ARCHITECTS • PLANNERS
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CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-8227
FL REGISTRATIONS: EB0005822 AAC002142

SEAL:
6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

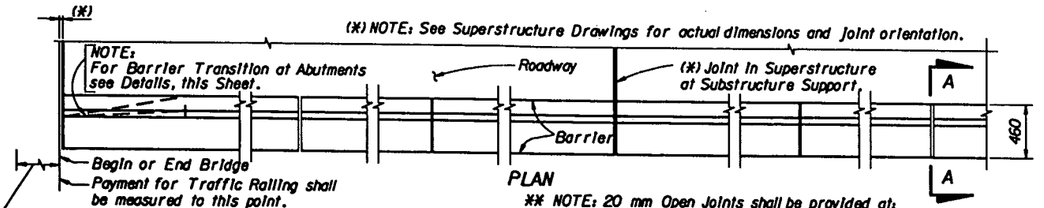
ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: PHASE CONSTRUCTION

PROJECT NAME: S.R. 29 BRIDGE NOS. 050041, 050035, 050032, & 050031

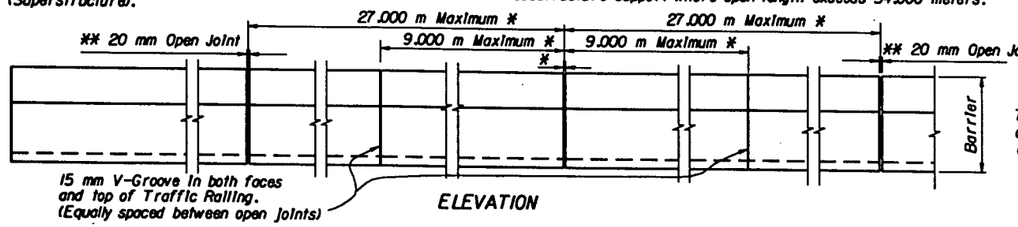
Drawing No.

Index No.

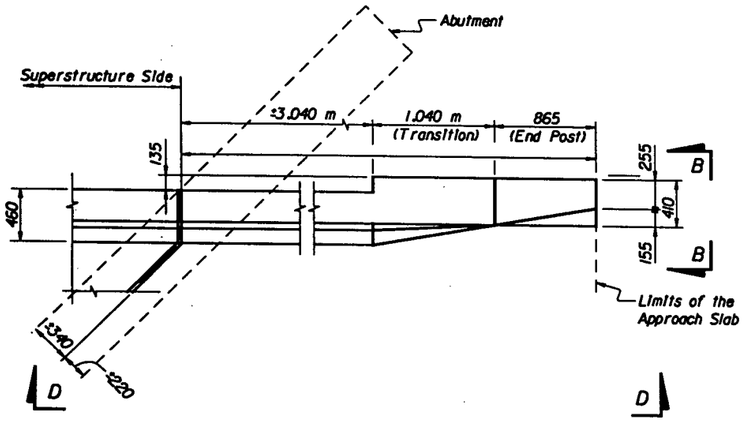


PLAN

** NOTE: 20 mm Open Joints shall be provided at:
1 - Substructure supports where superstructure slab is continuous.
2 - Midspan where span length exceeds 27.000 meters.
3 - Intermediate locations (equally spaced) between midspan and substructure support where span length exceeds 54.000 meters.

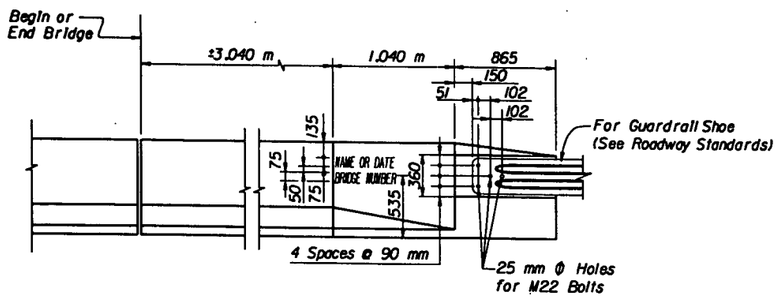


ELEVATION

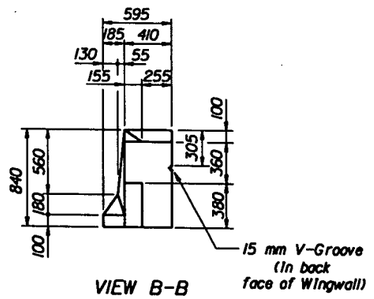


PLAN

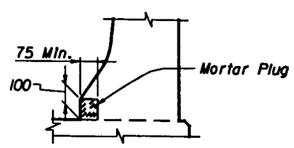
NOTE: For Details of Barrier on Approach Slab See Roadway Plans.



VIEW D-D



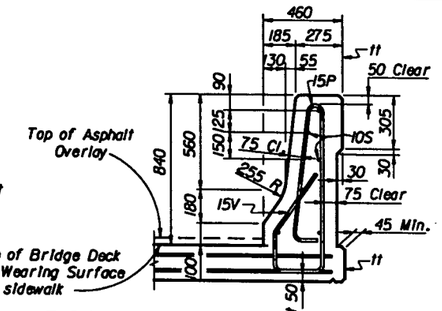
VIEW B-B



SECTION A-A

NOTE: When open joint in Barrier is not coincident with joint in the superstructure, the lower 100 mm portion of the open joint shall be plugged by filling with mortar in accordance with Article 400-15.1.

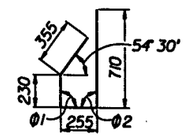
ROADWAY CROSS-SLOPE	LOW GUTTER		HIGH GUTTER	
	Ø1	Ø2	Ø1	Ø2
0% to 2%	90°	90°	90°	90°
2%+ to 6%	93°	87°	87°	93°
6%+ to 10%	96°	84°	84°	96°



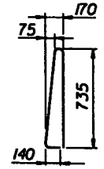
TYPICAL SECTION THRU TRAFFIC RAILING

†For Slabs 200 mm thick or less. If Slab is thicker than 200 mm or Barrier is located on a Retaining Wall, embed Bar 15V 155 mm.

††Where Barriers of adjacent bridges are to be built back to back, the outside vertical plane of the Barrier and Slab may coincide if so shown on the Superstructure Plans.



BAR 15V (No. 15M)



BAR 15P (No. 15M)

BENDING DIAGRAMS

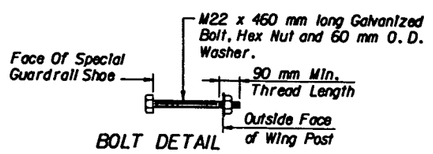
BAR BENDING NOTES

1. All bar dimensions in the bending diagrams are out to out.
2. Bars 15P and 15V shall be bent around a pin diameter = 65 mm.
3. The 230 mm and the 710 mm vertical dimensions shown for Bar 15V are based on a bridge slab 200 mm thick or greater and without raised sidewalk or wearing surface. If the slab thickness is less than 200 mm decrease these dimensions by an amount equal to the difference in the thicknesses; and if a wearing surface or a raised sidewalk is to be provided, increase the dimensions by an amount equal to the wearing surface thickness or sidewalk thickness.
4. Reinforcement for Barrier on Retaining Wall shall be the same as detailed above for a 200 mm slab with Ø1 = Ø2 = 90°.

TYPICAL TRAFFIC RAILING QUANTITIES

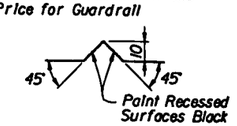
CONCRETE: 0.258 m^3 per meter.
REINFORCING STEEL: 29.67 kg per meter.
(Above quantities are based on 200 mm slab and 2% cross-slope).

NOTE: All dimensions are in millimeters (mm), except as noted.



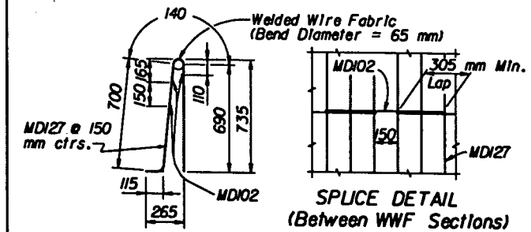
BOLT DETAIL

NOTE: The Cost of Bolts is to be included in the Contract Unit Price for Guardrail



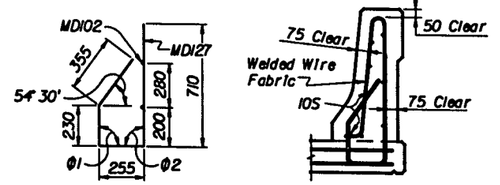
TO FORM INSCRIBED LETTERS AND FIGURES SECTION THRU RECESSED "V" GROOVE

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			A-10



SPLICE DETAIL (Between WWF Sections)

WELDED WIRE FABRIC



ALTERNATE REINFORCING DETAILS

The Contractor may utilize Welded Wire Fabric in lieu of all Bars 15P and 15V and Four (4) of the Bars 10S. Welded Wire Fabric shall conform to ASTM A497.

REINFORCING STEEL NOTES

All vertical reinforcing steel in Traffic Railing shall be No. 15M Bars spaced at 200 mm c.c. and all longitudinal reinforcing steel shall be No. 10M Bars. At all open joints all reinforcing shall have 50 mm minimum cover. At all construction joints Bars 10S (No. 10M) may be continuous or spliced. All splices in Bars 10S shall be 405 mm minimum.

TRAFFIC RAILING NOTES

CONCRETE AND REINFORCING STEEL: See General Notes.

PAYMENT: Traffic Railing on Bridges shall be paid for per linear meter (Item No. 2400-148-1), which shall include all Concrete and Reinforcing Steel. Traffic Railing shall be measured along the centerline of the top surface of the concrete barrier.

MARKERS: Markers recording the elevation shall be placed on top of the Traffic Railing at the Abutments. On bridges longer than 30.0 m, one marker shall be placed at each end of the bridge. On bridges 30.0 m or less, one marker shall be placed at one end of the bridge only. Markers are to be furnished by the Florida Department of Transportation and installed by the Contractor. The cost of installing the markers shall be included in the Contract Unit Price for Traffic Railing (Barrier).

TRAFFIC RAIL CONSTRUCTION: The contractor may construct the railing by the use of stationary removable forms or by the use of slip forms without altering the rail dimensions shown above.

SUPERELEVATED BRIDGES: At the option of the Contractor, Traffic Railing and Abutment End Posts on superelevated bridges, may be constructed perpendicular to the roadway surface. The cost of modifications shall be at the Contractor's expense.

BOLTS: Bolts, Nuts, and Washers shall be hot dip galvanized in accordance with ASTM A153.

RETAINING WALL: If the Barrier is to be provided on a retaining wall, the Barrier Section shall be as shown above. Other details such as transition for guardrail attachment, maximum spacing of 20 mm open joint and 15 mm V-Groove shall also apply. See Wall Plans for Payment.

NAME AND BRIDGE NUMBER: The Name and Bridge Number to be placed on the Traffic Railing shall be seen on the driver's right when approaching bridge. The date is to be placed on the driver's left when approaching the bridge. The date shall be the year the bridge is constructed. Black plastic letters and figures 75 mm in height, as approved by the Engineer, may be used, in lieu of letters and figures formed by 10 mm V-Grooves. V-Grooves shall be formed by preformed letters and figures.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	7-97
Checked by	HSH	7-97
Designed by	HSH	7-97
Checked by	JR	7-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
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FL REGISTRATIONS: EC0005622 AAC002142

SEAL:
6/29/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: MODIFIED TRAFFIC RAILING BARRIER

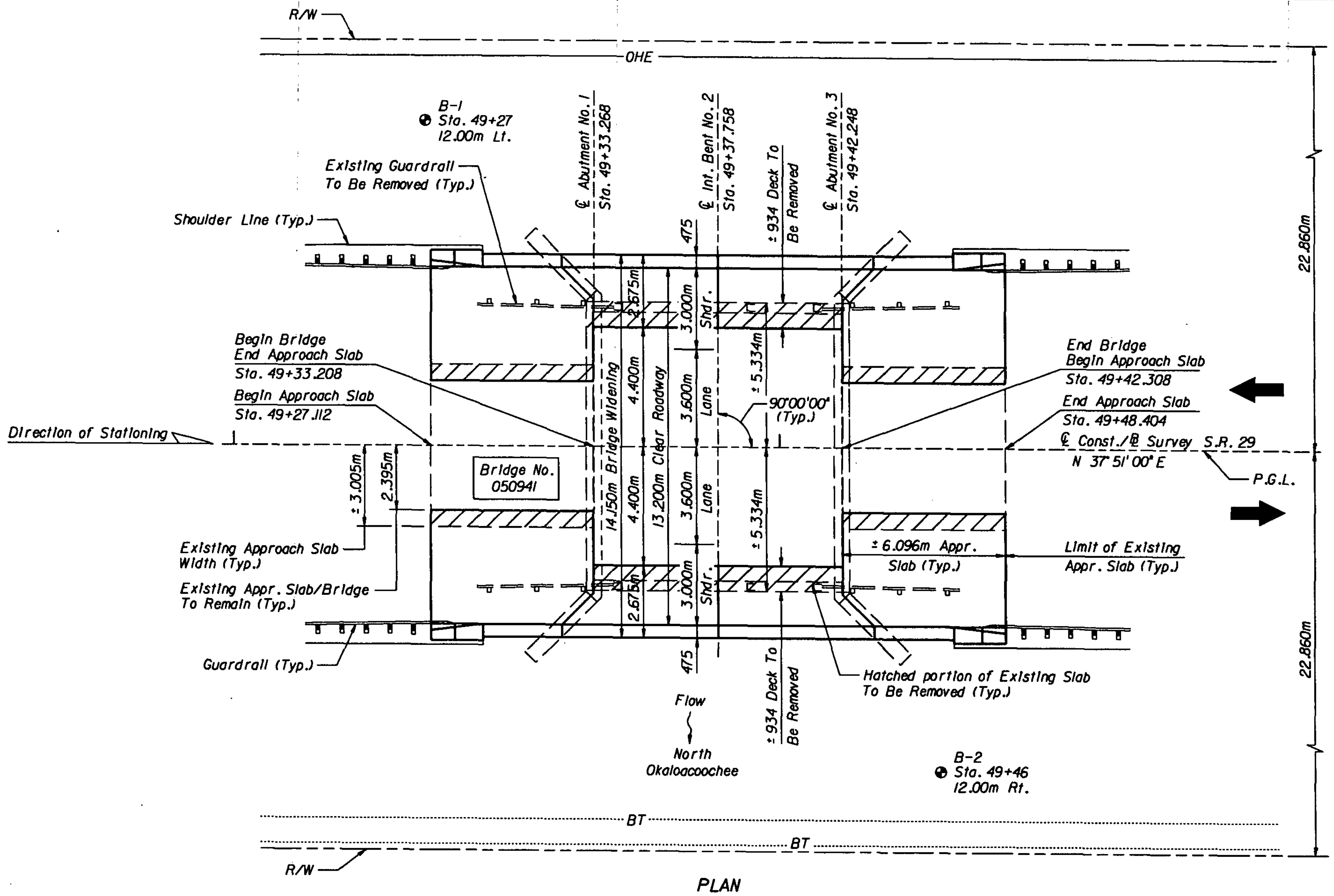
Drawing No.

PROJECT NAME: S.R. 29 BRIDGE NOS. 050041, 050035, 050032 & 050031

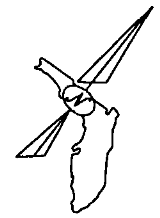
Index No.

23 JUN 98 #3508 i:\projects\9523-01\drawings\working\mod700.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-1



PLAN

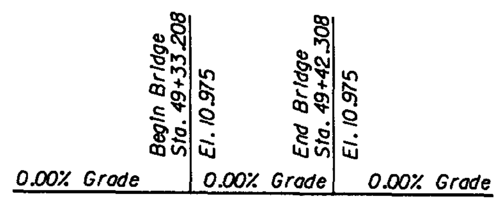


TRAFFIC DATA

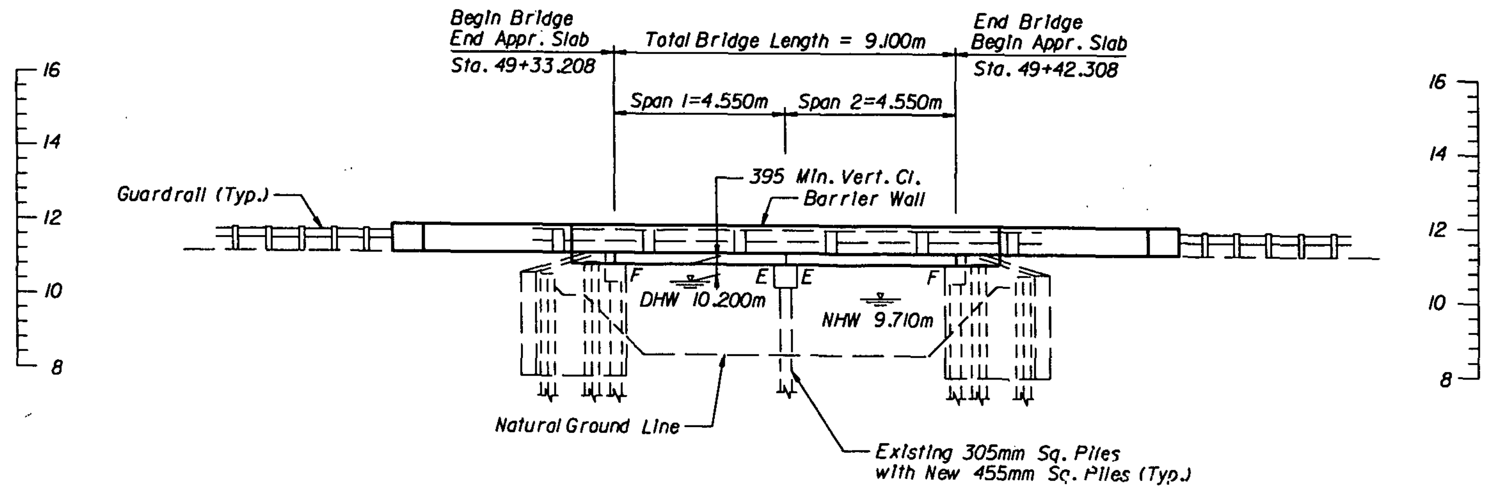
1997 AADT = 4300
1999 EST. AADT = 4500
2019 EST. AADT = 7000

K = 10.9%
D = 53.9%
T = 25.0% (24 HR.)
T = 12.5% (DESIGN HR.)

DESIGN SPEED 100 km/h



PROFILE GRADE S.R. 29
(Along ℄ Construction)



ELEVATION

NOTE:

1. Elevations shown in the Profile Grade Diagram refer to top of deck elevations. The PGL elevations is a maximum of 70 mm above the ℄ deck elevation due to the asphalt overlay. Refer to the Roadway Plans for the asphalt overlay.

W.P.I. No. 1110874

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAMES	DATES
DRAWN BY	BL	8-97
CHECKED BY	SB	8-97
DESIGNED BY	SB	8-97
CHECKED BY	RTC	8-97
APPROVED BY		

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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MIAMI (305)-445-2900 FLORIDA (800)-448-0227
FL REGISTRATIONS: EB0005822 AAC002142

SEAL:
6/22/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: PLAN AND ELEVATION

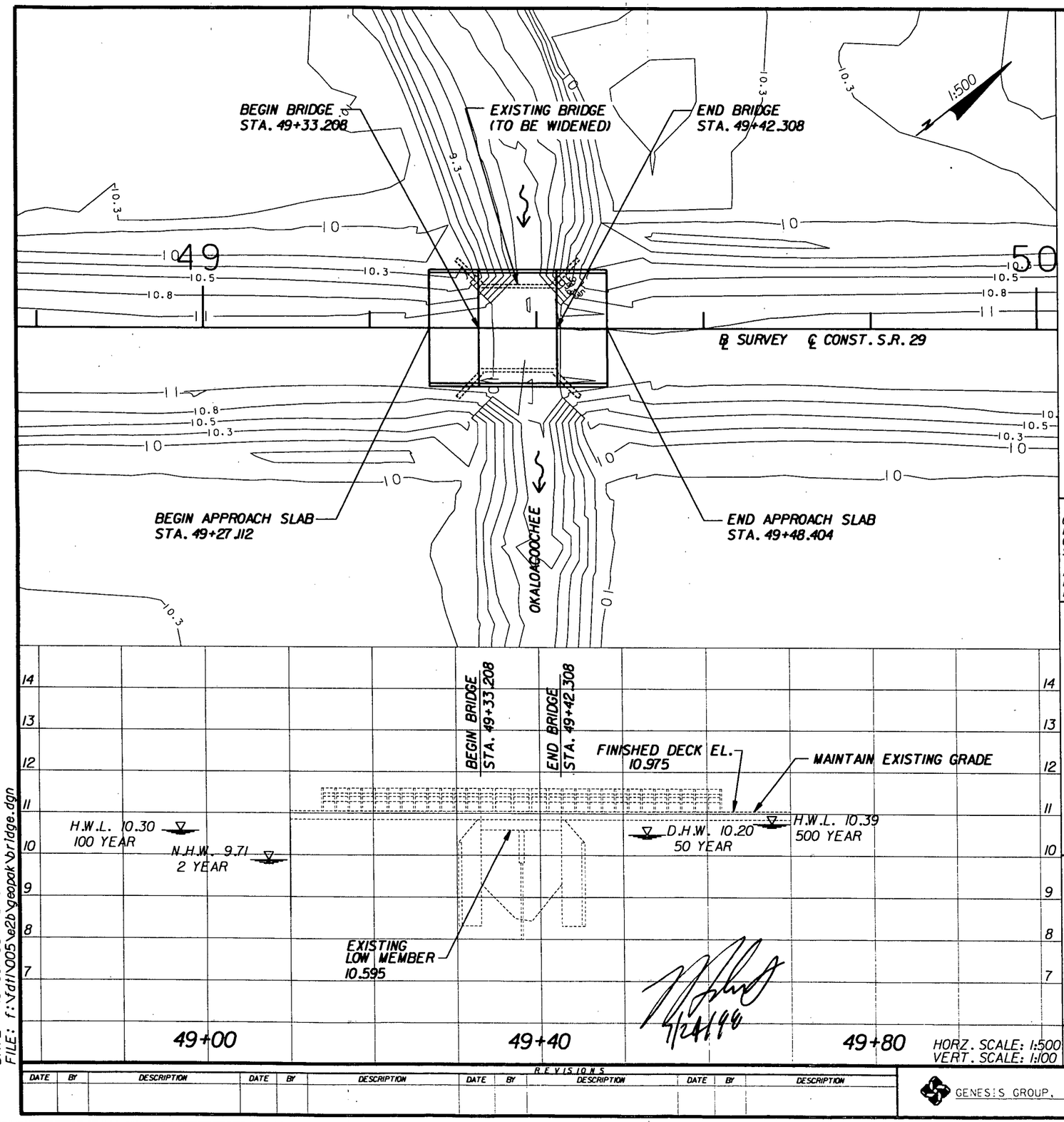
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941

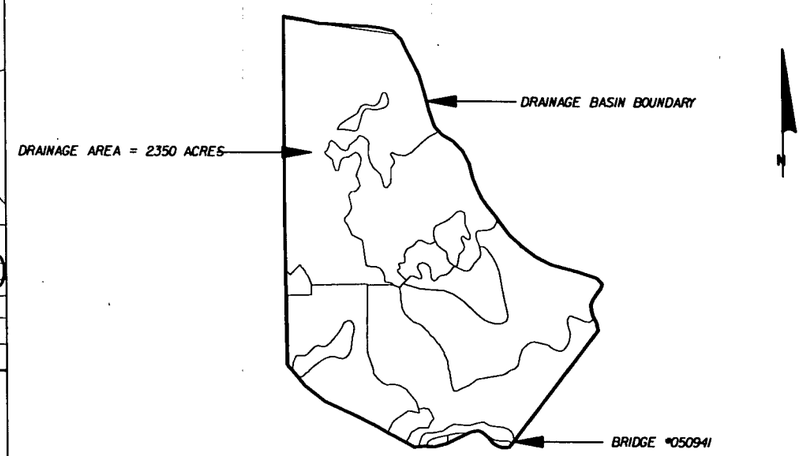
DRAWING NO.

INDEX NO.

'22 JUN 98 18:33:22 Brett Loeffler t:\07\7_01\okr\05094\gnpe94.dgn

STATE PROJ. NO.	SHEET NO.
05090-3511	B-2





(REFERENCE)	EXISTING STRUCTURES (1)	(2)	(3)	(4)	ASSUMED CONFIGURATION
FOUNDATION	0.305 PILES				0.305 PILES
OVERALL LENGTH	(+/-)19.100				(+/-)19.100
SPAN LENGTH	(+/-)14.550				(+/-)14.550
TYPE CONSTRUCTION	FLAT SLAB				FLAT SLAB
AREA OF OPENING @ H.W.	(+/-)19.400M2				(+/-)19.402M2
ROADWAY WIDTH	10.668				14.150
ELEV. LOW MEMBER	10.595				10.595

HYDRAULIC DESIGN DATA

NOTE: The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticiated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgements and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

DEFINITIONS:
Design Flood: The flood utilized to assure a desired level of hydraulic performance.
Base Flood: The flood having a 1% chance of being exceded in any year. (100 Year Frequency)
Overtopping Flood: The flood which causes flow over the highway, over a watershed divide or thru emergency relief structures.
Greatest Flood: The most severe flood which can be predicted where overtopping is not practicable.

WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) 9.71 M.H.W. N/A M.L.W. N/A

FLOOD DATA:	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	☐ OVERTOPPING FLOOD ☒ GREATEST FLOOD
STAGE ELEV. NGVD (M)	UNKNOWN	10.20	10.30	10.39
DISCHARGE (CM/S)	UNKNOWN	11.89	14.61	22.0
AVERAGE VELOCITY (M/S)	UNKNOWN	0.59	0.52	0.48
EXCEEDANCE PROB. (%)	UNKNOWN	2.0%	1.0%	0.2%
FREQUENCY (YR.)	UNKNOWN	50	100	500

HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 49+33.208 END BRIDGE STATION 49+42.308 SKEW ANGLE 0°
2. CHANNEL SECTION: ℄ STATION 49+38 BOTTOM WIDTH 9.14 ELEV. 8.45 SIDE SLOPE 4:1
3. LIMITS OF CHANNEL EXCAVATION: RT. 0 LT. 0
4. CLEARANCE: NAVAGATION: HORIZ. N/A VERT. N/A ABOVE EL. N/A DRIFT: HORIZ. 9.14 VERT. 1.28 ABOVE EL. 9.71
5. SCOUR PREDICTION: 100 YEAR DESIGN SCOUR EL. 6.70 DEPTH = 4.19
   500 YEAR SCOUR EL. 6.88 DEPTH = 4.55
6. SLOPE PROTECTION: NONE
7. DECK DRAINAGE: RUNOFF WILL SHEET FLOW OFF BRIDGE THRU REPLACEMENT SCUPPERS
8. OTHER:

REMARKS:

DATE: 10-Oct-96 16:18
FILE: f:\fdi\005\e2b\geopak\bridge.dgn

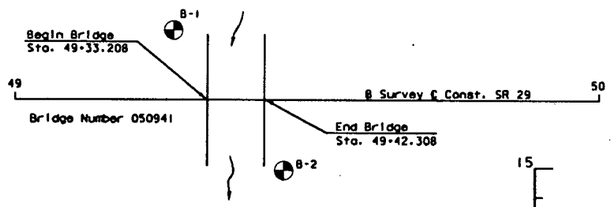
REVISIONS												
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE HYDRAULIC RECOMMENDATIONS
S.R. 29 BRIDGE NO. 050941

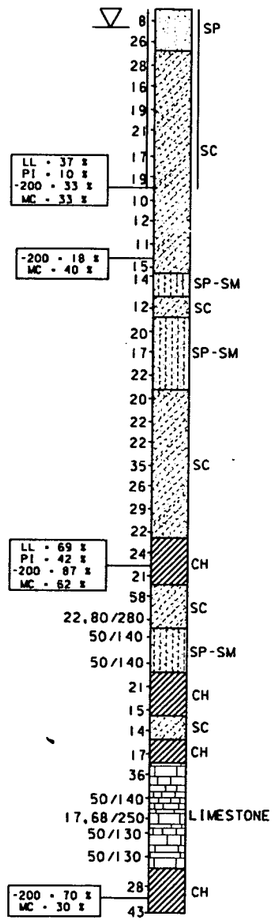
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	05090-3511		B-3



NTS

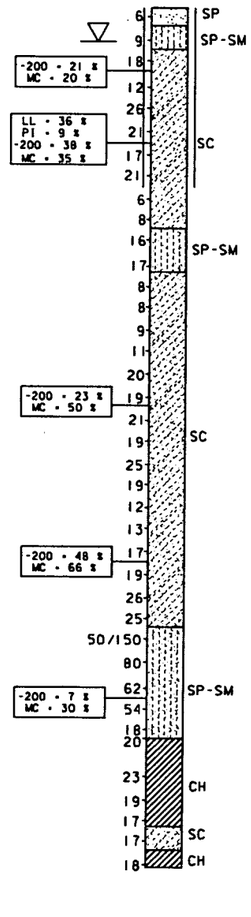
BORING NO. B-1
Sta. 49+27
12m LT. of Centerline
Elev. 10.53 m

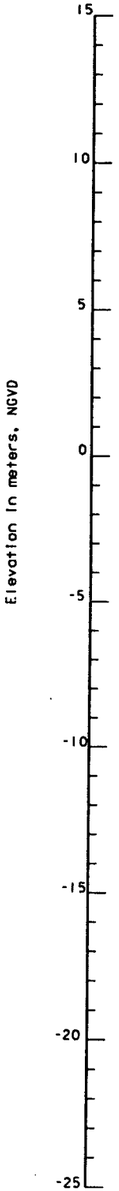
11/28/95

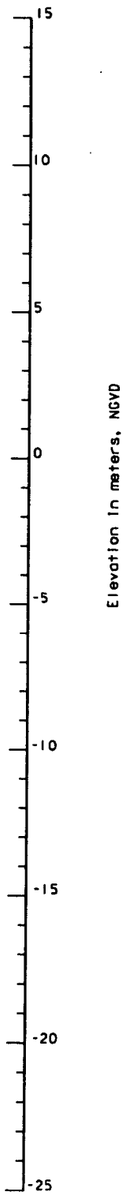


BORING NO. B-2
Sta. 49+46
12m RT. of Centerline
Elev. 10.62 m

11/29/95







LEGEND :

- SP, Poorly graded sands, sand-silt mixtures.
- SC, Clayey sands, sand-clay mixtures.
- SP-SM, Poorly graded sands and gravelly sands, to silty sands, sand-silt mixtures.
- CH, Inorganic clays of High plasticity, fat clays.
- Limestone

NOTES :

Numbers to the left of borings indicate SPT values for 300 mm penetration. (Unless otherwise noted.)

50/90 - Numbers of blows for 90 mm of penetration.

▽ - Water Table

Casing used

Rig Used - Failing 1500

Hammer Type - 63.5 kn Manual

WATER :

Resistivity : 8970 ohms-cm, Chlorides : 40 ppm, Sulfates :<2, pH : 5.9.

ENVIRONMENTAL CLASSIFICATION

Substructure : Concrete : Moderately Aggressive
Steel : Extremely Aggressive (Due to pH)

Superstructure : Slightly Aggressive

Granular Materials- Relative Density	SPT (Blows/300mm)
Very Loose	Less than 4
Loose	4 - 10
Medium or Compact	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

Silts and Clays- Consistency	SPT (Blows/300mm)
Very Soft	Less than 2
Soft	2 - 4
Firm	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	Greater than 30

REVISIONS

Date	By	Description	Date	By	Description
11/18/96	TNP	Hammer Type revised	02/10/97	MEH	N value's corrected
			06/20/97	TNP	Begin & End Bridge stations, corrected
					Sheet Numbers, added

	Names	Dates
Drawn by	DML	6/97
Checked by	MEH	6/97
Designed by		
Checked by		
Approved by	T.N. Puckett	

ENGINEER OF RECORD:
MATERIALS OFFICE
DISTRICT 1
801 N. Broadway
Bartow, Florida 33830-1249

LOGO:

SEAL:
Norman Puckett 6/20/97

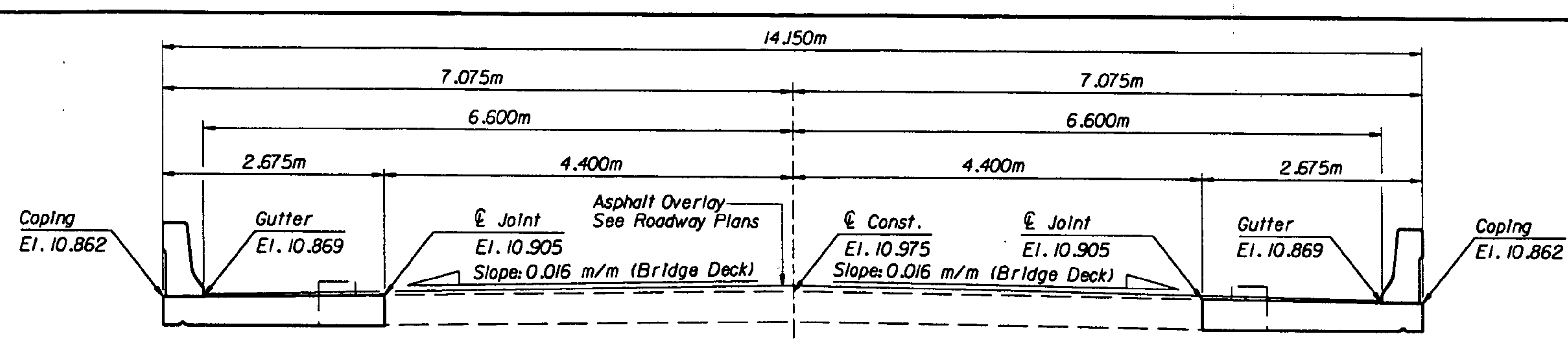
FLORIDA DEPARTMENT OF TRANSPORTATION
MATERIALS OFFICE

ROAD NO.	COUNTY	PROJECT NO.
29	Glades	05090-3511

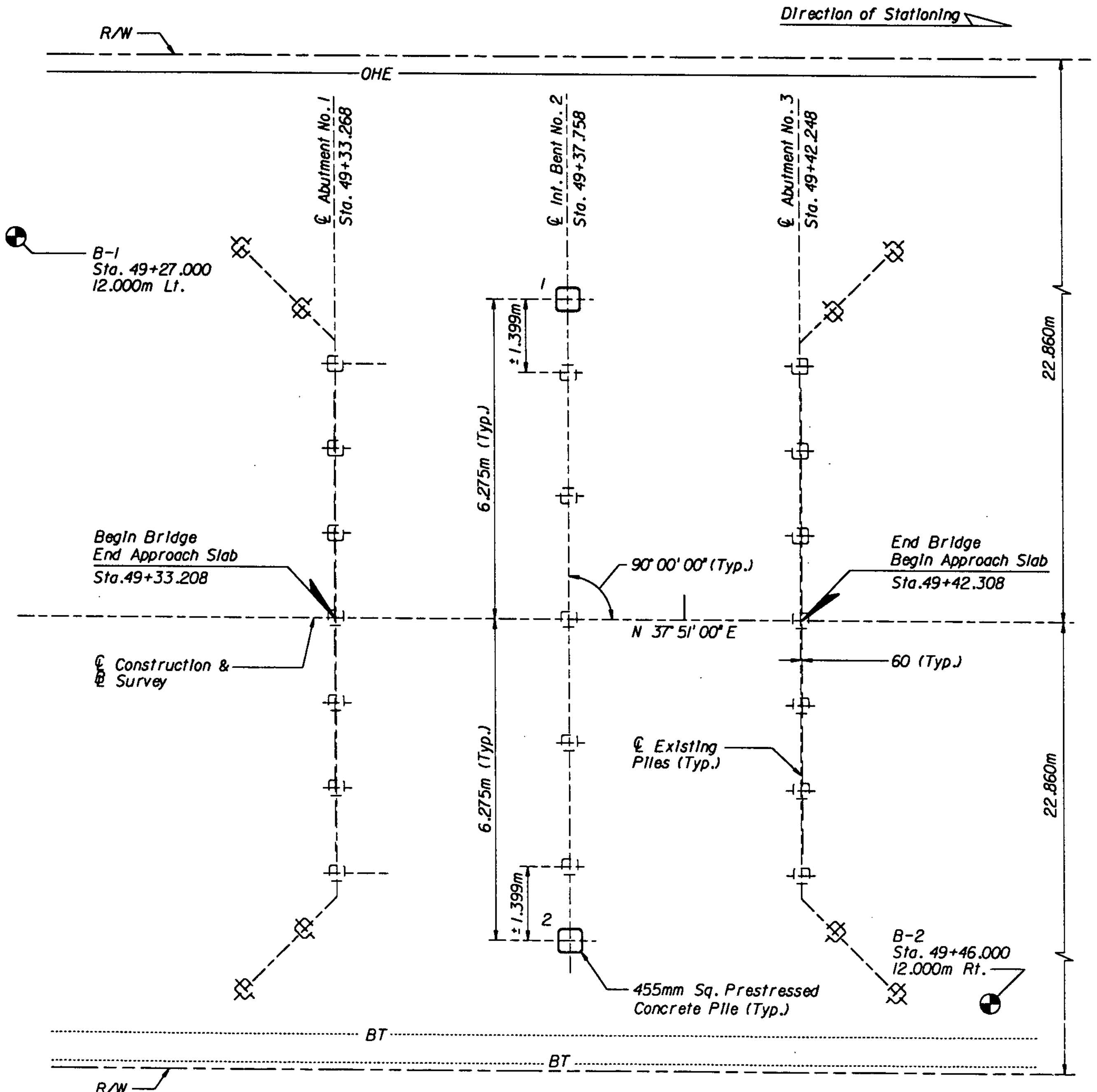
SHEET TITLE: Report of Core Borings
DRAWING NO. 1
PROJECT NAME: SR 29/over Okaloacoochee
INDEX NO.

F:\1 JAN 20 11:22:08 1997 /usr4/pro17/soils/05115b.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-4



SECTION THRU SUPERSTRUCTURE SHOWING FINISH DECK ELEVATIONS



FOUNDATION LAYOUT

NORTH OKALOACOOCHEE BRIDGE # 050941										
Bent	Pile Size (mm)	Design Load (kN)	Min. Tip Elev. (m,NGVD)	Scour Elev. (m,NGVD)	Total Scour Resistance* (kN)	Total Down Drag (kN)	Reqd. Preform to Elev. (m)	Reqd. Jet to Elev. (m)	Net Scour Resistance** (kN)	Test Pile Length (m)
2	455	280	0.0	+6.7	200	N.A.	N.A.	N.A.	200	N.A.

RDR= (Design Load x FS) + Net Scour Resistance + Total Downdrag where FS is the appropriate safety factor in accordance with the Standard Specifications A455-3.12.2

NOTES:

1. * Total side resistance from ground line to the scour elevation.
2. ** Net side friction resistance from the required preformed or jetting elevation to the scour elevation.
3. RDR is the Required Driving Resistance. All piles shall be driven to the design load times the appropriate factor of safety in accordance with Section A455-3.12.2 of the Standard Specifications plus the total downdrag and net scour resistance.
4. Pile driving criteria will be established using the Wave Equation Method by the District Geotechnical Office.
5. If jetting or preforming elevations differ from those on the table, the engineer shall be responsible for determination of the required driving resistance.
6. Scour has been considered in the design with scour elevations shown in the table.
7. The minimum tip elevation shown is required for lateral stability. Under no circumstance shall the pile be installed above the minimum tip elevation shown in the table.
8. Recommended Production Pile Lengths are 12.000m.

LEGEND:

☐ Denotes 455mm Sq. Prestressed Concrete Piles

▫ Denotes 305mm Sq. Concrete Existing Piles

GENERAL NOTES:

1. All New Piles are 455mm Sq. Prestressed Concrete Piles.
2. All New Piles are Plumb.
3. For the Pile Cutoff Elevations, see Substructure sheets.
4. All existing piles are to remain.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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MIAMI (305)-445-2900 FLORIDA (800)-448-0227
FL REGISTRATIONS: EB0005822 AAC002142

SEAL

9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: FOUNDATION LAYOUT & FINISH GRADE ELEVATIONS

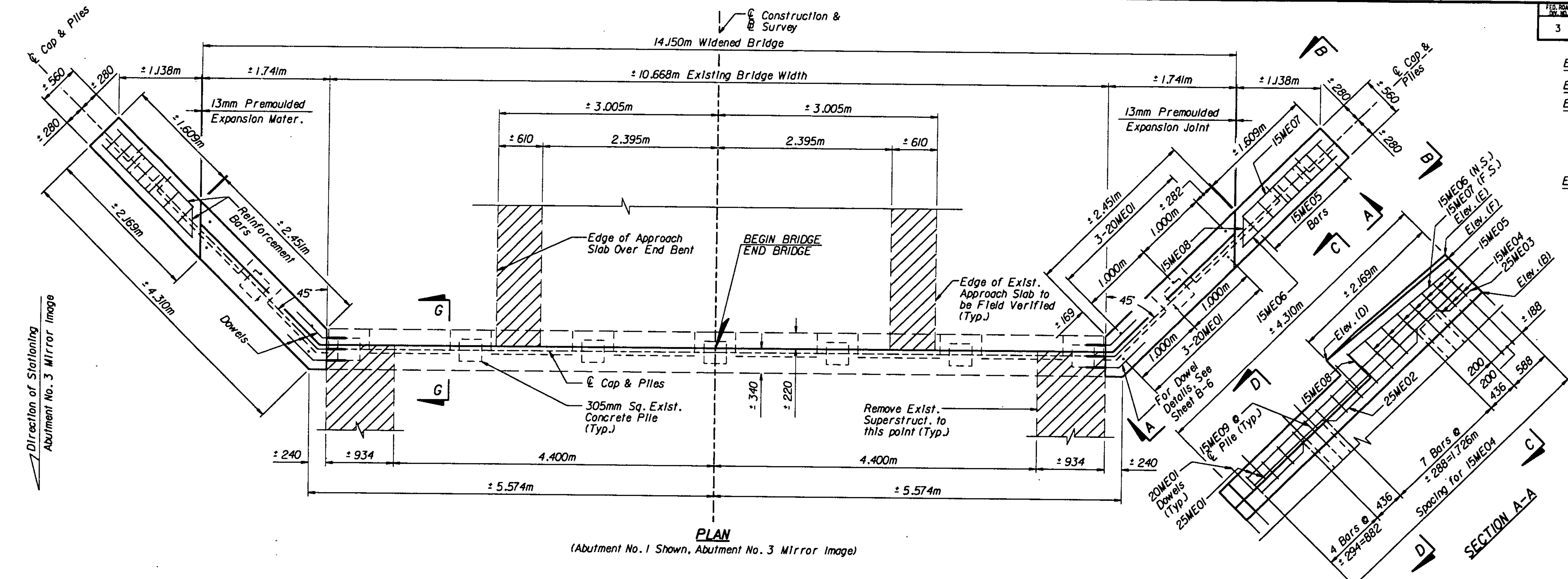
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOHEE, BRIDGE NO. 050941

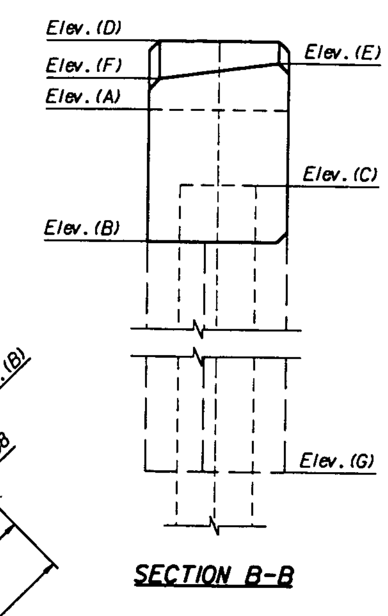
Drawing No.

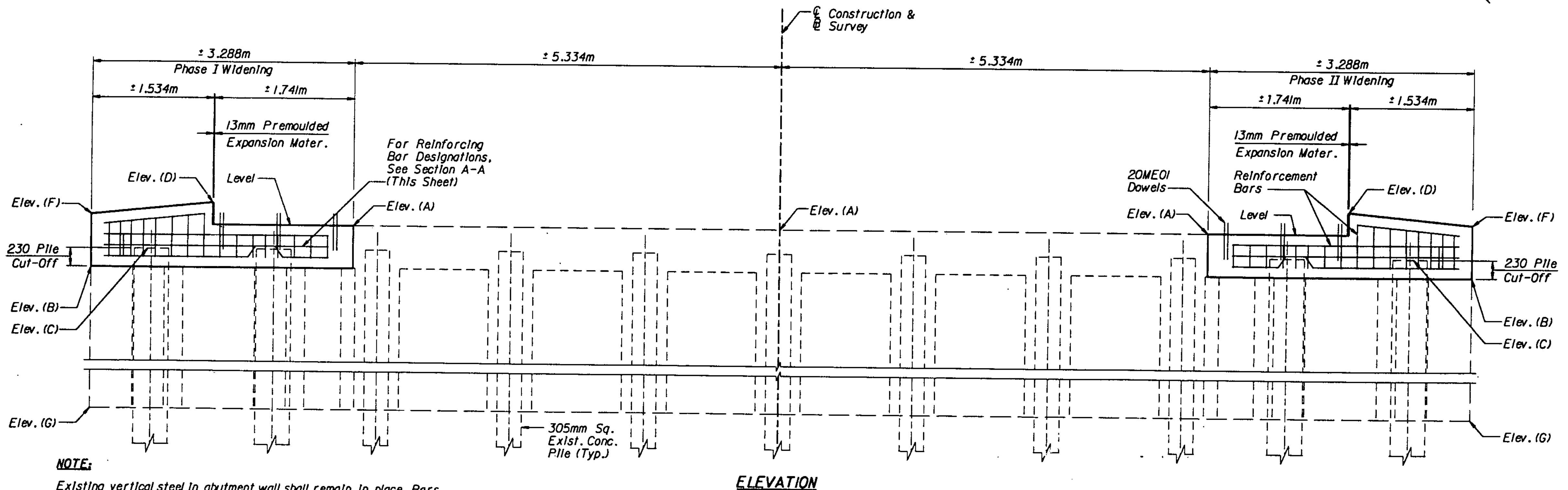
Index No.

10 SEP 97 13:19:45 Brett's Computer c:\projects\717-0\okto\05094\sbfd04.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-5







ABUTMENT CONSTRUCTION ELEVATIONS

Location	Abutment Nos. 1 & 3
Elev. (A)	10.595 (Top of Cap)
Elev. (B)	10.061 (Bottom of Cap)
Elev. (C)	10.291 (Pile Cut-Off)
Elev. (D)	10.875
Elev. (E)	10.787
Elev. (F)	10.721
Elev. (G)	*7.9248

* Elevation G has been obtained from the existing plans. Contractor to field verify if required.

LEGEND:

▨ Area to be Removed

NOTES:

1. For Estimated Quantities, See Abutment Modification Detail Sheet B-7.
2. For Detailed Removal of Approach Slab, See Approach Slab Sheet in the Roadway Plans.
3. All contact surfaces between old and new concrete shall be cleaned.
4. For Sections C, D, and G, See Abutment Modifications Detail Sheet B-6.

NOTE:

Existing vertical steel in abutment wall shall remain in place. Bars shall be cleaned and embedded in proposed portion of cap. Where necessary existing bars shall be cut to provide 100mm minimum clearance.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
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FL REGISTRATIONS: EB0005822 AAC002142

SEAL: 9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATIONS

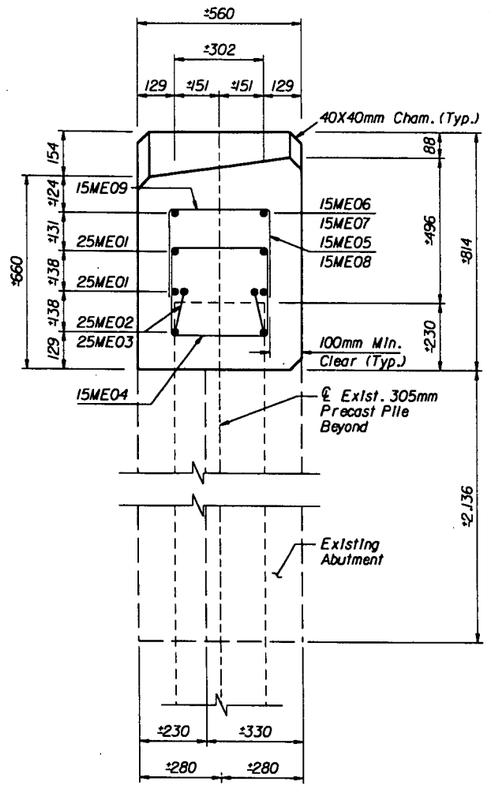
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941

Drawing No.

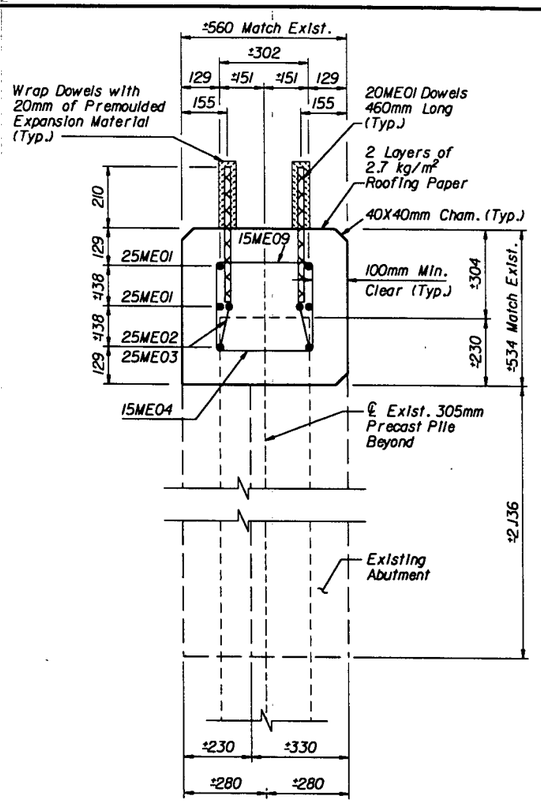
Index No.

10 SEP 97 13:20:54 Brett's Computer c:\projects\7f-0\oka\05094\okab01.dgn

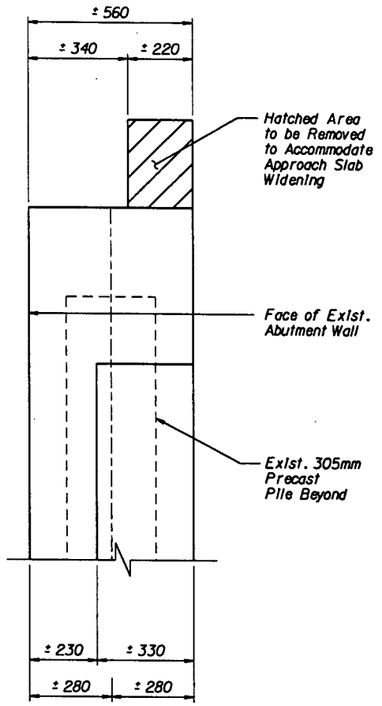
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-6



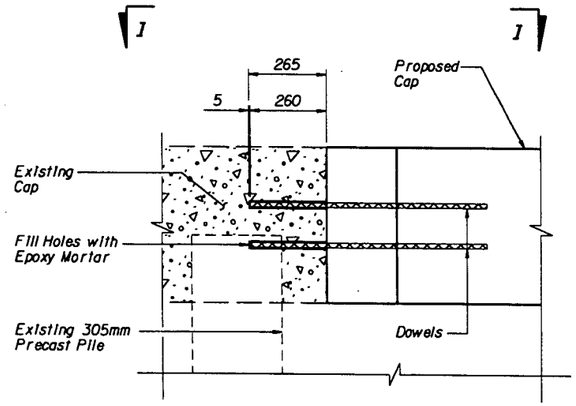
SECTION C-C



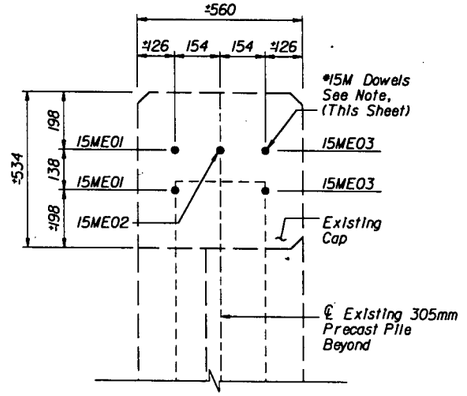
SECTION D-D



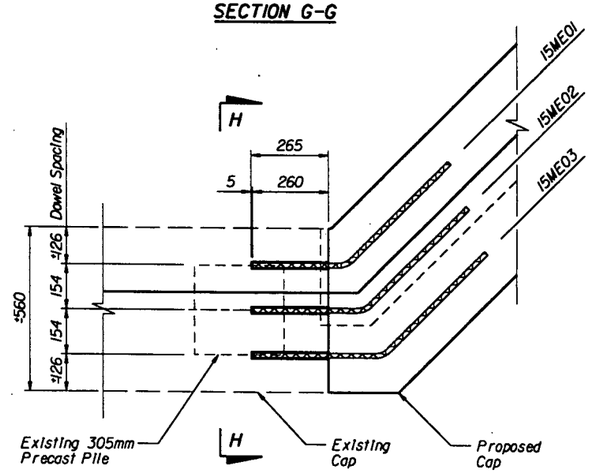
SECTION G-G



DOWEL DETAIL ELEVATION



SECTION H-H



SECTION I-I PLAN

NOTE:

6-19mm Ø x 265mm Deep Drilled Holes for Dowels. Set Dowels in Approved Epoxy or Capsule Adhesive, (Class IV). See Dowel Details (This Sheet). See Notes on Sheet B-8.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-446-8227
FL REGISTRATIONS: E00005022 AAC002142

SEALED

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

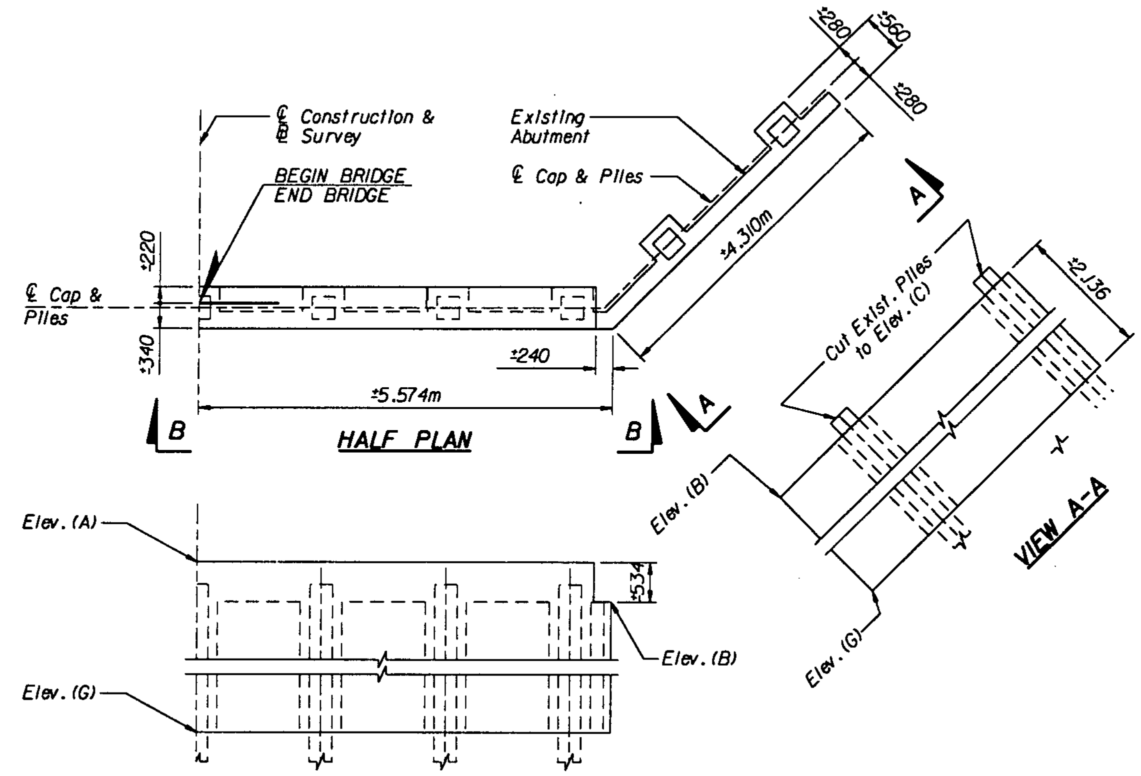
SHEET TITLE: ABUTMENT MODIFICATION DETAILS (1 OF 2)

Drawing No.

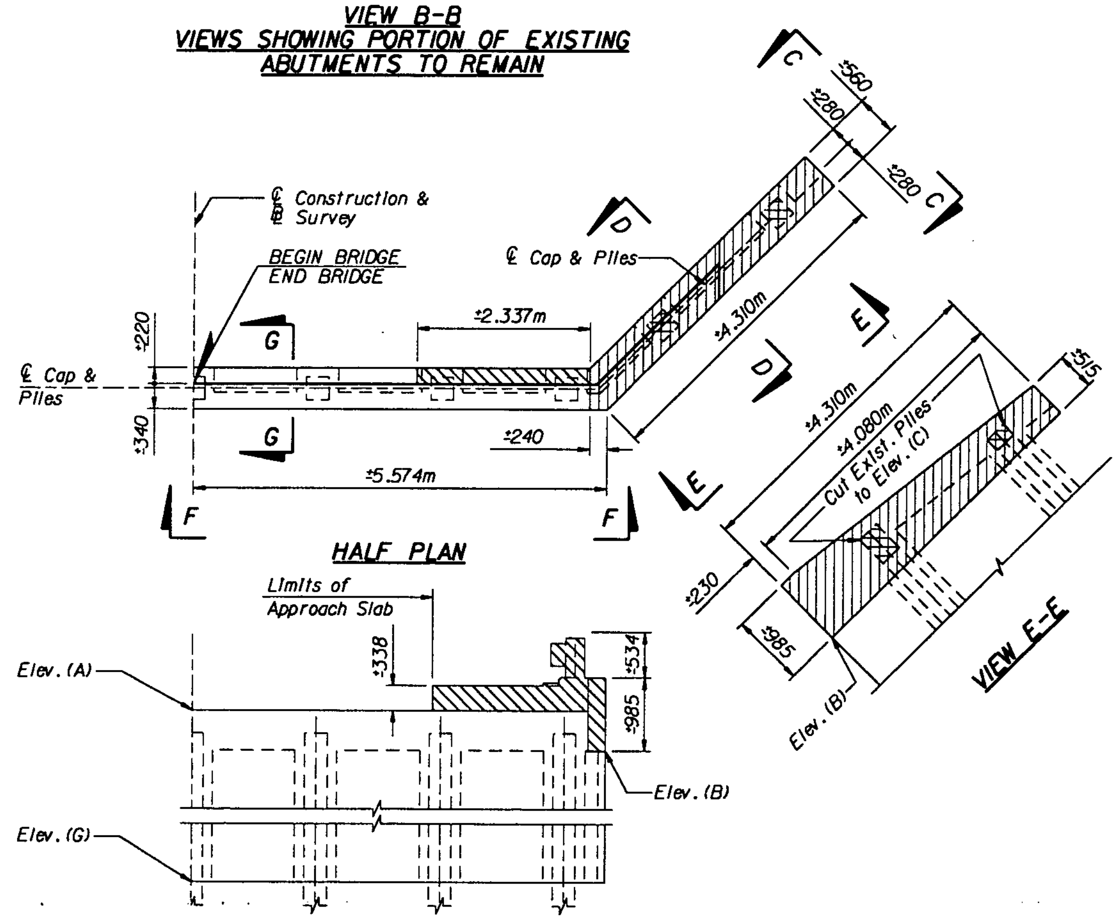
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941

Index No.

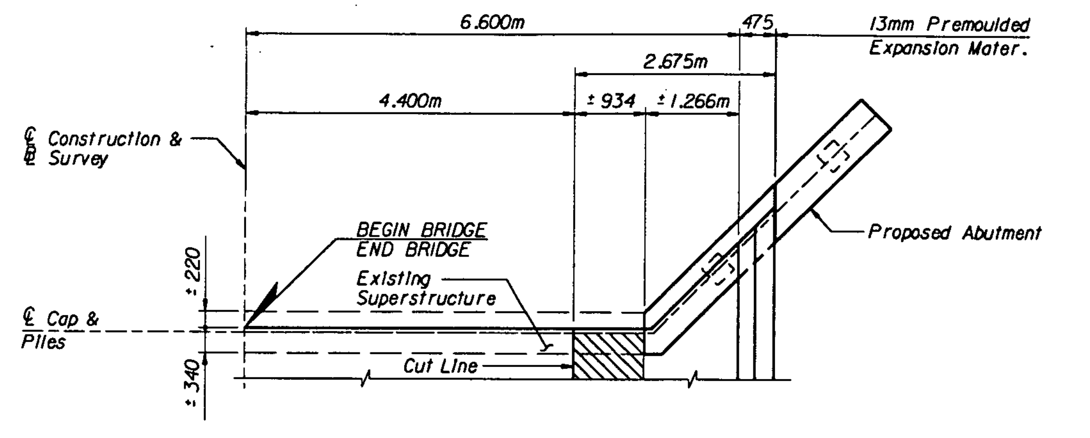
10 SEP 97 13:21:32 Brett's Computer c:\projects\FIF-Okal\05094\fokaabd1.dgn



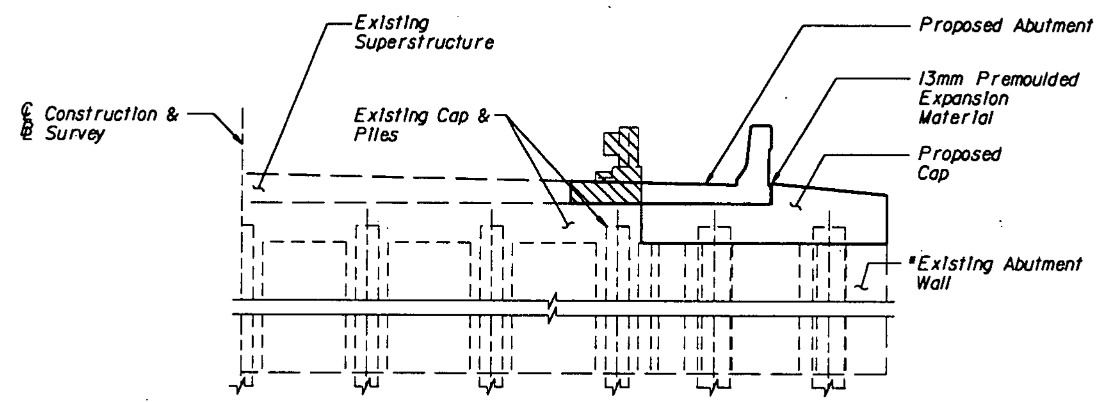
VIEW B-B
VIEWS SHOWING PORTION OF EXISTING ABUTMENTS TO REMAIN



VIEW F-F
VIEWS SHOWING EXISTING ABUTMENTS
(Hatched areas to be removed)



HALF PLAN



HALF ELEVATION
VIEW SHOWING COMPLETED STRUCTURE

*Existing Vertical Steel in Abutment Wall shall remain in place. Bars shall be Cleaned and Embedded in Proposed Portion of Cap. Where necessary Existing Bars shall be cut to provide 100mm Min. Clearance.

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m^3	3.0
Reinforcing Steel (Substructure)	kg	338
455 mm Sq. Prestressed Concrete Piles	m	* *

* Estimated Quantities are for one End Bent only.
* * See Summary of Bridge Pay Items

NOTES:

1. For Table of Elevations, See Sheet B-5.
2. For Sections C, D, and G, See Abutment Modifications Detail Sheet B-6.

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REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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FL REGISTRATIONS: EB0005022 AAC002142

SEAL: 9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

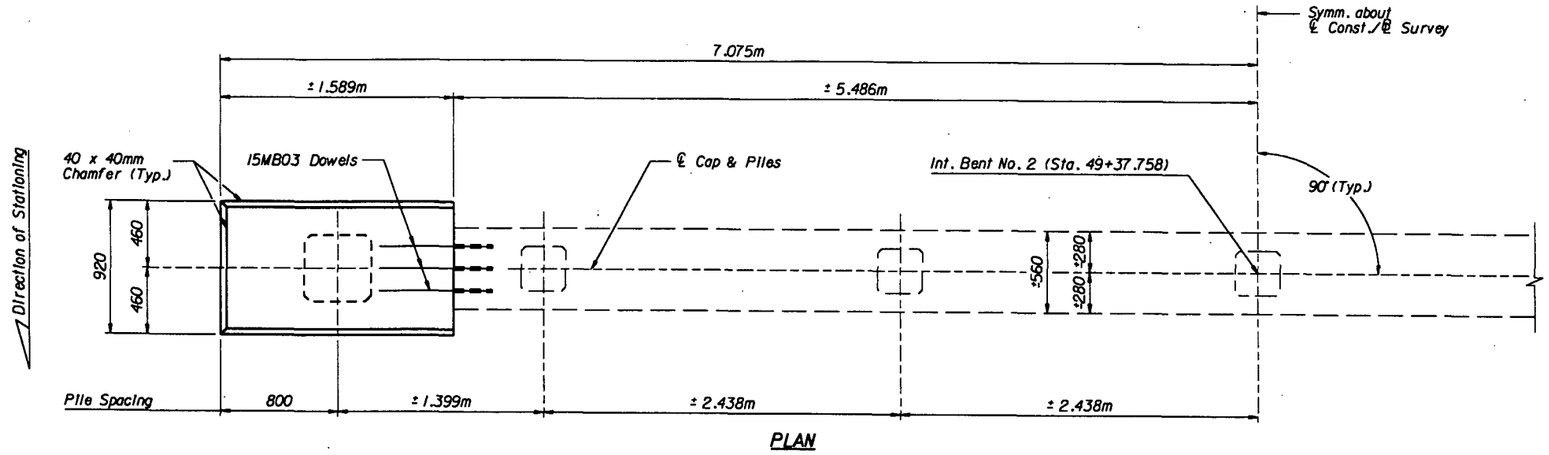
SHEET TITLE: ABUTMENT MODIFICATION DETAILS (2 OF 2)

PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941

Drawing No.

Index No.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-8



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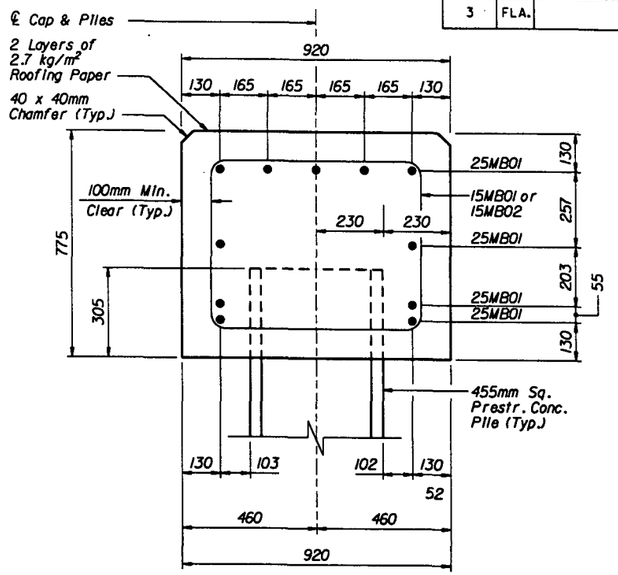
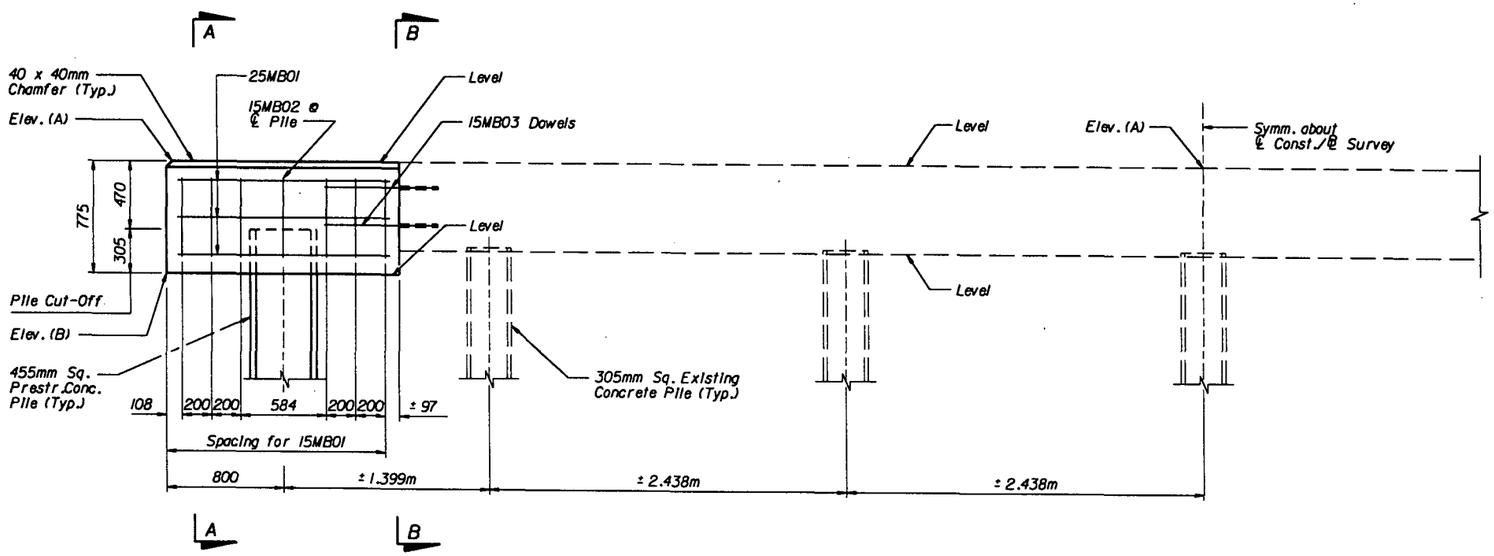
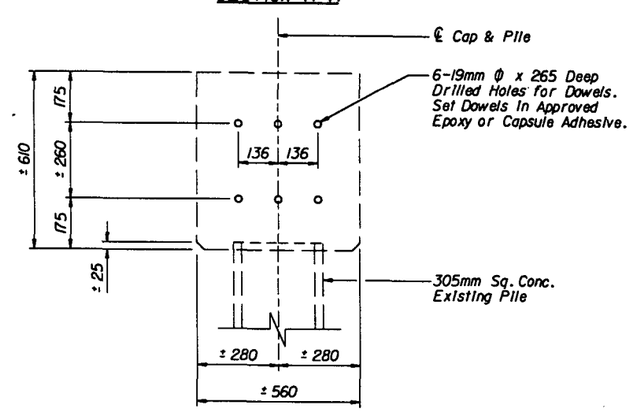


SECTION A-A



ELEVATION

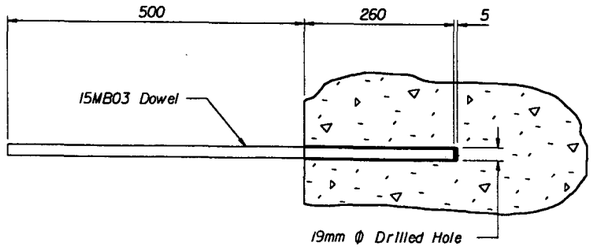


SECTION B-B

ESTIMATED QUANTITIES **		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m^3	2.2
Reinforcing Steel (Substructure)	kg	194
455mm Prestressed Concrete Piles	m	*

* See Summary of Bridge Pay Items.
** Quantities are for one Intermediate Bent only.

BENT CONSTRUCTION ELEVATIONS	
Location	Bent No. 2 49+37.758
Elev. (A)	10.595
Elev. (B)	9.820
Pile Cut-Off	10.125



DOWEL DETAIL

NOTES:

1. Dowels shall be set in approved epoxy or capsule adhesive (Class IV). Where reinforcing is encountered, shift hole to clear. The cost of approved epoxy or capsule adhesive and installing dowels shall be included in the Contract Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
2. All piles are plumb.
3. Dowel holes shall be cleaned thoroughly and free of moisture prior to anchor installation. See adhesive manufacturer's instructions for specific installation procedures.
4. For Pile Loads, See Sheet B-4.
5. For Bill of Reinforcing, See Sheet B-11.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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FL REGISTRATIONS: EB0005022 AAC002142

SEAL:
9/16/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: INTERMEDIATE BENT MODIFICATIONS
Drawing No.
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941
Index No.

10 SEP 97 13:24:02 Brett's Computer c:\projects\171-01\okb050941\sht\b03.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-9

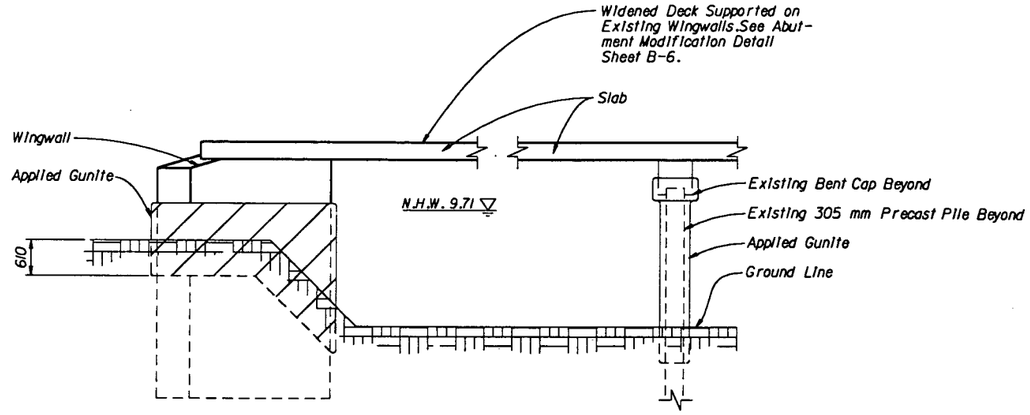
GENERAL NOTES:

CLEANING AREAS OF MATRIX LOSS: All areas upon which gunite is to be applied shall be thoroughly cleaned in accordance with Technical Special Provision Section 402. If necessary, the water level shall be lowered, by dewatering, to a height sufficient to allow for these repairs. Dewatering operations shall not include the placement of fill in the canal bed. If reinforcing steel is exposed, it will not be necessary to remove concrete from behind the steel, since the gunite will increase the original clearance and no corrosion has been noted.

COVERING SPALLED AREAS: After cleaning the surface areas over which gunite is to be applied, the welded wire fabric shall be furred 13 mm from sound concrete or exposed reinforcing steel.

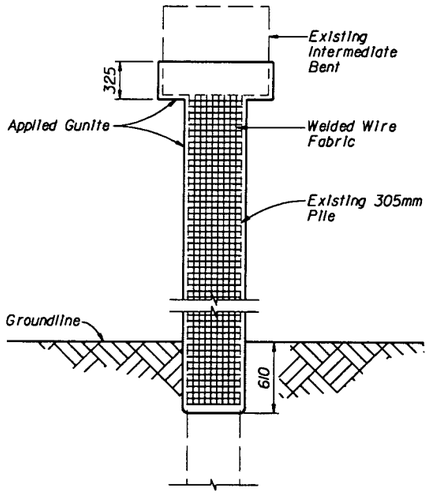
COST: Compensation shall be in accordance with Special Provision Section 401.

NOTE: Additional areas of unsound concrete may be found in the course of this contract at the discretion of the Engineer, these areas shall be repaired as outlined in these plans. All work shall be performed in accordance with Technical Special Provision Section 402 Gunite.

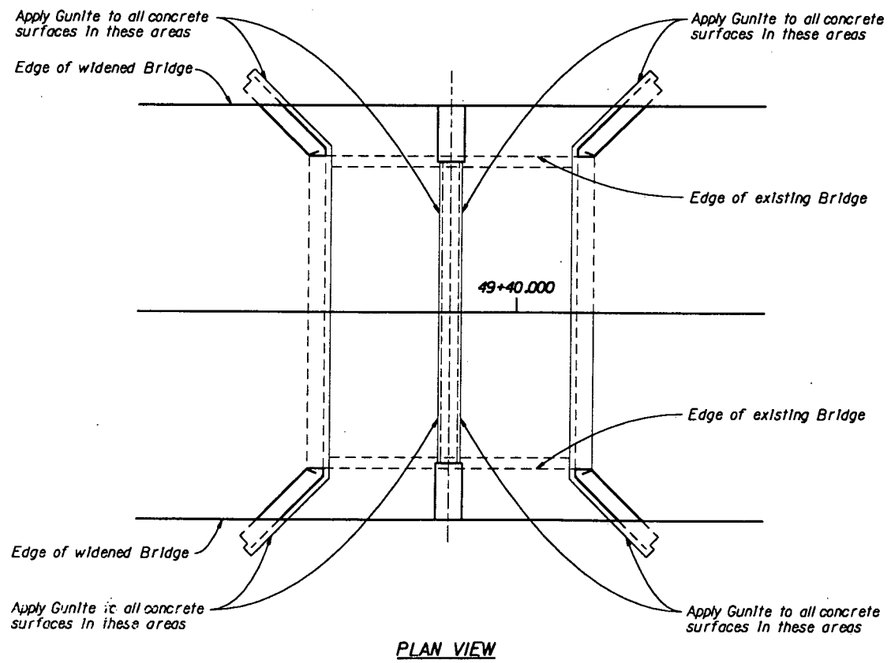


DETAIL OF GUNITE APPLICATION (TYPICAL)
Note: Widened Intermediate Bent Cap & Proposed 455 mm Pile not shown for clarity.

NOTE: Welded Wire Fabric shall be applied to the surface of the Wingwalls but has not been shown for clarity.



GUNITE REPAIR DETAIL
(For Existing Piles)



PLAN VIEW

REVISIONS						
Date	By	Description	Date	By	Description	

	Names	Dates
Drawn by	M. Llaneras	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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MIAMI (305)-445-2988 FLORIDA (800)-448-8227
FL REGISTRATIONS: EB0005022 AAC002142

SEAL:
8/12/97

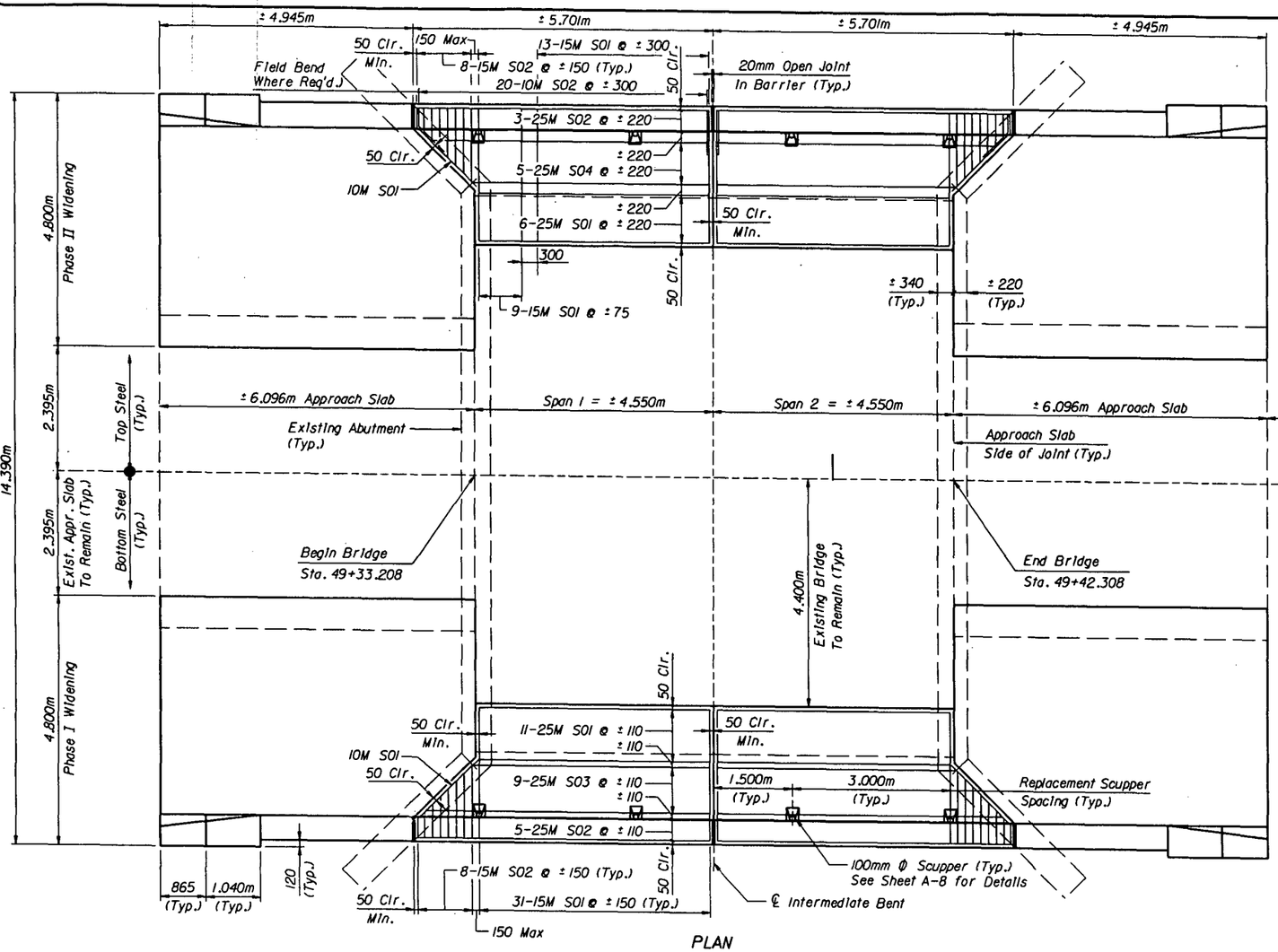
FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

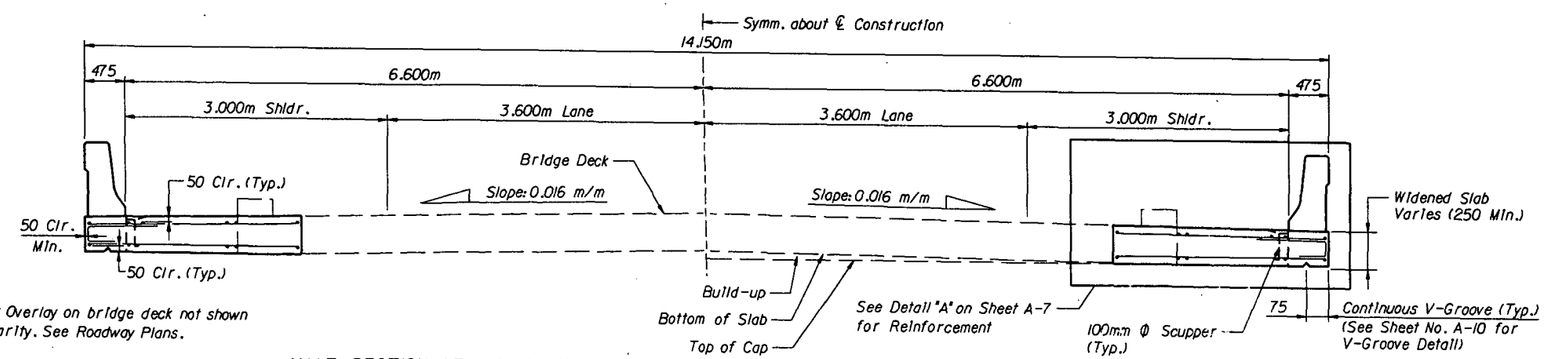
SHEET TITLE: REPAIR DETAILS
Drawing No.
PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941
Index No.

10 SEP 97 13:26:17 Brett's Computer c:\projects\7ff-01\ok\050941\okarepd.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-10



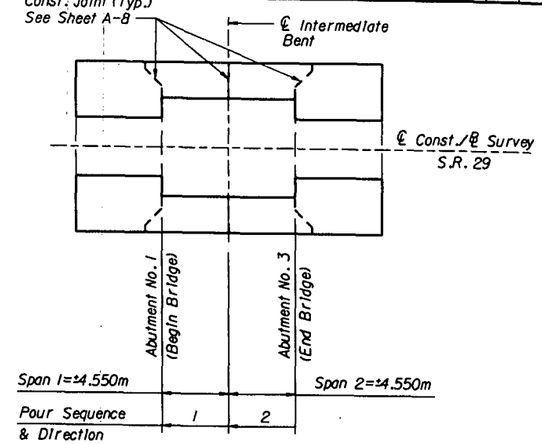
PLAN



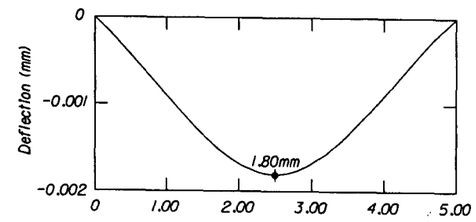
NOTE: Asphalt Overlay on bridge deck not shown for clarity. See Roadway Plans.

HALF SECTION AT MID-SPAN

HALF SECTION AT BENTS



2-SPAN SUPERSTRUCTURE POURING DIAGRAM



DEAD LOAD DEFLECTION DIAGRAM

NOTES:

1. Set bars in slab for Barrier as detailed on Barrier Sheet.
2. Pouring Sequence: After pouring the first unit, succeeding pours shall begin at the end away from and proceed toward the previously placed unit. (The first unit may be at either end of bridge)
3. No unit shall be placed adjacent to a previously placed unit that is not a minimum of 72 hours old.
4. The contractor shall camber the forms to compensate for the combined effect of the deflection of the forms and the dead load deflection of the slab.
5. The contractor may submit for approval a revised casting sequence. The submittal shall include structural analysis by the specialty Engineer reflecting the new casting sequence and its effect on the Camber Diagram. The revision shall be in conformance with Chapter 19 of the Structures Design Guidelines.

*ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Class IV Concrete - Superstructure	m^3	14.80
Reinforcing Steel (Superstructure)	kg	3983
Concrete Traffic Railing Barrier	m	22.8

* Quantities are for the complete Superstructure.

REVISIONS						
Date	By	Description	Date	By	Description	

	Names	Dates
Drawn by	BL	8-97
Checked by	SB	8-97
Designed by	SB	8-97
Checked by	RTC	8-97
Approved by		

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
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FL REGISTRATIONS: EB0005022 AAC002142

SEAL:
10/16/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 2-SPAN SUPERSTRUCTURE

Drawing No.

PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOHEE, BRIDGE NO. 050941

Index No.

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FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			B-11

MARK SIZE	MARK DES	METERS LENGTH	NO BARS	TYP BAR	STY A	STY G	METERS B	C	D	E	F	H	J	K	N	Ø
LOCATION ABUTMENTS NOS. 1 AND 3 (PER SIDE) NO. REQUIRED = 4																
15M	E01	0.820	2	12			0.500	0.320								45
15M	E02	0.880	1	12			0.500	0.380								45
15M	E03	0.945	2	12			0.500	0.445								45
15M	E04	1.670	14	4	4	4	0.335	0.360								
15M	E05	0.960	7	11			0.360	0.300	0.300							
15M	E06	1.795	1	1			1.795									
15M	E07	1.495	1	1			1.495									
15M	E08	1.050	1	11			0.450	0.300	0.300							
15M	E09	1.030	2	11			0.360	0.335	0.335							
20M	E01	0.460	6	1			0.460									
25M	E01	3.970	4	1			3.970									
25M	E02	3.598	2	40			0.135	0.345	1.545	0.340	0.795	3.970			2	
25M	E03	0.926	2	28			0.340	0.395	0.135	0.135						
LOCATION INTERMEDIATE BENT NO. 2 NO. REQUIRED = 1																
15M	B01	2.870	12	4	4	4	0.575	0.720								
15M	B02	2.030	2	5			0.575	0.720	0.080	0.080						
15M	B03	0.760	12	1			0.760									
25M	B01	1.380	22	1			1.380									
LOCATION SUPERSTRUCTURE NO. REQUIRED = 1																
10M	S01	1.625	8	1			1.625									
10M	S02	1.080	80	11			0.130	0.200	0.750							
15M	S01	2.575	212	1			2.575									
BARS 15M S02 VARY IN 8 SETS OF 8 BARS EACH IN INCREMENTS OF 0.150 M																
15M	S02	VARY	64	1			1.480									
		0.955					0.430									
25M	S01	4.380	68	1			4.380									
25M	S02	5.530	32	1			5.530									
BARS 25M S03 VARY IN 9 SETS OF 4 BARS EACH IN INCREMENTS OF 0.110M																
25M	S03	VARY	36	1			5.395									
		4.955		1			4.515									
BARS 25M S04 VARY IN 5 SETS OF 4 BARS EACH IN INCREMENTS OF 0.220M																
25M	S04	VARY	20	1			5.395									
		4.955		1			4.515									

END OF LIST

NOTE:

1. All Reinforcing Steel shown on this sheet shall be ASTM A615M-92, Grade 420.

T:\0717_01\OKA05094\GNRE\BARLIDGN
22 JUN 98 18:36:54 Brett Loeffler

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAMES	DATES
DRAWN BY	BL	8-97
CHECKED BY	SB	8-97
DESIGNED BY	SB	8-97
CHECKED BY	RTC	8-97
APPROVED BY		

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
ENGINEERS•ARCHITECTS•PLANNERS
901 PONCE DE LEON BLVD., SUITE 900
CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-8227
FL REGISTRATION: EB0005822 AAC002142

SEAL:
Richard T. Castella
06/22/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

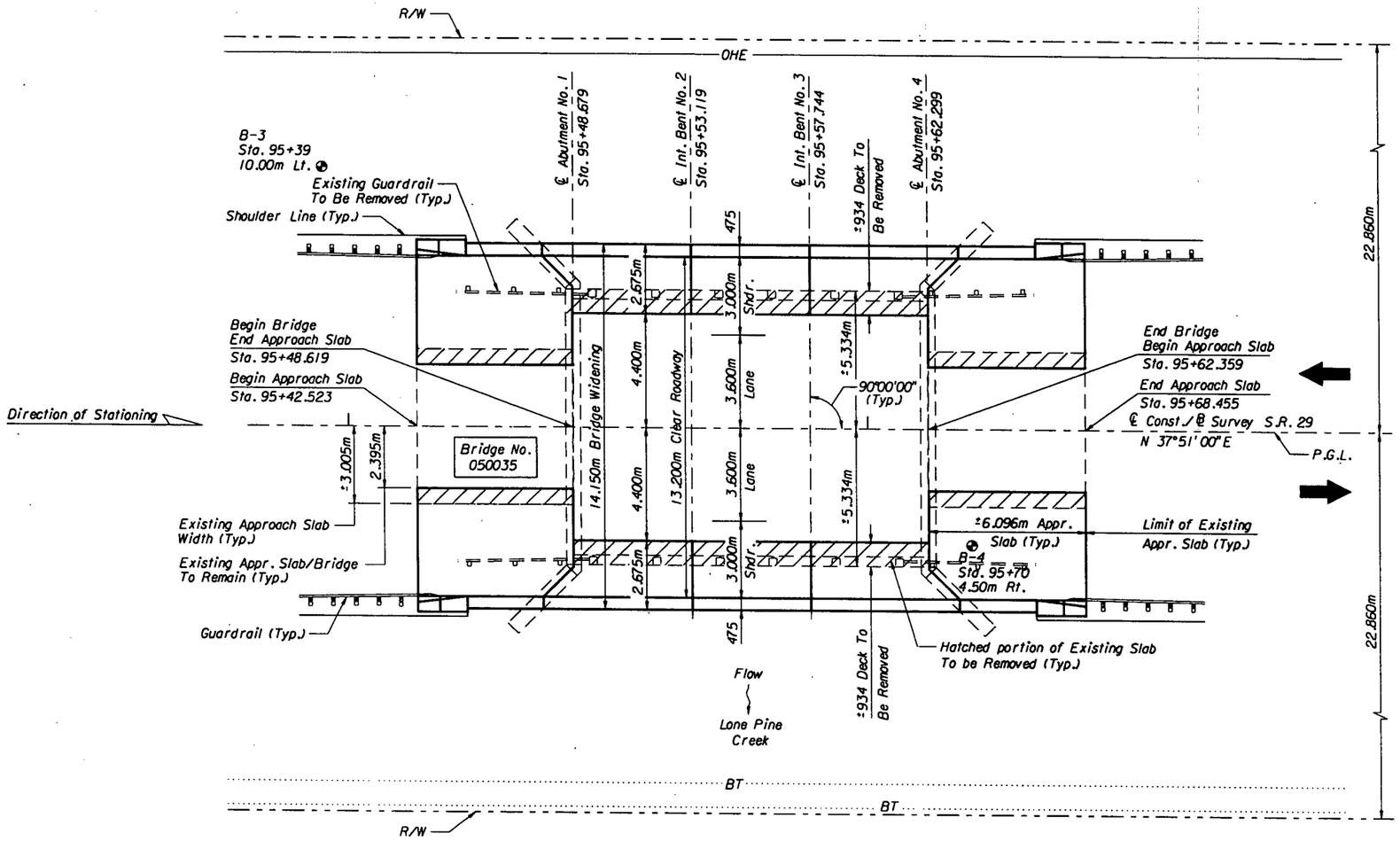
SHEET TITLE: REINFORCING BAR LIST

PROJECT NAME: S.R. 29 BRIDGE OVER NORTH OKALOACOOCHEE, BRIDGE NO. 050941

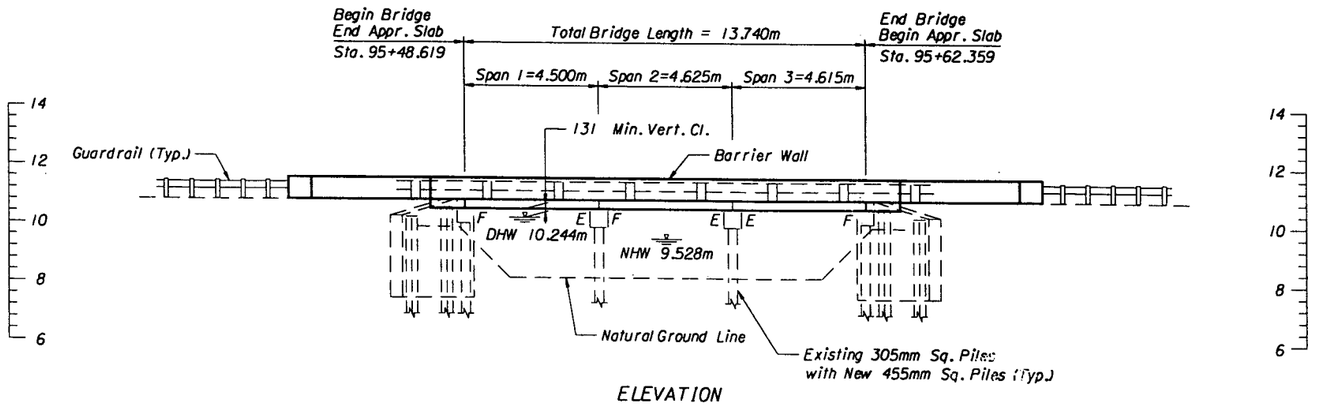
DRAWING NO.

INDEX NO.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-1



PLAN



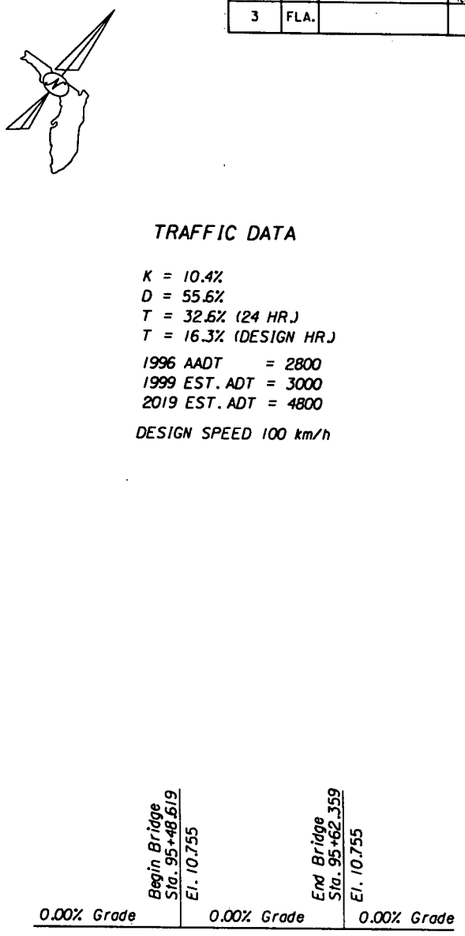
ELEVATION

TRAFFIC DATA

K = 10.4%
D = 55.6%
T = 32.6% (24 HR.)
T = 16.3% (DESIGN HR.)

1996 AADT = 2800
1999 EST. ADT = 3000
2019 EST. ADT = 4800

DESIGN SPEED 100 km/h



PROFILE GRADE S.R. 29
(Along ℄ Construction)

NOTE:

1. Elevations shown in the Profile Grade Diagram refer to top of deck elevations. The PGL elevations is a maximum of 80 mm above the ℄ deck elevation due to the asphalt overlay. Refer to the Roadway Plans for the asphalt overlay.

W.P.I. No. 1110874

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 7/14/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: PLAN AND ELEVATION

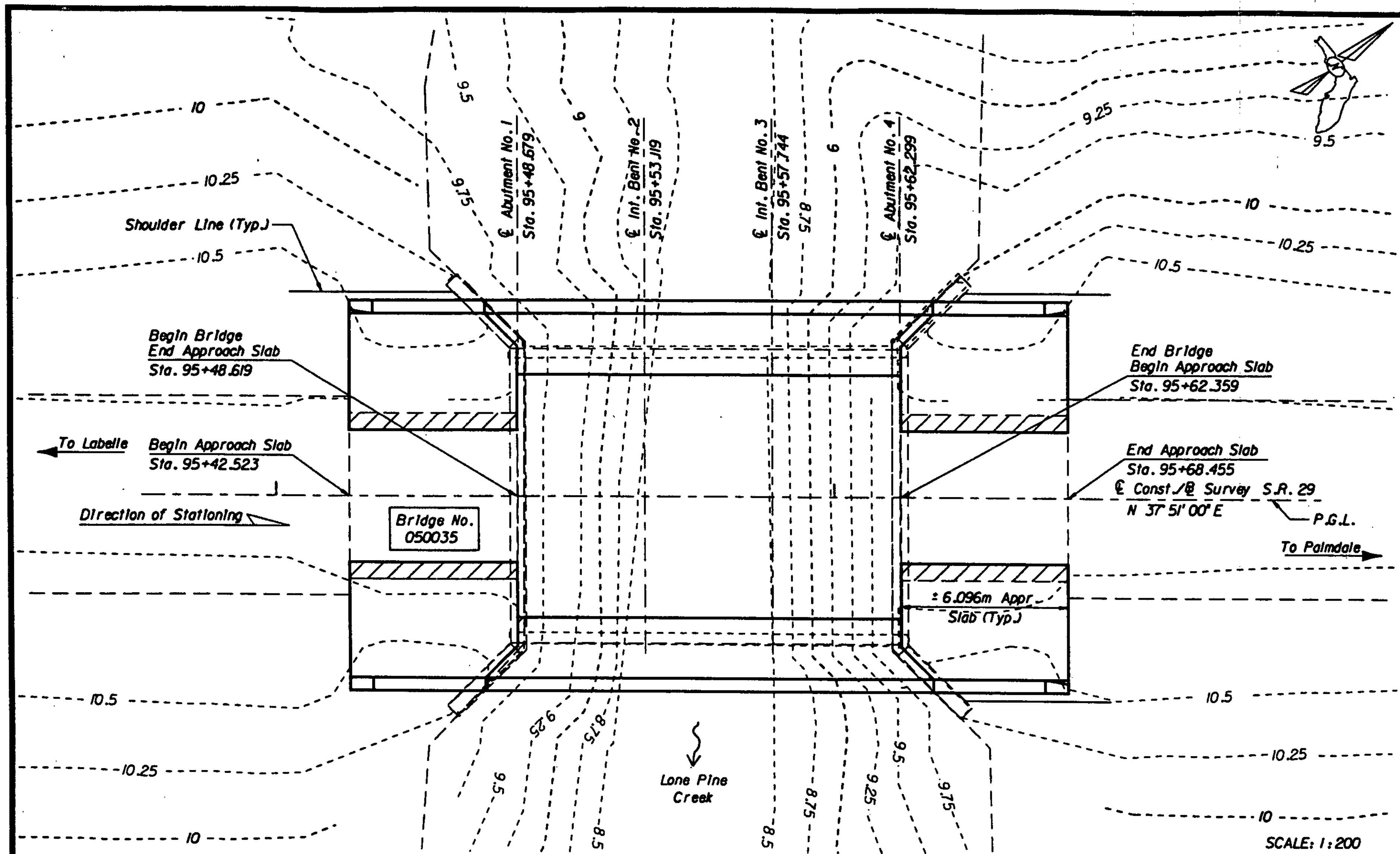
Drawing No.

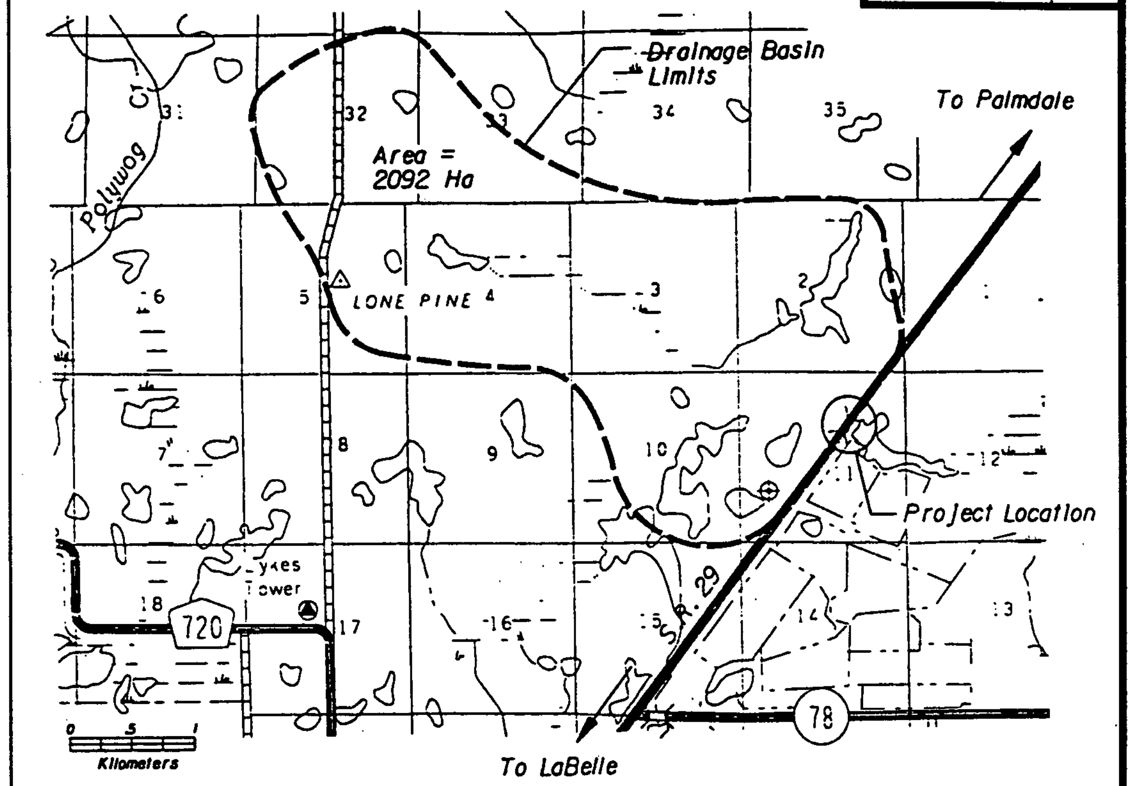
PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

Index No.

$FILE$
$TIME$
$DATE$

STATE PROJ. NO.	SHEET NO.
05090-1511	C-2





(REFERENCE)	EXISTING STRUCTURES (1)	(2)	(3)	(4)	ASSUMED CONFIGURATION
FOUNDATION	0.305 Piles	N/A	N/A	N/A	0.305 Piles
OVERALL LENGTH	13.740				13.740
SPAN LENGTH	± 4.572				± 4.572
TYPE CONSTRUCTION	Flat Slab				Flat Slab
AREA OF OPENING @ H.W.	± 21.924				± 21.924
ROADWAY WIDTH	± 10.668				14.150
ELEV. LOW MEMBER	10.375				10.375

HYDRAULIC DESIGN DATA

NOTE: The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticipated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgments and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

DEFINITIONS:
Design Flood: The flood utilized to assure a desired level of hydraulic performance.
Base Flood: The flood having a 1% chance of being exceeded in any year. (100 Year Frequency)
Overtopping Flood: The flood which causes flow over the highway, over a watershed divide or thru emergency relief structures.
Greatest Flood: The most severe flood which can be predicted where overtopping is not practicable.

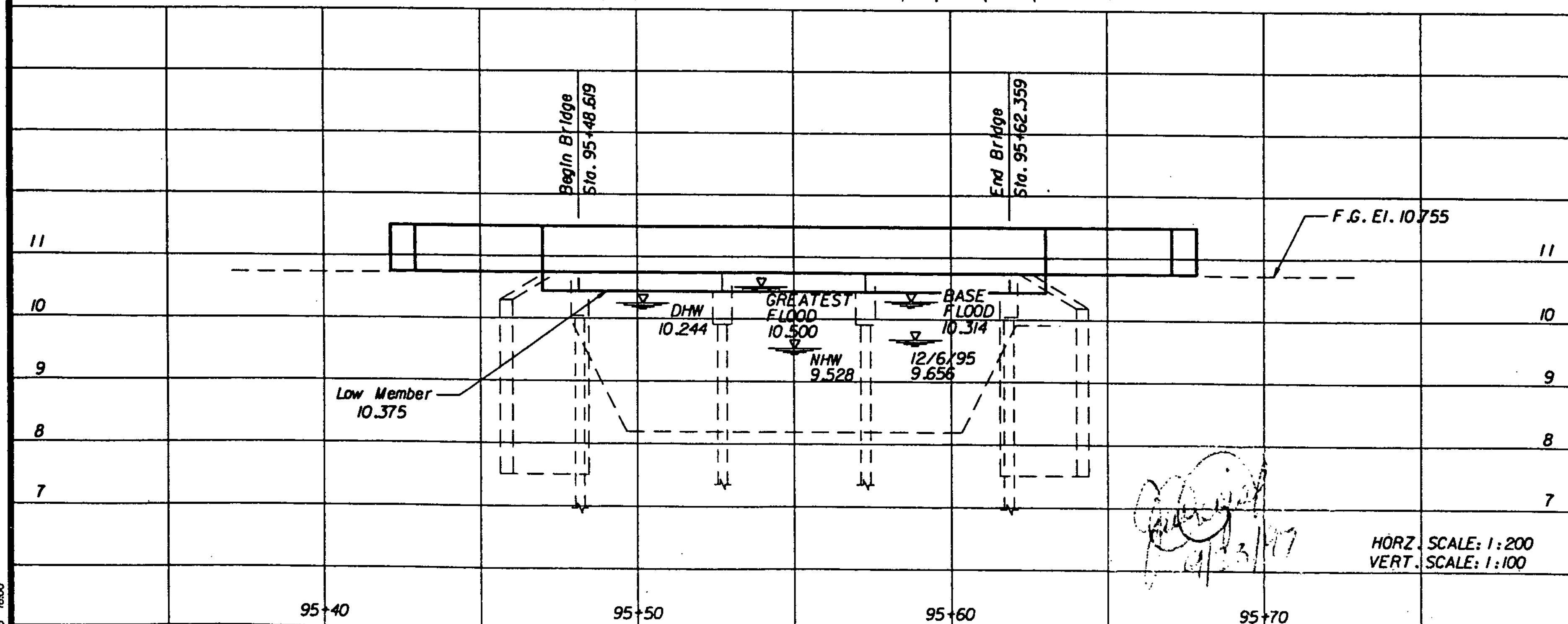
WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) 9.528 M.H.W. N/A M.L.W. N/A

FLOOD DATA:	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	☐ OVERTOPPING FLOOD ☒ GREATEST FLOOD
STAGE ELEV. NGVD (M)	UNKNOWN	10.244	10.314	10.452
DISCHARGE (CM/M)	UNKNOWN	1016	1164	1485
AVERAGE VELOCITY (M/S)	UNKNOWN	0.783	0.875	1.070
EXCEEDANCE PROB. (%)	UNKNOWN	2%	1%	0.2%
FREQUENCY (YR.)	UNKNOWN	50	100	500

HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 95+48.619 END BRIDGE STATION 95+62.359 SKEW ANGLE 0°
2. CHANNEL SECTION: ℄ STATION 95+55.499 BOTTOM WIDTH 13.716 ELEV. 8.230 SIDE SLOPE 0
3. LIMITS OF CHANNEL EXCAVATION: RT. N/A LT. N/A
4. CLEARANCE: NAVAGATION: HORIZ. N/A VERT. N/A ABOVE EL. N/A DRIFT: HORIZ. 4.166 VERT. 0.131 ABOVE EL. 10.244
5. SCOUR PREDICTION: 100 YEAR DESIGN SCOUR EL. 4.298 DEPTH = 6.58
   500 YEAR SCOUR EL. 3.501 DEPTH = 8.36
6. SLOPE PROTECTION: NONE
7. DECK DRAINAGE: RUNOFF WILL SHEET FLOW OFF BRIDGE INTO EXISTING ROADWAY DRAINAGE DITCHES.
8. OTHER:

REMARKS:



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
REVISIONS											

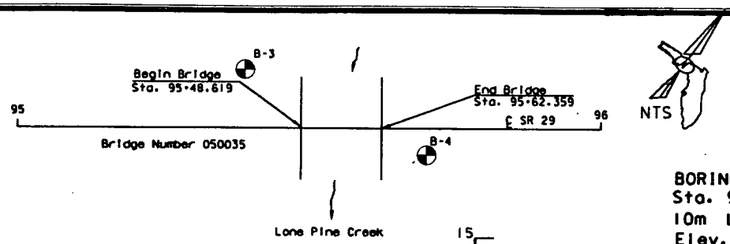
JMI ENGINEERS, INC.
1424 Piedmont Drive East
Tallahassee, Florida 32312
Tel: 904-385-7450 Fax: 904-385-3545

FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE HYDRAULIC RECOMMENDATIONS S.R.29 BRIDGE NO. 050035

FILE: e:\cadd\ad\95230\grabr03.dgn
DATE: 16-Oct-96 16:00

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	05090-3511		C-3



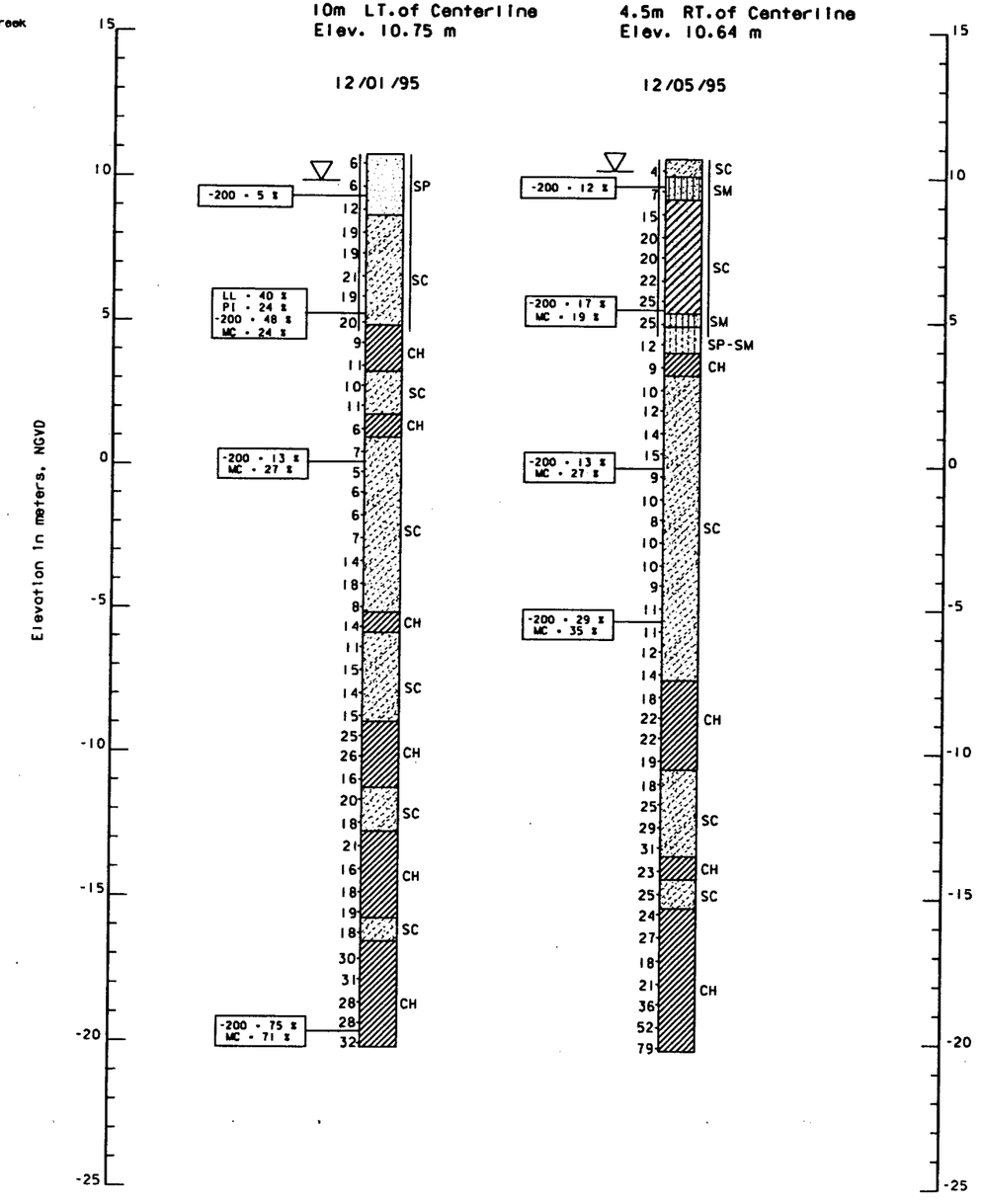
NTS

BORING NO. B-3
Sta. 95+39
10m LT. of Centerline
Elev. 10.75 m

12/01/95

BORING NO. B-4
Sta. 95+70
4.5m RT. of Centerline
Elev. 10.64 m

12/05/95



LEGEND :

- SM, Silty sands, sand-silt mixtures.
- SP, Poorly graded sands, sand-silt mixtures.
- SC, Clayey sands, sand-clay mixtures.
- SP-SM, Poorly graded sands and gravelly sands, to silty sands, sand-silt mixtures.
- CH, Inorganic clays of High plasticity, fat clays.

NOTES :

Numbers to the left of borings indicate SPT values for 300 mm penetration. (Unless otherwise noted.)

50/90 - Numbers of blows for 90 mm of penetration.

▽ - Water Table

- Casing used

Rig Type - Failing 1500
Hammer Type - 63.5 kn Manual

WATER :

Resistivity : >10,000 ohms-cm, Chlorides : 60 ppm, Sulfates : 2, pH : 5.0.

ENVIRONMENTAL CLASSIFICATION

Substructure : Concrete : Moderately Aggressive
Steel : Extremely Aggressive (Due to pH)
Superstructure : Slightly Aggressive

Granular Materials- Relative Density	SPT (Blows/300mm)
Very Loose	Less than 4
Loose	4 - 10
Medium or Compact	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

Silts and Clays- Consistency	SPT (Blows/300mm)
Very Soft	Less than 2
Soft	2 - 4
Firm	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	Greater than 30

REVISIONS

Date	By	Description	Date	By	Description
11/18/96	TNP	Hammer Type revised	02/10/97	MEH	N value's corrected
			06/20/97	TNP	Begin & End Bridge stations, corrected
					Sheet Numbers, added

	Names	Dates
Drawn by	DML	6/97
Checked by	MEH	6/97
Designed by		
Checked by		
Approved by	T.N. Puckett	

ENGINEER OF RECORD:
MATERIALS OFFICE
DISTRICT 1
801 N. Broadway
Bartow, Florida 33830-1249

LOGO:

SEAL:
Thomas Puckett 6/20/97

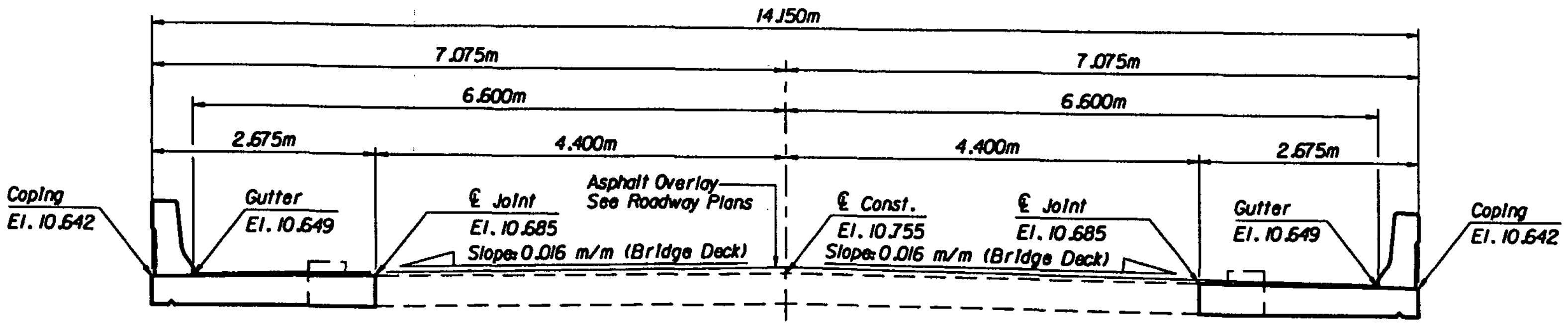
FLORIDA DEPARTMENT OF TRANSPORTATION
MATERIALS OFFICE

ROAD NO.	COUNTY	PROJECT NO.
29	Glades	05090-3511

SHEET TITLE: Report of Core Borings
Drawing No. 1
PROJECT NAME: SR 29/over Lone Pine Creek
Index No.

Fri Jun 20 11:23:40 1997 /ust4/proj/soils/05511b.dgn

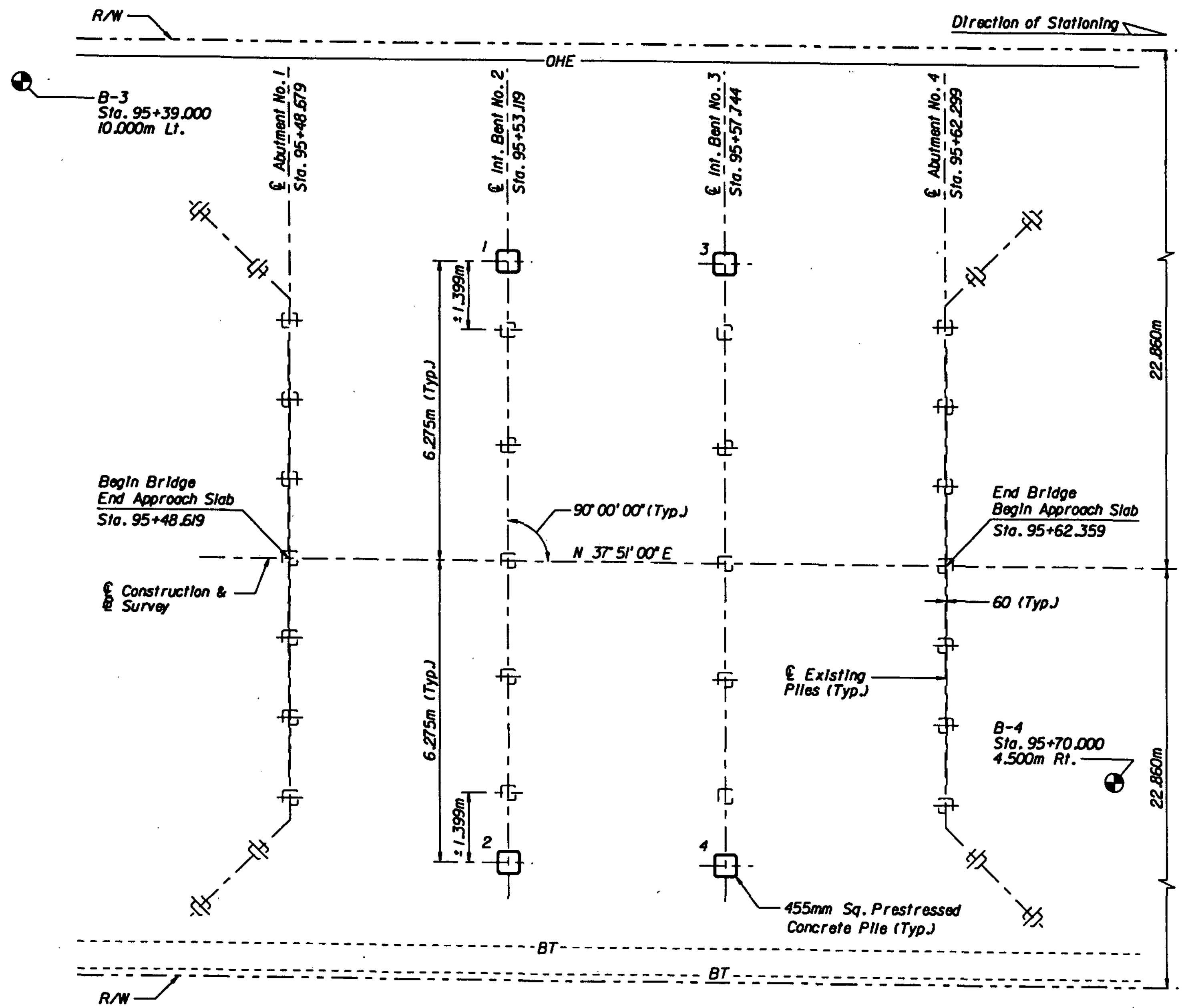
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-4



SECTION THRU SUPERSTRUCTURE SHOWING FINISH DECK ELEVATIONS

PILE INSTALLATION TABLE-LONE PINE CREEK BRIDGE # 050035										
Bent	Pile Size (mm)	Design Load (kN)	Min. Tip Elev. (m,NGVD)	Scour Elev. (m,NGVD)	Total Scour Resistance* (kN)	Total Down Drag (kN)	Reqd. Preform to Elev. (m)	Reqd. Jet to Elev. (m)	Net Scour Resistance** (kN)	Test Pile Length (m)
2	455	280	-2.0	+3.9	500	N.A.	N.A.	N.A.	500	N.A.
3	455	280	-2.0	+3.9	500	N.A.	N.A.	N.A.	500	N.A.

RDR= (Design Load x FS) + Net Scour Resistance + Total Downdrag where FS is the appropriate safety factor in accordance with the Standard Specifications A455-3.12.2



FOUNDATION LAYOUT

NOTES:

1. * Total side resistance from ground line to the scour elevation.
2. ** Net side friction resistance from the required preformed or jetting elevation to the scour elevation.
3. RDR is the Required Driving Resistance. All piles shall be driven to the design load times the appropriate factor of safety in accordance with Section A455-3.12.2 of the Standard Specifications plus the total downdrag and net scour resistance.
4. Pile driving criteria will be established using the Wave Equation Method by the District Geotechnical Office.
5. If jetting or preforming elevations differ from those on the table, the engineer shall be responsible for determination of the required driving resistance.
6. Scour has been considered in the design with scour elevations shown in the table.
7. The minimum tip elevation shown is required for lateral stability. Under no circumstance shall the pile be installed above the minimum tip elevation shown in the table.
8. Recommended Production Pile Lengths are 20.000m.

LEGEND:

□ Denotes 455mm Sq. Prestressed Concrete Piles

[ ] Denotes 305mm Sq. Concrete Existing Piles

GENERAL NOTES:

1. All New Piles are 455mm Sq. Prestressed Concrete Piles.
2. All New Piles are Plumb.
3. For the Pile Cutoff Elevations, see Substructure sheets.
4. All existing piles are to remain.

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REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

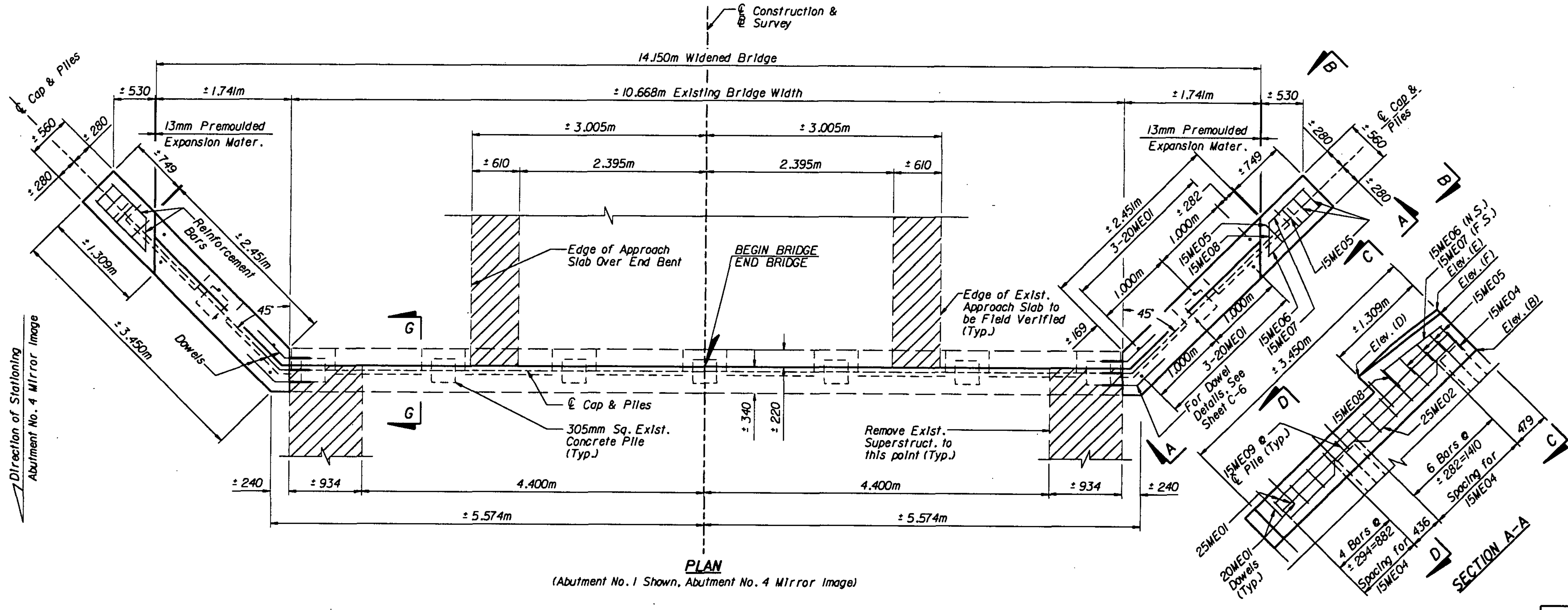
SHEET TITLE: FOUNDATION LAYOUT & FINISH GRADE ELEVATIONS

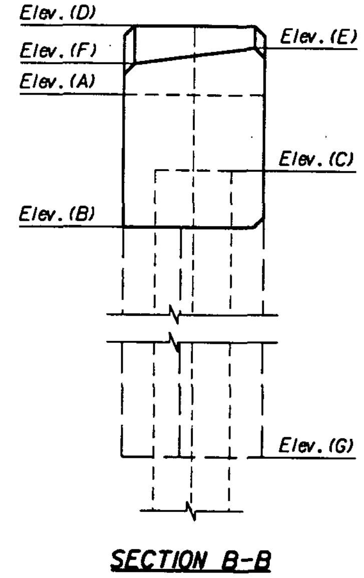
PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

Drawing No.

Index No.

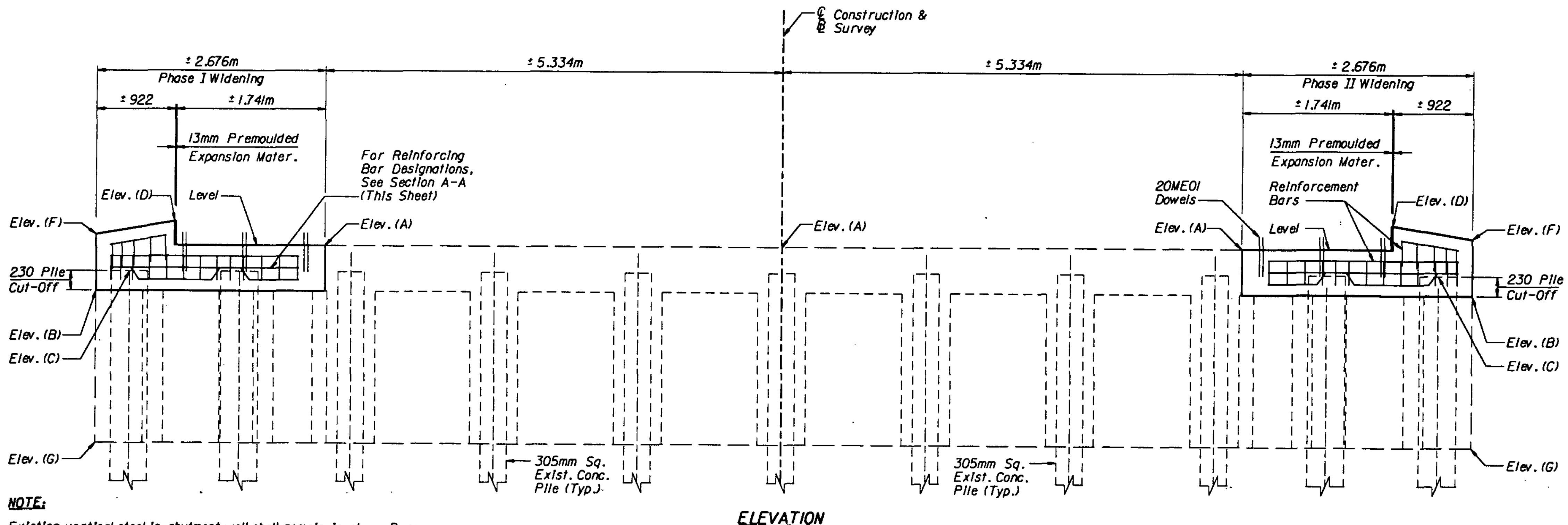
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-5





ABUTMENT CONSTRUCTION ELEVATIONS	
Location	Abutment Nos. 1 & 4
Elev. (A)	10.375 (Top of Cap)
Elev. (B)	9.841 (Bottom of Cap)
Elev. (C)	10.071 (Pile Cut-Off)
Elev. (D)	10.655
Elev. (E)	10.567
Elev. (F)	10.501
Elev. (G)	*8.230

* Elevation G has been obtained from the existing plans. Contractor to field verify if required.



LEGEND:

Area to be Removed

NOTES:

1. For Estimated Quantities, See Abutment Modification Detail Sheet C-7.
2. For Detailed Removal of Approach Slab, See Approach Slab Sheet in the Roadway Plans.
3. All contact surfaces between old and new concrete shall be cleaned.
4. For Sections C, D, and G, See Abutment Modifications Detail Sheet C-6.

NOTE:

Existing vertical steel in abutment wall shall remain in place. Bars shall be cleaned and embedded in proposed portion of cap. Where necessary existing bars shall be cut to provide 100mm minimum clearance.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by		
Designed by		
Checked by		
Approved by		

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
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SEAL: 9/23/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATIONS

PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

Drawing No.

Index No.

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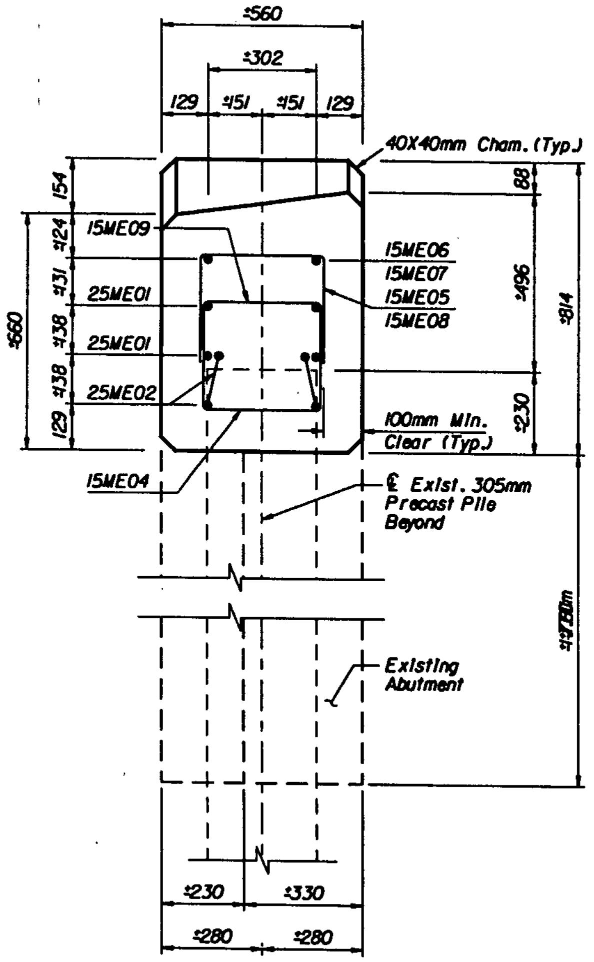
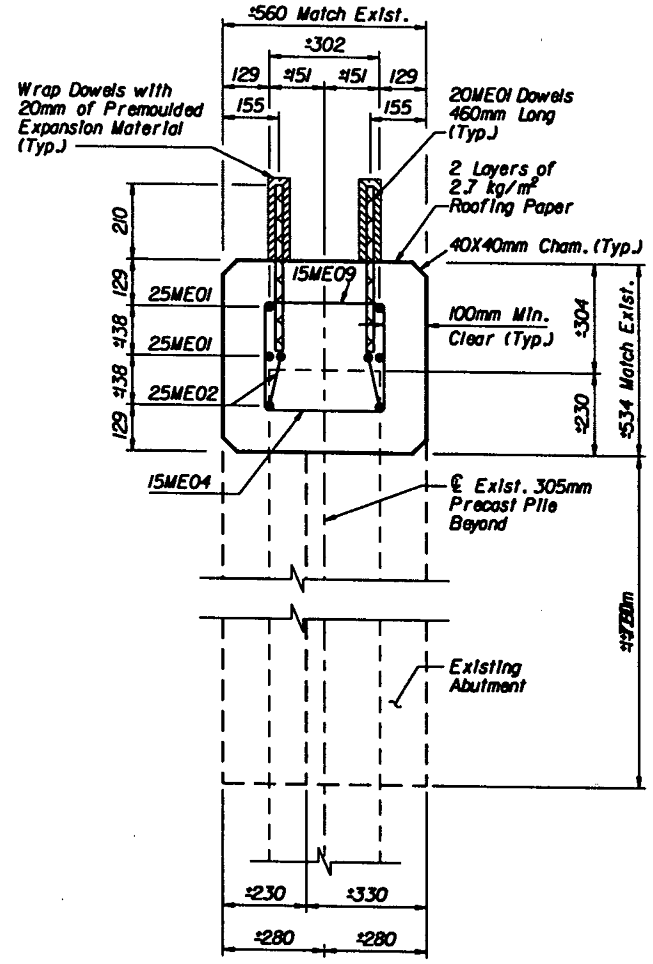
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-6



SECTION C-C



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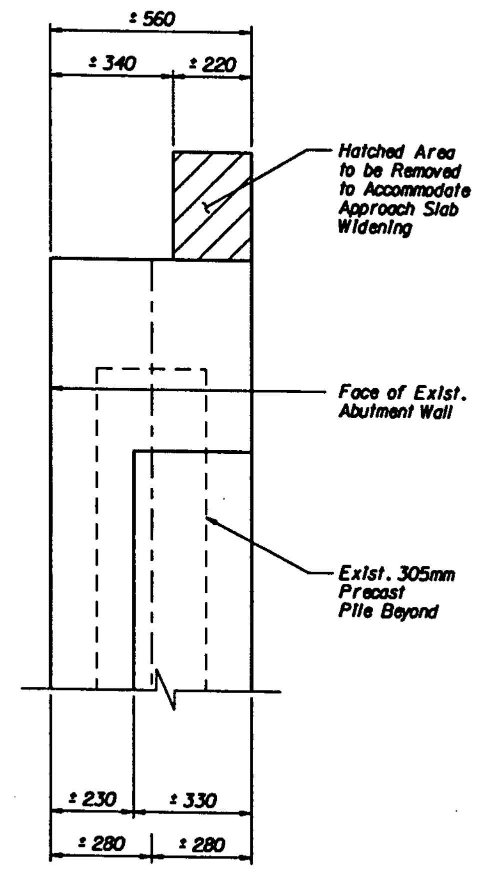
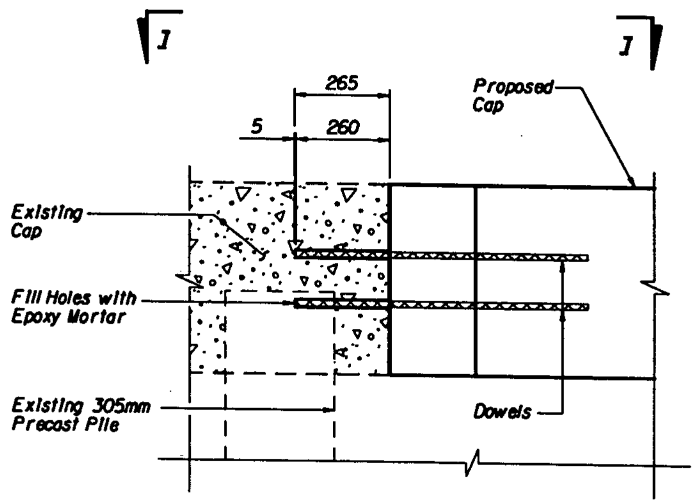
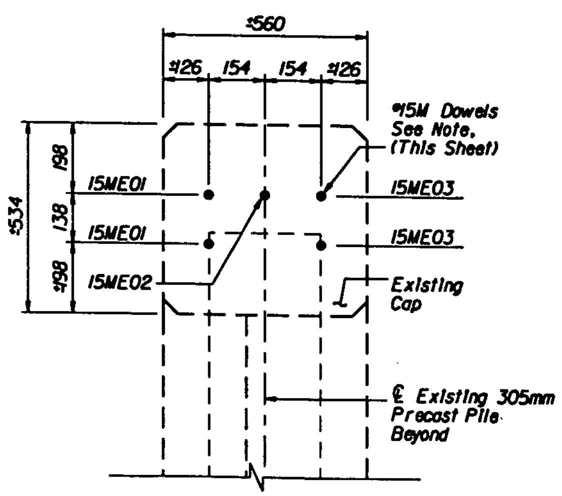


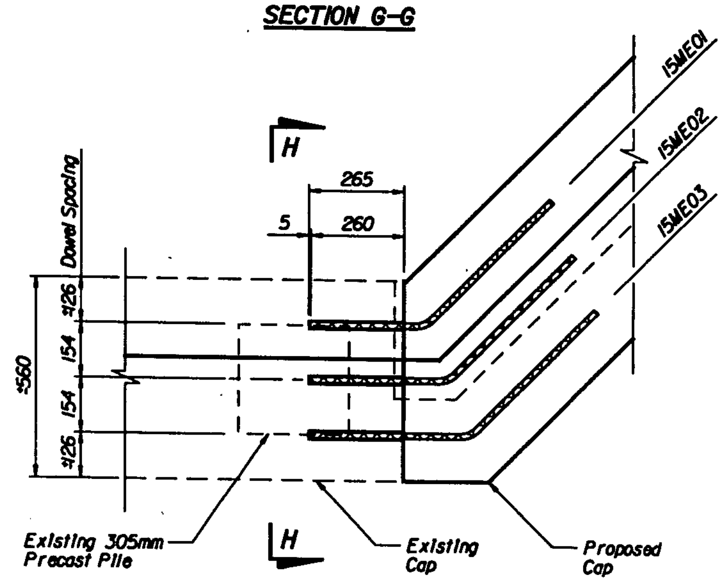
SECTION G-G



DOWEL DETAIL ELEVATION



SECTION H-H



SECTION I-I PLAN

Note:

6-19mm Φ x 265mm Deep Drilled Holes for Dowels. Set Dowels in Approved Epoxy or Capsule Adhesive, (Class IV). See Dowel Details (This Sheet). See Notes on Sheet C-8.

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23 JUN 98

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
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900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

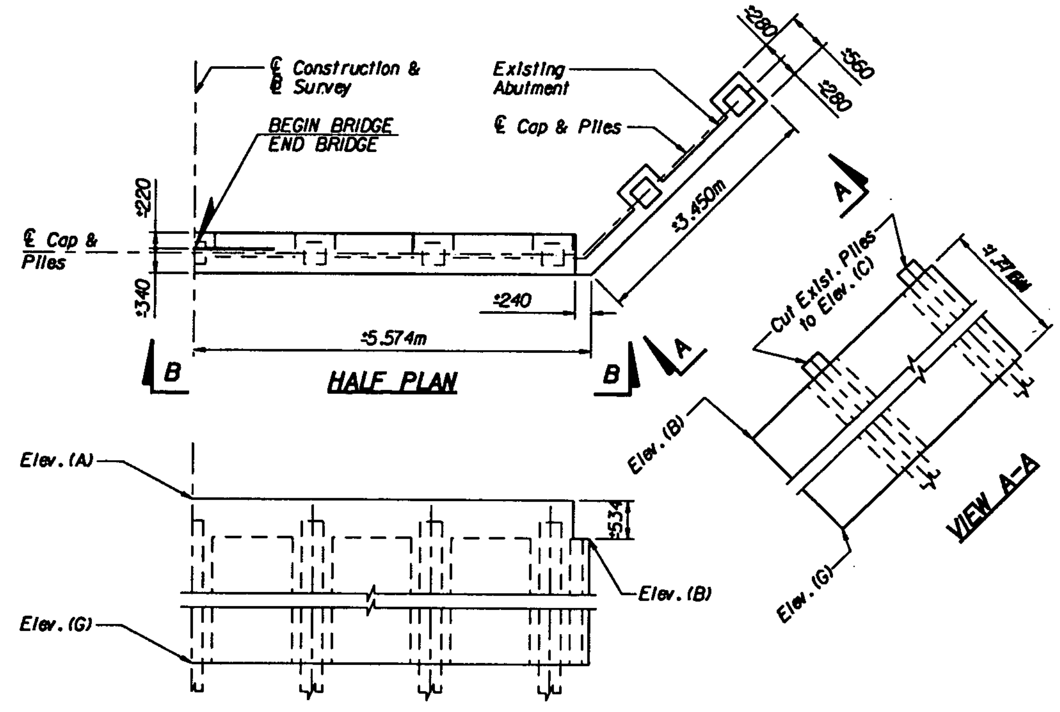
SHEET TITLE: ABUTMENT MODIFICATION DETAILS (1 OF 2)

PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

Drawing No.

Index No.

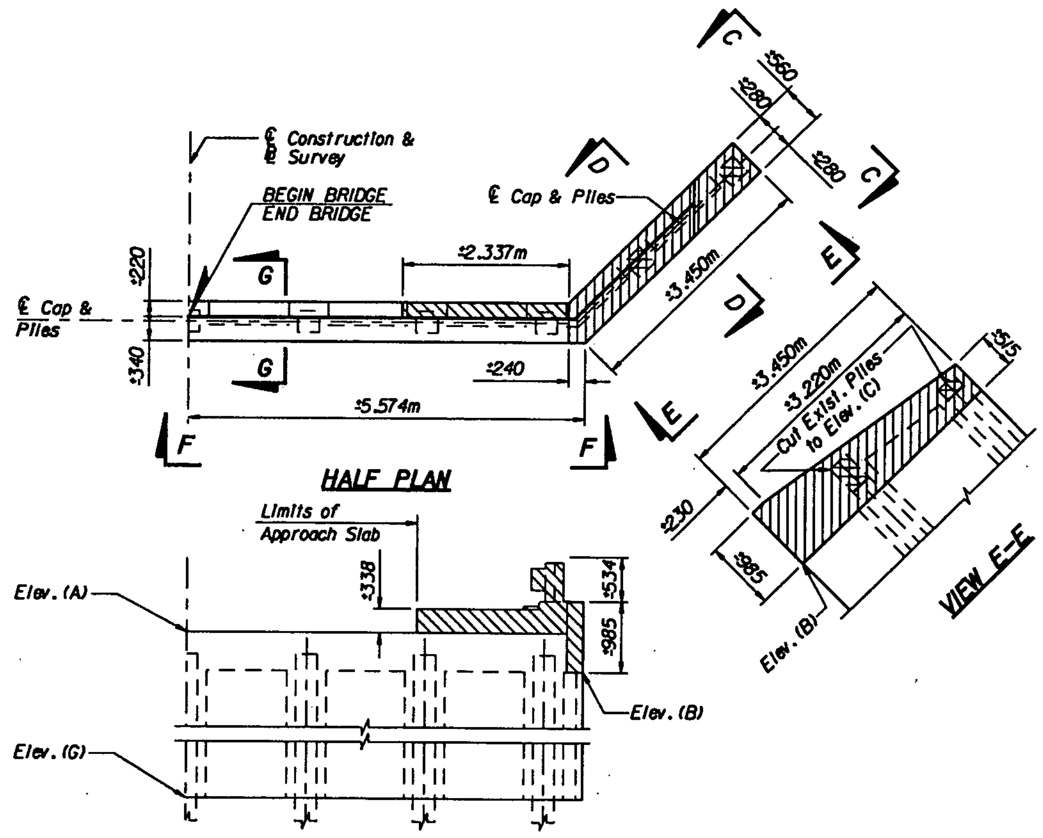
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-7



HALF PLAN

VIEW B-B

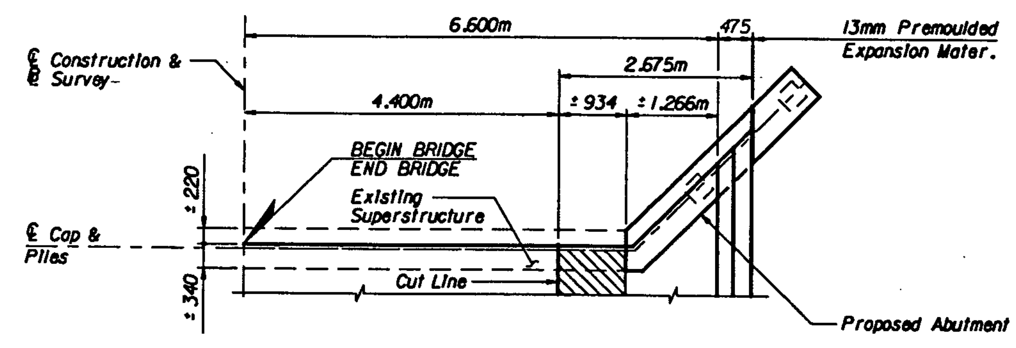
VIEWS SHOWING PORTION OF EXISTING ABUTMENTS TO REMAIN



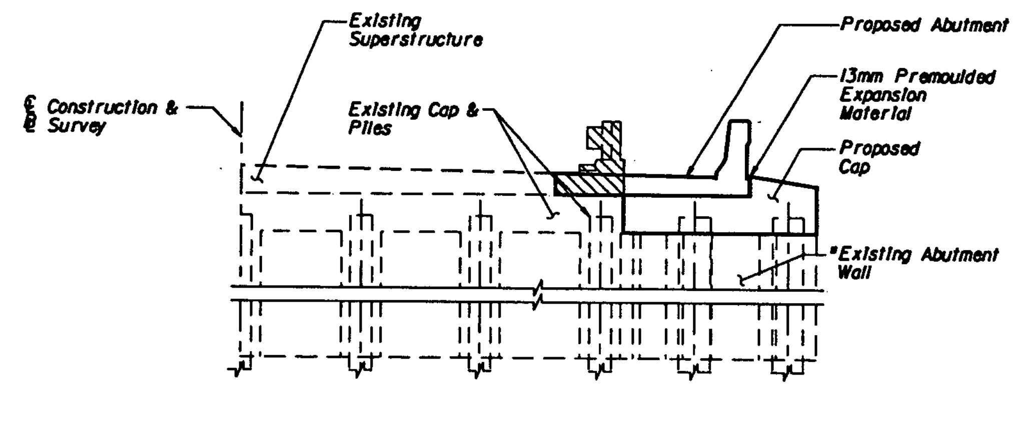
HALF PLAN

VIEW F-F

VIEWS SHOWING EXISTING ABUTMENTS
(Hatched areas to be removed)



HALF PLAN



HALF ELEVATION

VIEW SHOWING COMPLETED STRUCTURE

*Existing Vertical Steel in Abutment Wall shall remain in place. Bars shall be Cleaned and Embedded in Proposed Portion of Cap. Where necessary Existing Bars shall be cut to provide 100mm Min. Clearance.

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m³	2.3
Reinforcing Steel (Substructure)	kg	246
455 mm Sq. Prestressed Concrete Piles	m	* *

* Estimated Quantities are for one End Bent only.
* * See Summary of Bridge Pay Items

NOTES:

1. For Table of Elevations, See Sheet C-5.
2. For Sections C, D, and G, See Abutment Modifications Detail Sheet C-6.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

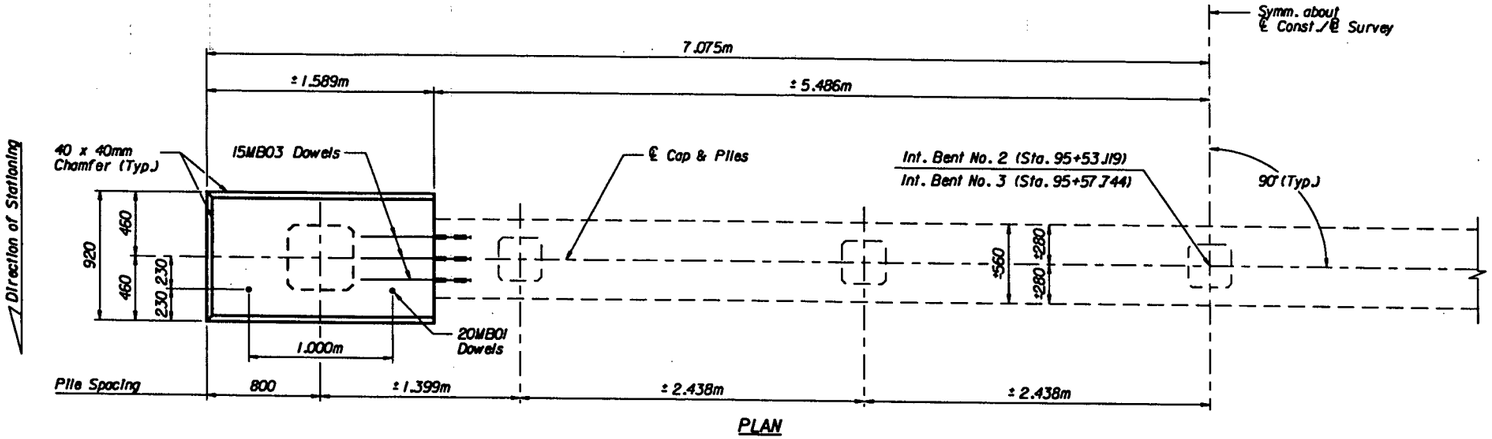
SHEET TITLE: ABUTMENT MODIFICATION DETAILS (2 OF 2)

PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

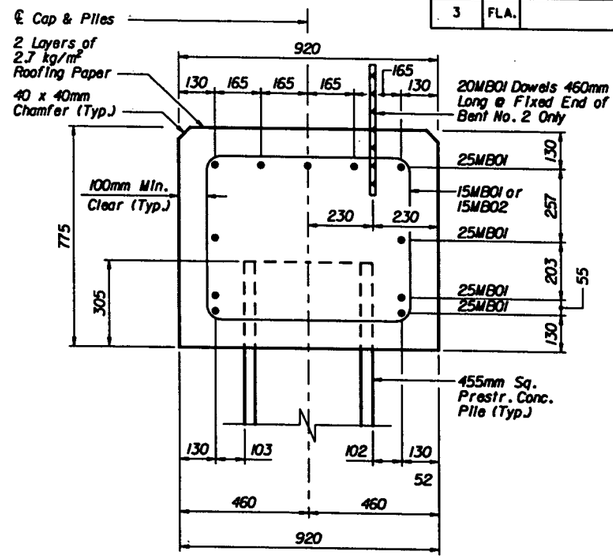
Drawing No.

Index No.

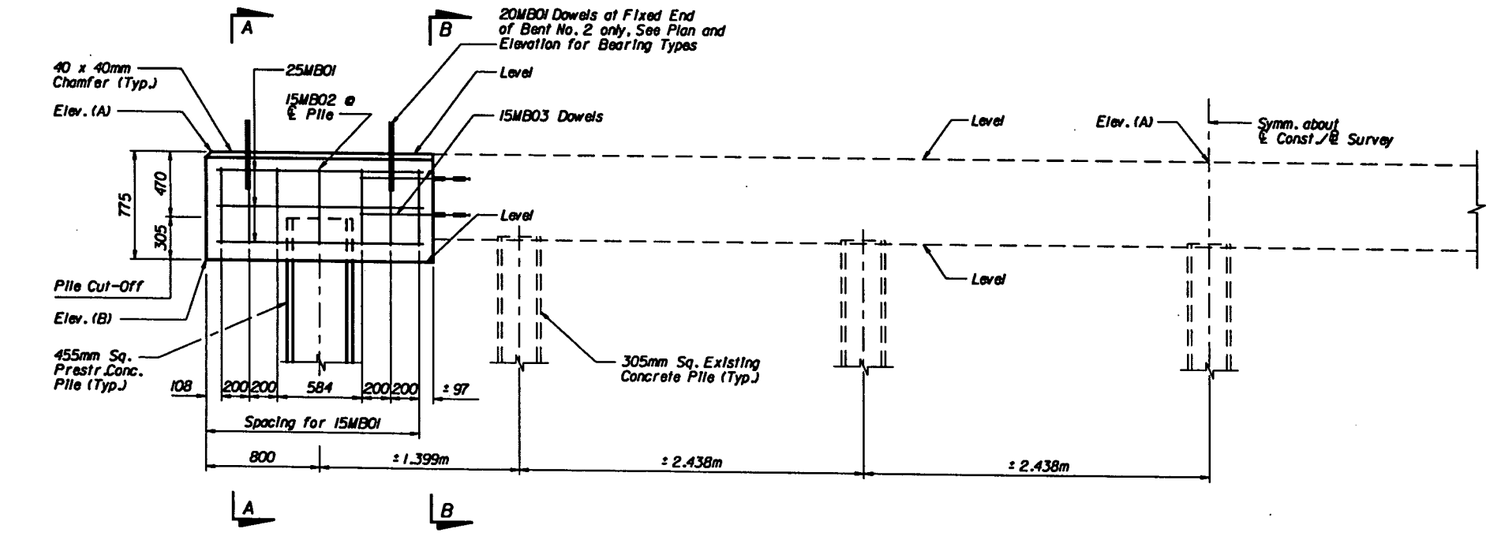
FED. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-8



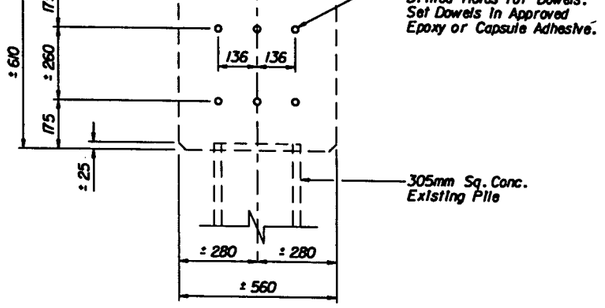
PLAN



SECTION A-A



ELEVATION

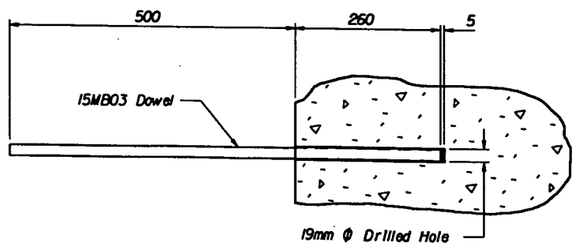


SECTION B-B

ESTIMATED QUANTITIES **			
ITEM	UNIT	BENT 2	BENT 3
Class IV Concrete (Substructure)	m^3	2.2	2.2
Reinforcing Steel (Substructure)	kg	198	194
455mm Prestressed Concrete Piles	m	*	*

* See Summary of Bridge Pay Items.
** Quantities are for one Intermediate Bent only.

BENT CONSTRUCTION ELEVATIONS		
Location	Bent No. 2 95+53.119	Bent No. 3 95+57.744
Elev. (A)	10.375	10.375
Elev. (B)	9.600	9.600
Pile Cut-Off	9.905	9.905



DOWEL DETAIL

NOTES:

1. Dowels shall be set in approved epoxy or capsule adhesive (Class IV). Where reinforcing is encountered, shift hole to clear. The cost of approved epoxy or capsule adhesive and installing dowels shall be included in the Contract Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
2. All piles are plumb.
3. The removal of a 50mm layer of gunite coating will be required where the cap extension meets the existing cap.
4. Dowel holes shall be cleaned thoroughly and free of moisture prior to anchor installation. See adhesive manufacturer's instructions for specific installation procedures.
5. The Gunite shall be removed in a manner that provides a clean smooth surface to which the cap extension will be added. The cost of Gunite Removal shall be included in the Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
6. For Pile Loads, See Sheet C-4.
7. For Bill of Reinforcing, See Sheet C-10.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Register, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: INTERMEDIATE BENT MODIFICATIONS

PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

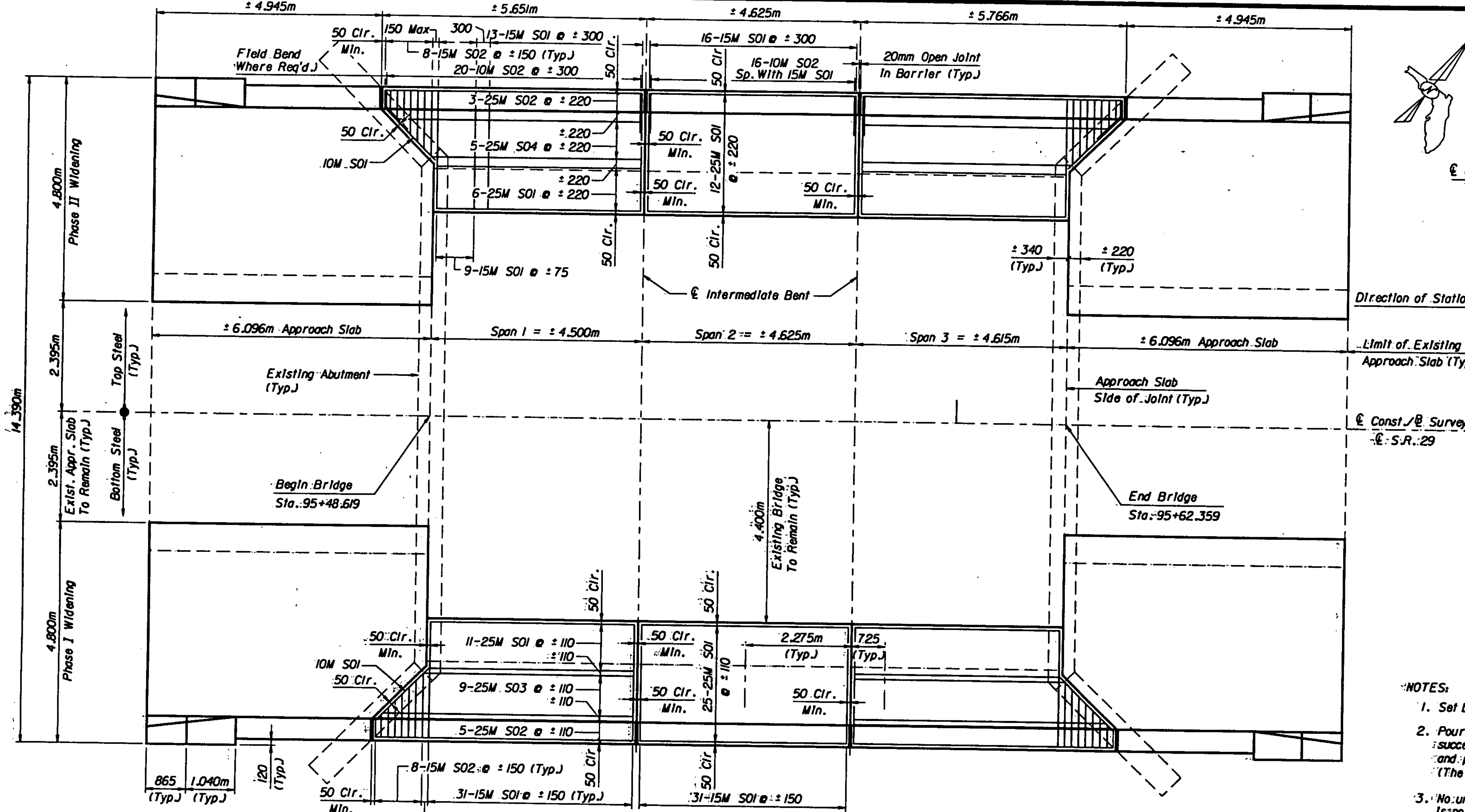
Drawing No.

Index No.

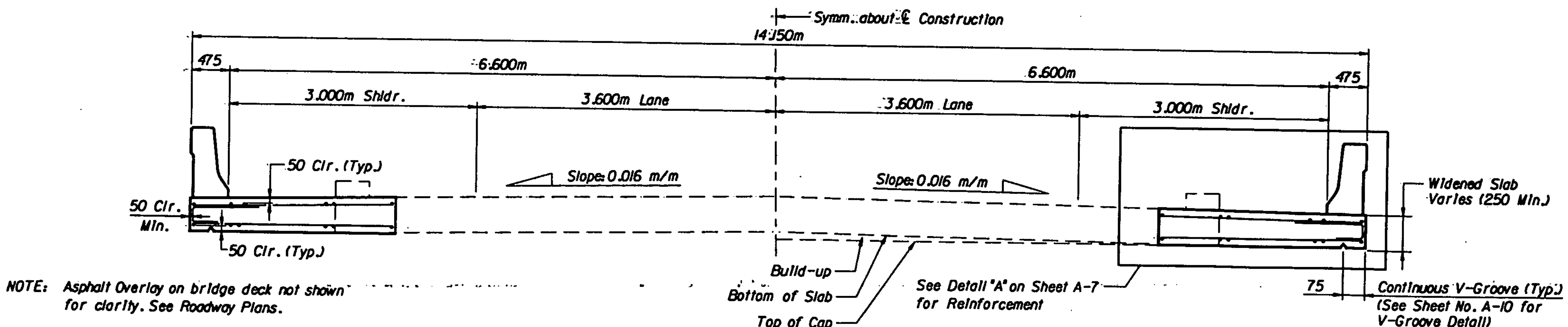
I:\projects\9523-01\drawings\working\050035\sbt803.dgn

23 JUN 98 11:50:41

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-9

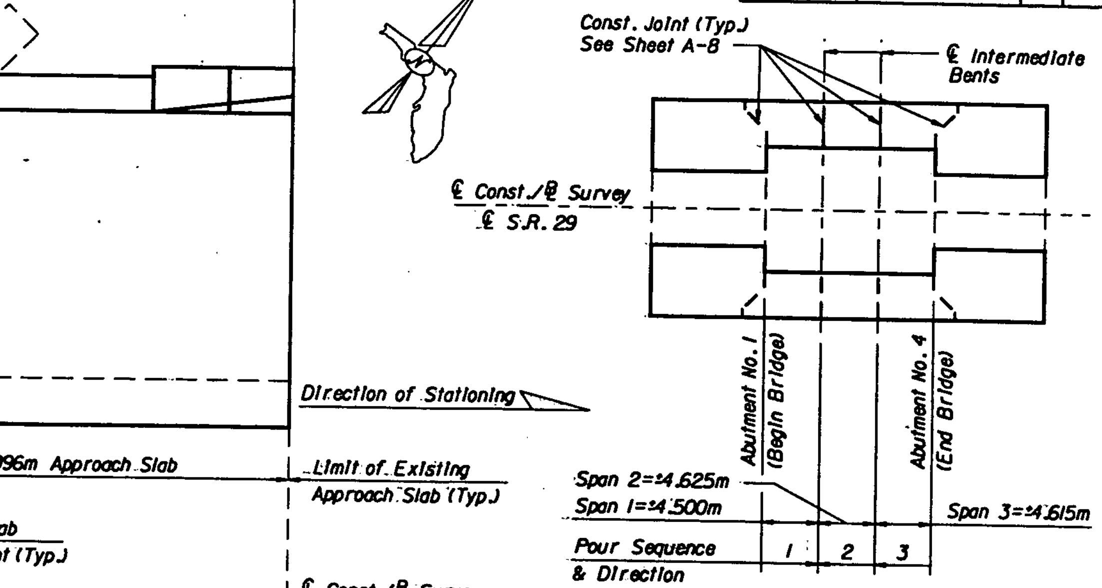


PLAN

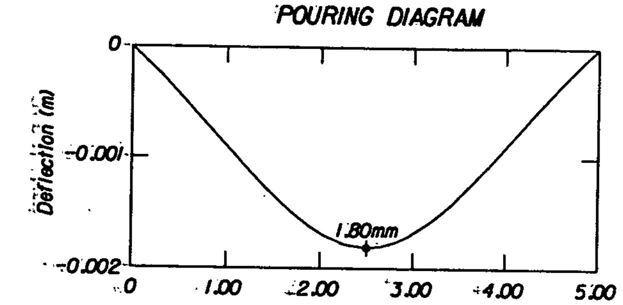


NOTE: Asphalt Overlay on bridge deck not shown for clarity. See Roadway Plans.

HALF SECTION AT MID-SPAN (SPAN 2 - SEE PLAN VIEW) HALF SECTION AT BENTS



3-SPAN SUPERSTRUCTURE POURING DIAGRAM



DEAD LOAD DEFLECTION DIAGRAM

NOTES:

1. Set bars in slab for Barrier as detailed on Barrier Sheet.
2. Pouring Sequence: After pouring the first unit, succeeding pours shall begin at the end away from and proceed toward the previously placed unit. (The first unit may be at either end of bridge)
3. No unit shall be placed adjacent to a previously placed unit that is not a minimum of 72 hours old.
4. The contractor shall camber the forms to compensate for the combined effect of the deflection of the forms and the dead load deflection of the slab.
5. The contractor may submit for approval a revised casting sequence. The submittal shall include structural analysis by the specialty Engineer reflecting the new casting sequence and its effect on the Camber Diagram. The revision shall be in conformance with Chapter 19 of the Structures Design Guidelines.

***ESTIMATED QUANTITIES**

ITEM	UNIT	QUANTITY
Class IV Concrete - Superstructure	m^3	21.70
Reinforcing Steel (Superstructure)	kg	5663
Concrete Traffic Railing Barrier **	m	32.1

* Quantities are for the complete Superstructure.

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 3-SPAN SUPERSTRUCTURE

PROJECT NAME: S.R. 29 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

Drawing No.

Index No.

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23 JUN 98

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			C-10

MARK SIZE	MARK DES	METERS LENGTH	NO BARS	TYP BAR	STY A	STY G	METERS B	C	D	E	F	H	J	K	N	Ø
LOCATION ABUTMENTS NOS. 1 AND 4 (PER SIDE) NO. REQUIRED = 4																
15M	E01	0.820	2	12			0.500	0.320								45
15M	E02	0.880	1	12			0.500	0.380								45
15M	E03	0.945	2	12			0.500	0.445								45
15M	E04	1.670	11	4	4	4	0.335	0.360								
15M	E05	0.960	4	11			0.360	0.300	0.300							
15M	E06	0.935	1	1			0.935									
15M	E07	0.635	1	1			0.635									
15M	E08	1.050	1	11			0.450	0.300	0.300							
15M	E09	1.030	2	11			0.360	0.335	0.335							
20M	E01	0.460	6	1			0.460									
25M	E01	3.000	4	1			3.000									
25M	E02	3.598	2	40			0.135	0.345	1.210	0.350	0.795	3.000			2	
LOCATION INTERMEDIATE BENT NOS. 2 AND 3 (PER 1 BENT) NO. REQUIRED = 2																
15M	B01	2.870	12	4	4	4	0.575	0.720								
15M	B02	2.030	2	5			0.575	0.720	0.080	0.080						
15M	B03	0.760	12	1			0.760									
25M	B01	1.380	22	1			1.380									
LOCATION INTERMEDIATE BENT NO. 2 (PER SIDE) NO. REQUIRED = 2																
20M	B01	0.460	2	1			0.460									
LOCATION SUPERSTRUCTURE NO. REQUIRED = 1																
10M	S01	1.625	8	1			1.625									
10M	S02	1.080	112	11			0.130	0.200	0.750							
15M	S01	2.575	306	1			2.575									
BARS 15M S02 VARY IN 8 SETS OF 8 BARS EACH IN INCREMENTS OF 0.150 M																
15M	S02	VARY	64	1			1.480									
		0.955					0.430									
25M	S01	4.380	142	1			4.380									
25M	S02	5.530	32	1			5.530									
BARS 25M S03 VARY IN 9 SETS OF 4 BARS EACH IN INCREMENTS OF 0.110M																
25M	S03	VARY	36	1			5.395									
		4.955		1			4.515									
BARS 25M S04 VARY IN 5 SETS OF 4 BARS EACH IN INCREMENTS OF 0.220M																
25M	S04	VARY	20	1			5.395									
		4.955		1			4.515									

END OF LIST

NOTE:
1. All Reinforcing Steel shown on this sheet shall be ASTM A615m-92, Grade 420.

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REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
1424 Piedmont Drive East
Tallahassee, Florida 32312
Tel: 904-385-7450 Fax: 904-385-3545

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

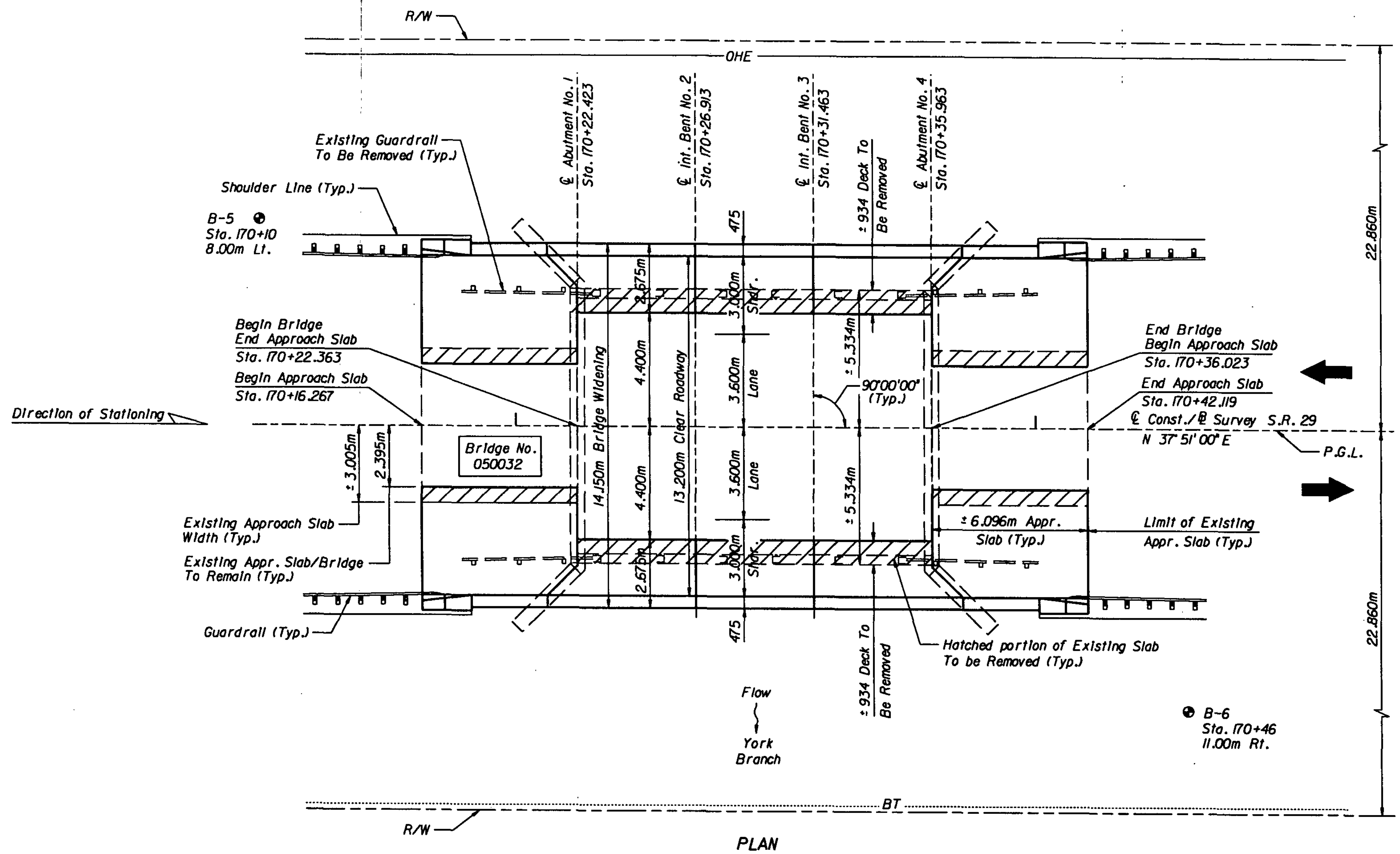
SHEET TITLE: REINFORCING BAR LIST

PROJECT NAME: S.R. 31 BRIDGE OVER LONE PINE CREEK, BRIDGE NO. 050035

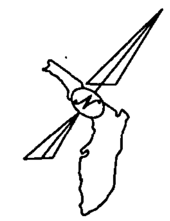
Drawing No.

Index No.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-1



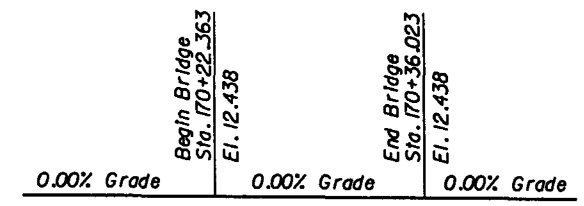
PLAN



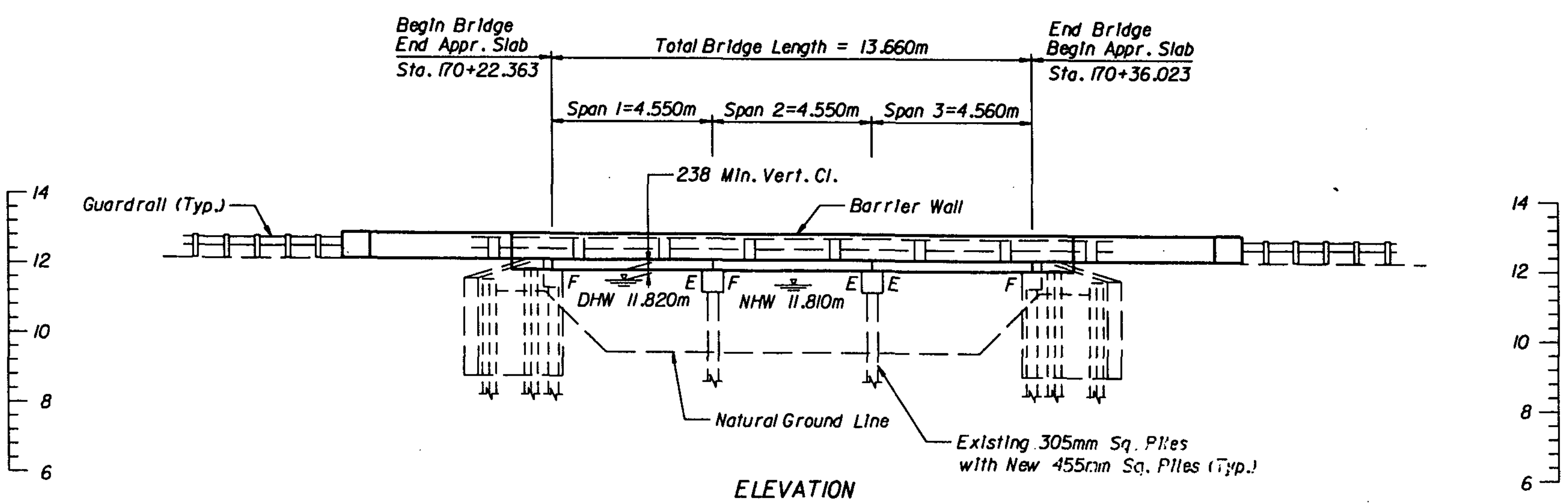
TRAFFIC DATA

1996 AADT = 2800
1999 EST. AADT = 3000
2019 EST. AADT = 4800
K = 10.4%
D = 55.6%
T = 32.6% (24 HR.)
T = 16.3% (DESIGN HR.)

DESIGN SPEED 100 km/h



PROFILE GRADE S.R. 29
(Along ℄ Construction)



ELEVATION

NOTE:

1. Elevations shown in the Profile Grade Diagram refer to top of deck elevations. The PGL elevations is a maximum of 77 mm above the ℄ deck elevation due to the asphalt overlay. Refer to the Roadway Plans for the asphalt overlay.

W.P.I. No. 1110874

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAMES	DATES
DRAWN BY	BL	8-97
CHECKED BY	SB	8-97
DESIGNED BY	SB	8-97
CHECKED BY	RTC	8-97
APPROVED BY		

ENGINEER OF RECORD:
CORZO CASTELLA CARBALLO THOMPSON SALMAN, P.A.
ENGINEERS•ARCHITECTS•PLANNERS
901 PONCE DE LEON BLVD., SUITE 900
CORAL GABLES, FLORIDA 33134
MIAMI (305)-445-2900 FLORIDA (800)-448-8277
FL REGISTRATIONS: EB0005822 AAC002142

SEAL:
6/22/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: PLAN AND ELEVATION

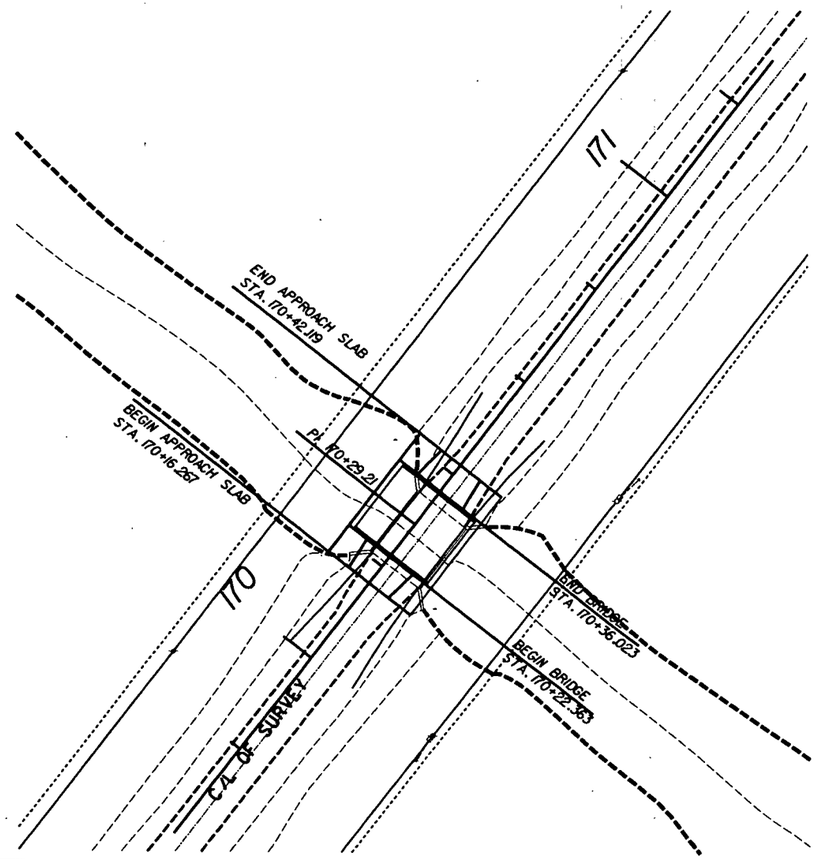
PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

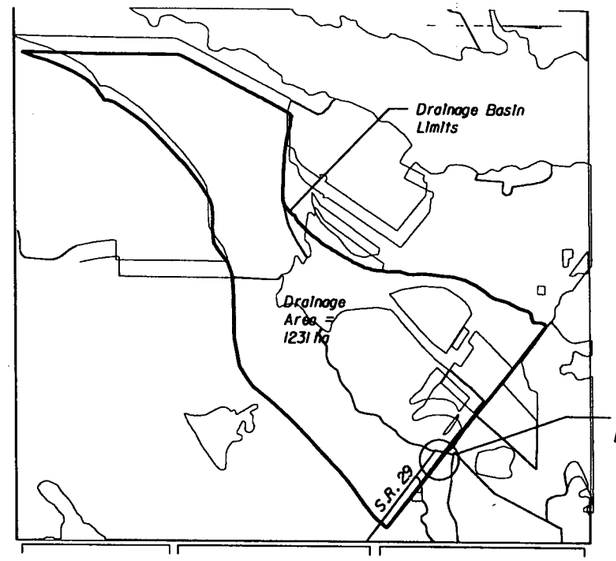
DRAWING NO.

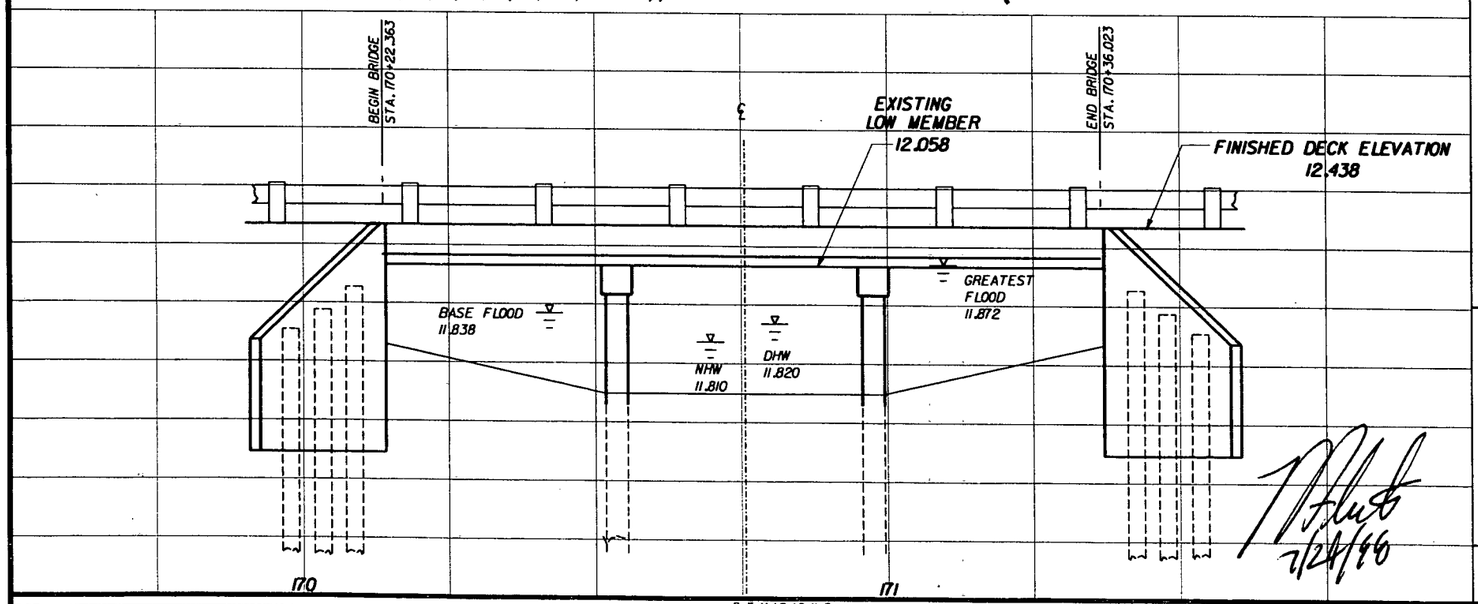
INDEX NO.

22 JUN 98 18:39:19 Brett Loeffler t:\0717_01\york\050032\gnpe032.dgn

STATE PROJ. NO.	SHEET NO.
05090-3511	D-2







(REFERENCE)	EXISTING STRUCTURES (1)	(2)	(3)	(4)	ASSUMED CONFIGURATION
FOUNDATION	0.035 PILES				0.305 PILES
OVERALL LENGTH	(+/-)13.660				(+/-)13.660
SPAN LENGTH	(+/-)14.550				(+/-)14.550
TYPE CONSTRUCTION	FLAT SLAB				FLAT SLAB
AREA OF OPENING @ H.W.	(+/-)121.924				(+/-)121.924
ROADWAY WIDTH	10.668				14.150
ELEV. LOW MEMBER	12.058				12.058

HYDRAULIC DESIGN DATA

NOTE: The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticipated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgements and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

DEFINITIONS:
Design Flood: The flood utilized to assure a desired level of hydraulic performance.
Base Flood: The flood having a 1% chance of being exceded in any year. (100 Year Frequency)
Overtopping Flood: The flood which causes flow over the highway, over a watershed divide or thru emergency relief structures.
Greatest Flood: The most severe flood which can be predicted where overtopping is not practicable.

WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) 11.810 M.H.W. _____ M.L.W. _____

FLOOD DATA:	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	☐ OVERTOPPING FLOOD ☒ GREATEST FLOOD
STAGE ELEV. NGVD (M)		11.820	11.838	11.872
DISCHARGE (CM/S)		446	512	666
AVERAGE VELOCITY (M/S)		0.884	0.994	1.237
EXCEEDANCE PROB. (%)		2.00%	1.00%	0.2%
FREQUENCY (YR.)		50	100	500

HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 170+22.363 END BRIDGE STATION 170+36.023 SKEW ANGLE 0°
2. CHANNEL SECTION: ℄ STATION _____ BOTTOM WIDTH 13.716 ELEV. 10.3 SIDE SLOPE 0
3. LIMITS OF CHANNEL EXCAVATION: RT. N/A LT. N/A
4. CLEARANCE: NAVAGATION: HORIZ. N/A VERT. N/A ABOVE EL. N/A DRIFT: HORIZ. 4.166 VERT. 0.270 ABOVE EL. 11.790
5. SCOUR PREDICTION: 100 YEAR DESIGN SCOUR EL. 7.90 DEPTH = 13.00
   500 YEAR SCOUR EL. 7.36 DEPTH = 15.62
6. SLOPE PROTECTION: NONE
7. DECK DRAINAGE: RUNOFF WILL SHEET FLOW OFF BRIDGE THRU REPLACEMENT SCUPPERS
8. OTHER: _____

REMARKS: _____

2/24/96

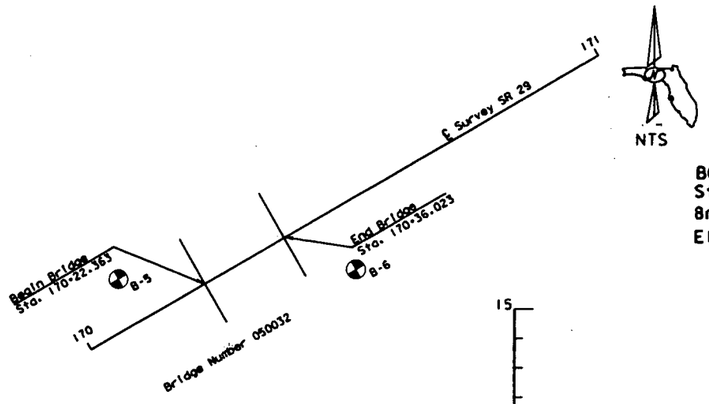
REVISIONS															
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

GENESIS GROUP, INC.

BRIDGE HYDRAULIC RECOMENDATIONS
S.R. 29 BRIDGE NO. 050032

$$$$$$$STYLINE$$$$$$$
$$$$$$$DGNSPECIFICATION$$$$$$$

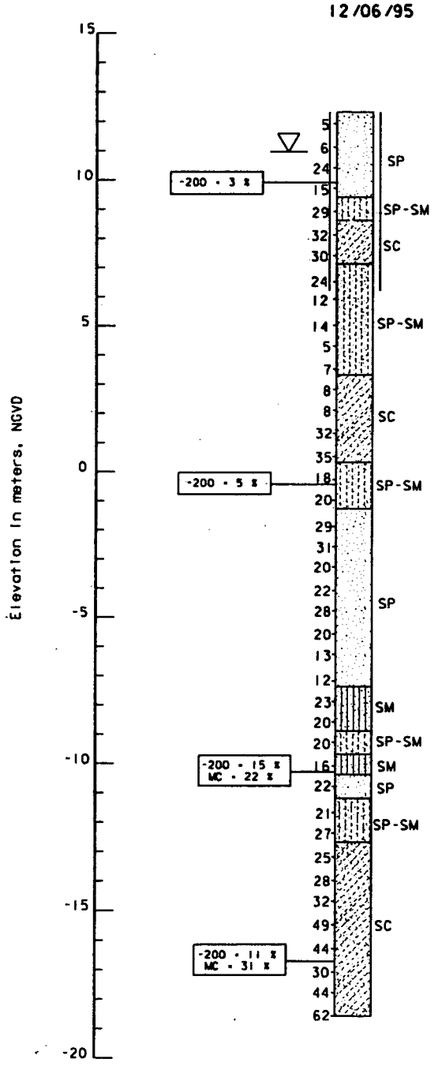
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	05090-3511		D-3



NTS

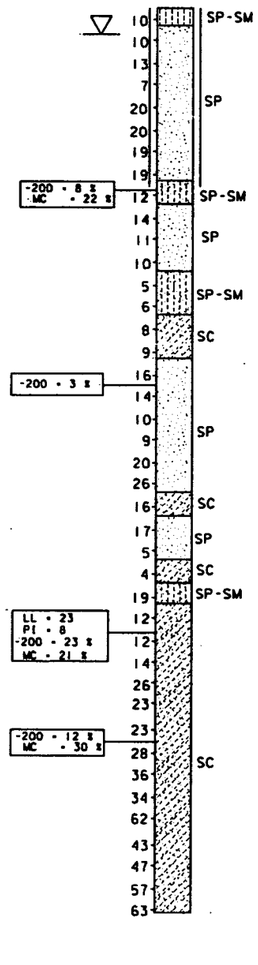
BORING NO. B-5
Sta. 170+10
8m LT.of Centerline
Elev. 12.32 m

12/06/95



BORING NO. B-6
Sta. 170+46
11m RT.of Centerline
Elev. 12.35 m

12/06/95



LEGEND :

- SP, Poorly graded sands, sand-silt mixtures.
- SC, Clayey sands, sand-clay mixtures.
- SP-SM, Poorly graded sands and gravelly sands, to silty sands, sand-silt mixtures.
- SM, Silty sands, sand-silt mixtures.

NOTES :

Numbers to the left of borings indicate SPT values for 300 mm penetration. (Unless otherwise noted.)

50/90 - Numbers of blows for 90 mm of penetration.

▽ - Water Table

Casing used

Rig Used - Failing 1500

Hammer Type - 63.5 kn Manual

WATER :

Resistivity : >10,000 ohms-cm, Chlorides : 40 ppm, Sulfates :<2, pH : 4.7.

ENVIRONMENTAL CLASSIFICATION

Substructure : Concrete : Extremely Aggressive (Due to pH)
Steel : Extremely Aggressive (Due to pH)

Superstructure : Slightly Aggressive

Granular Materials- Relative Density	SPT (Blows/300mm)
Very Loose	Less than 4
Loose	4 - 10
Medium or Compact	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

Silts and Clays- Consistency	SPT (Blows/300mm)
Very Soft	Less than 2
Soft	2 - 4
Firm	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	Greater than 30

REVISIONS					
Date	By	Description	Date	By	Description
11/18/96	TNP	Hammer Type revised	02/10/97	MEH	N value's corrected
			06/20/97	TNP	Begin & End Bridge stations, corrected
					Sheet Numbers, added

	Names	Dates
Drawn by	DML	6/97
Checked by	MEH	6/97
Designed by		
Checked by		
Approved by	T.N. Puckett	

ENGINEER OF RECORD:
MATERIALS OFFICE
DISTRICT 1
801 N. Broadway
Bartow, Florida 33830-1249

LOGO:

SEAL:
Theresa Puckett
6/20/97

FLORIDA DEPARTMENT OF TRANSPORTATION
MATERIALS OFFICE

ROAD NO.	COUNTY	PROJECT NO.
29	Glades	05090-3511

SHEET TITLE: Report of Core Borings

Drawing No. 1

PROJECT NAME: SR 29/over York Branch

Index No.

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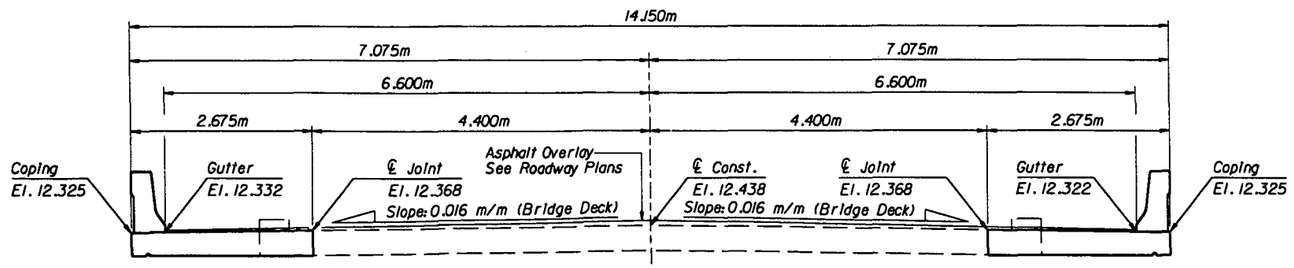
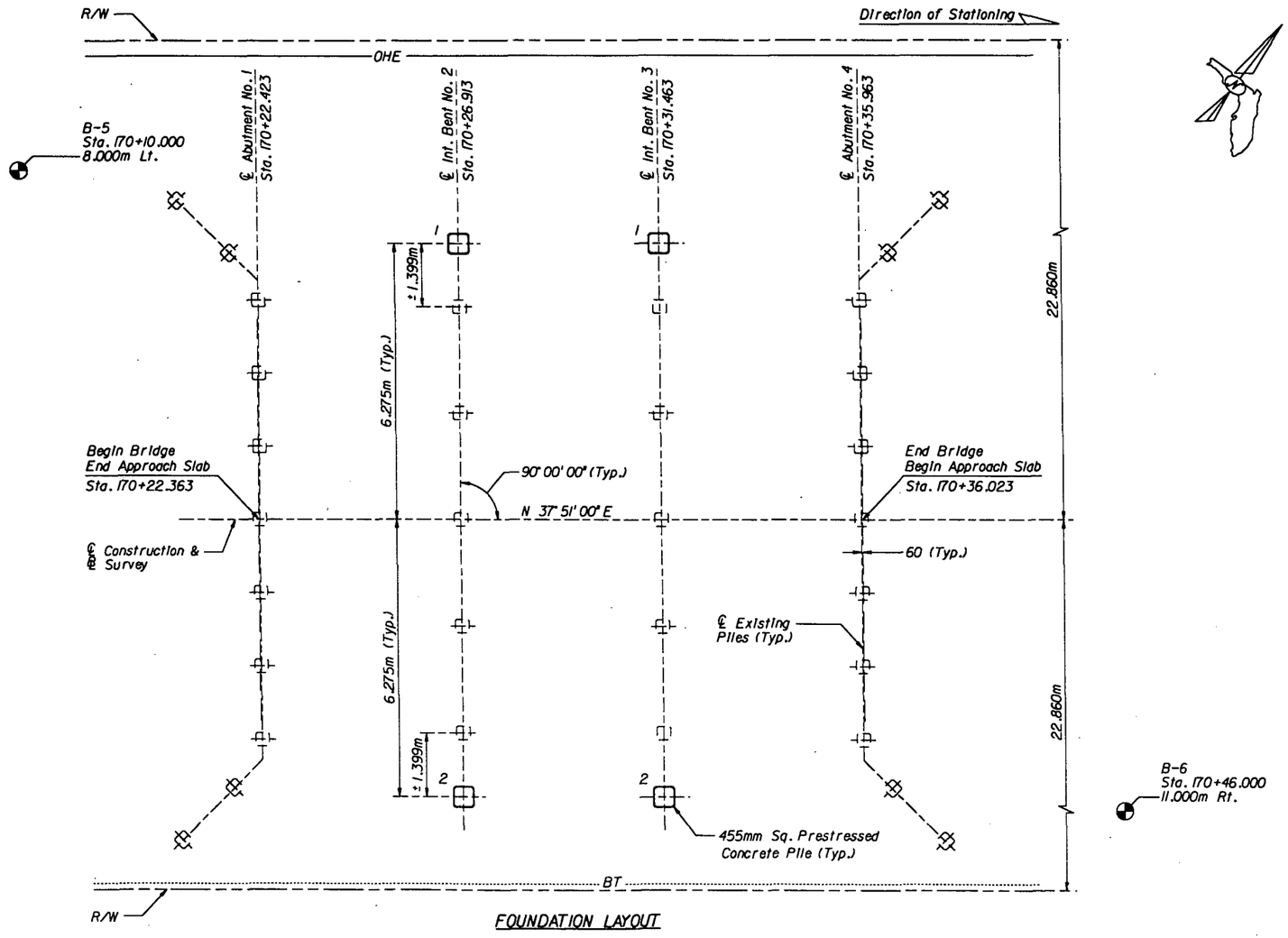
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-4



SECTION THRU SUPERSTRUCTURE SHOWING FINISH DECK ELEVATIONS



FOUNDATION LAYOUT

YORK BRANCH BRIDGE * 050032										
Bent	Pile Size (mm)	Design Load (kN)	Min. Tip Elev. (m,NGVD)	Scour Elev. (m,NGVD)	Total Scour Resistance* (kN)	Total Down Drag (kN)	Reqd. Preform to Elev. (m)	Reqd. Jet to Elev. (m)	Net Scour Resistance** (kN)	Test Pile Length (m)
2	455	280	+3.0	+8.5	100	N.A.	N.A.	N.A.	100	N.A.
3	455	280	+3.0	+8.5	100	N.A.	N.A.	N.A.	100	N.A.

RDR= (Design Load x FS) + Net Scour Resistance + Total Downdrag where FS is the appropriate safety factor in accordance with the Standard Specifications A455-3.12.2

NOTES:

1. * Total side resistance from ground line to the scour elevation.
2. ** Net side friction resistance from the required preformed or jetting elevation to the scour elevation.
3. RDR is the Required Driving Resistance. All piles shall be driven to the design load times the appropriate factor of safety in accordance with Section A455-3.12.2 of the Standard Specifications plus the total downdrag and net scour resistance.
4. Pile driving criteria will be established using the Wave Equation Method by the District Geotechnical Office.
5. If jetting or preforming elevations differ from those on the table, the engineer shall be responsible for determination of the required driving resistance.
6. Scour has been considered in the design with scour elevations shown in the table.
7. The minimum tip elevation shown is required for lateral stability. Under no circumstance shall the pile be installed above the minimum tip elevation shown in the table.
8. Recommended Production Pile Lengths are 12.000m.

LEGEND:

- ☐ Denotes 455mm Sq. Prestressed Concrete Piles
- ☐ Denotes 305mm Sq. Concrete Existing Piles

GENERAL NOTES:

1. All New Piles are 455mm Sq. Prestressed Concrete Piles.
2. All New Piles are Plumb.
3. For the Pile Cutoff Elevations, see Substructure sheets.
4. All existing piles are to remain.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
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SEAL

9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: FOUNDATION LAYOUT & FINISH GRADE ELEVATIONS

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

Drawing No.

Index No.

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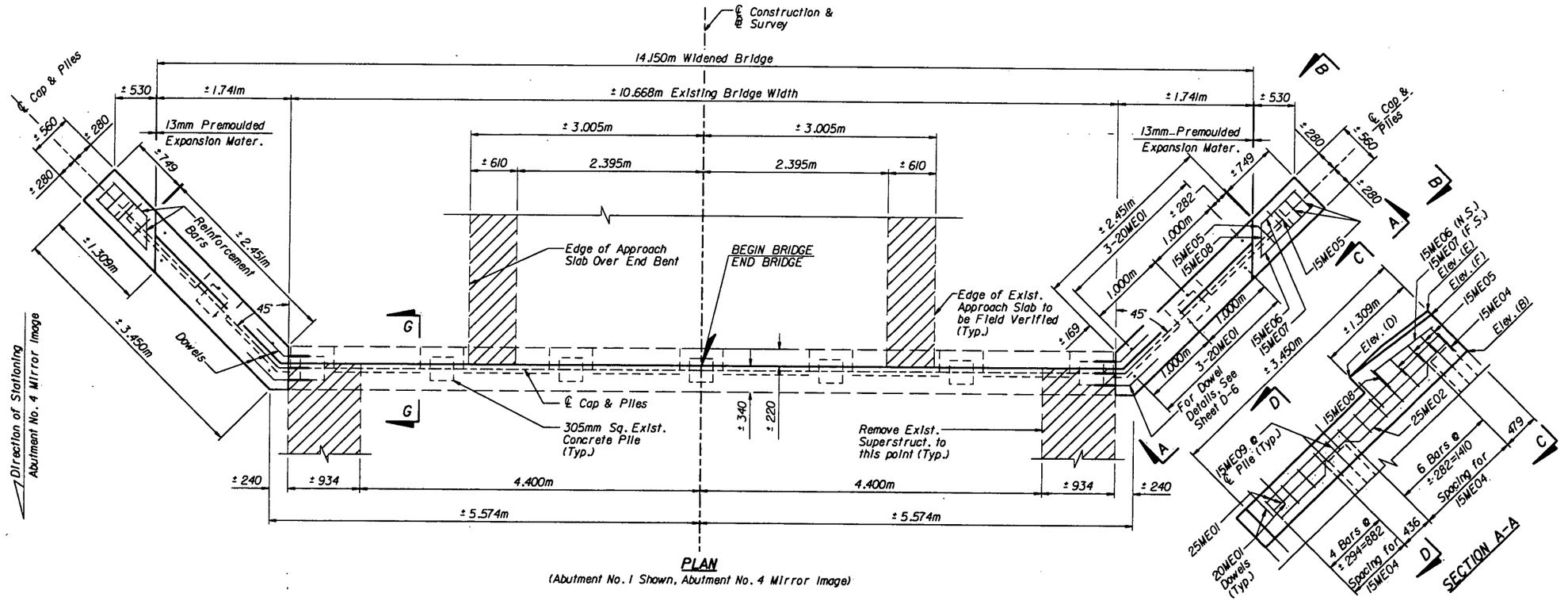
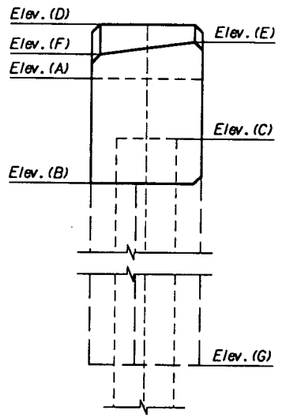
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-5

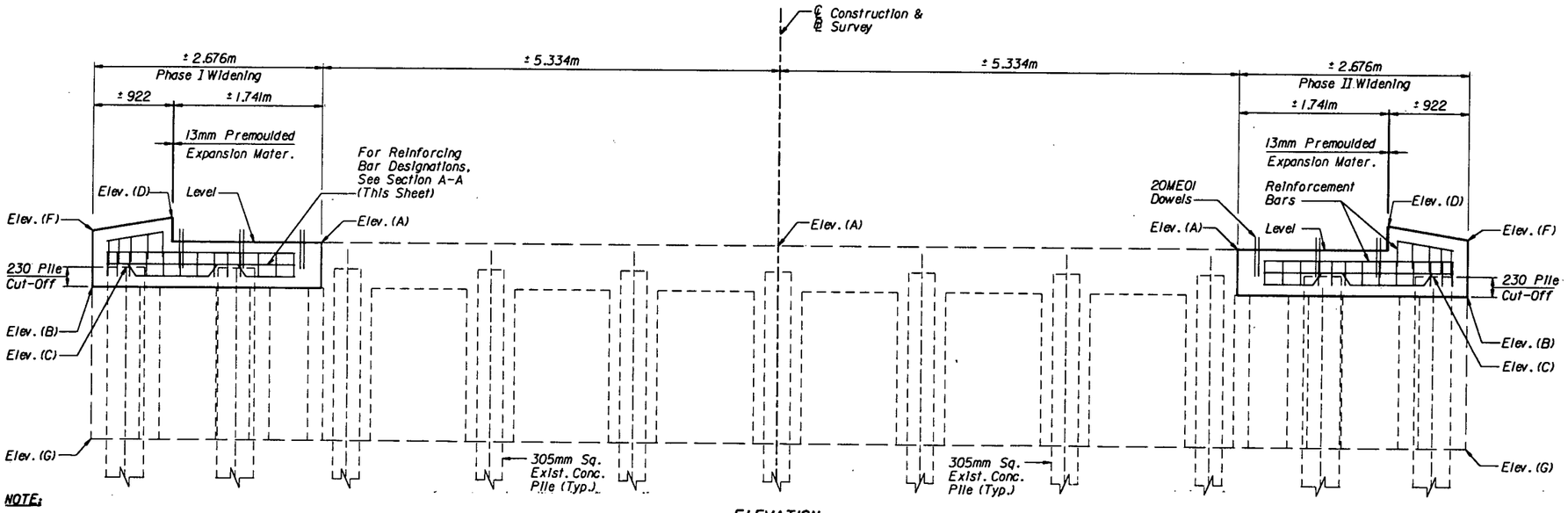


PLAN

(Abutment No. 1 Shown, Abutment No. 4 Mirror Image)



SECTION B-B



ELEVATION

NOTE:

Existing vertical steel in abutment wall shall remain in place. Bars shall be cleaned and embedded in proposed portion of cap. Where necessary existing bars shall be cut to provide 100mm minimum clearance.

ABUTMENT CONSTRUCTION ELEVATIONS	
Location	Abutment Nos. 1 & 4
Elev. (A)	12.058 (Top of Cap)
Elev. (B)	11.524 (Bottom of Cap)
Elev. (C)	11.754 (Pile Cut-Off)
Elev. (D)	12.338
Elev. (E)	12.250
Elev. (F)	12.184
Elev. (G)	*9.754

* Elevation G has been obtained from the existing plans. Contractor to field verify if required.

LEGEND:

Area to be Removed

NOTES:

1. For Estimated Quantities, See Abutment Modification Detail Sheet D-7.
2. For Detailed Removal of Approach Slab, See Approach Slab Sheet in the Roadway Plans.
3. All contact surfaces between old and new concrete shall be cleaned.
4. For Sections C, D, and G, See Abutment Modifications Detail Sheet D-6.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

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FL REGISTRATION: EB0003022 AAC002142

SEAL:

9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATIONS

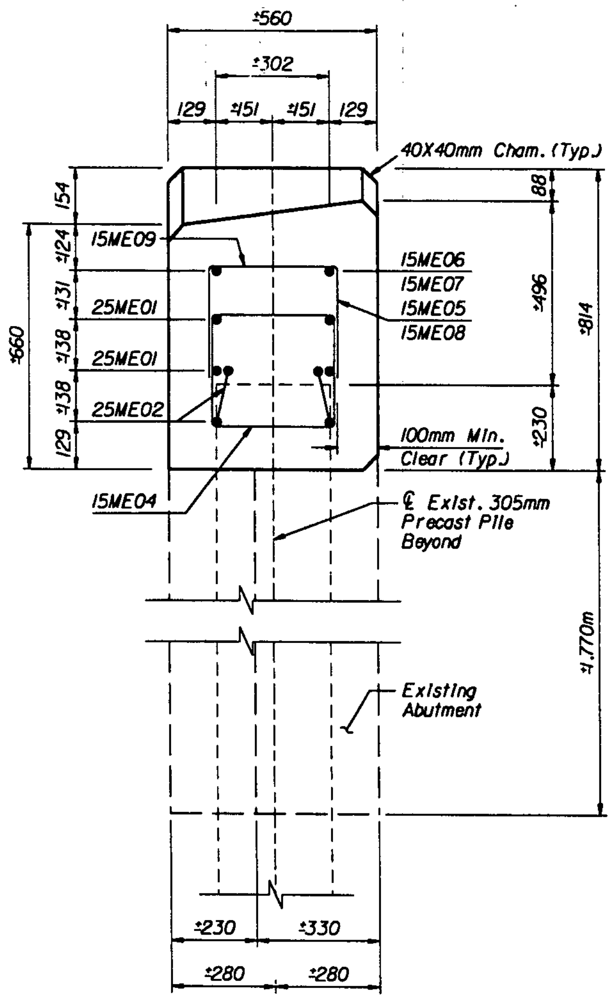
Drawing No.:

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

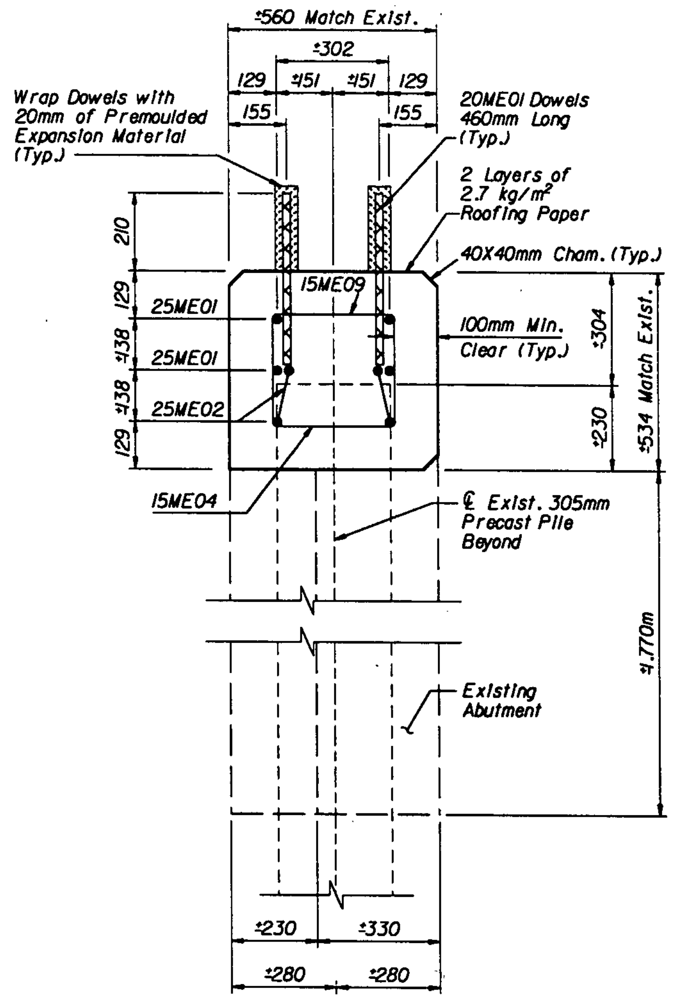
Index No.:

10 SEP 97 13:48:00 Brett's Computer c:\projects\717-01\york050032\yorkeb01.dgn

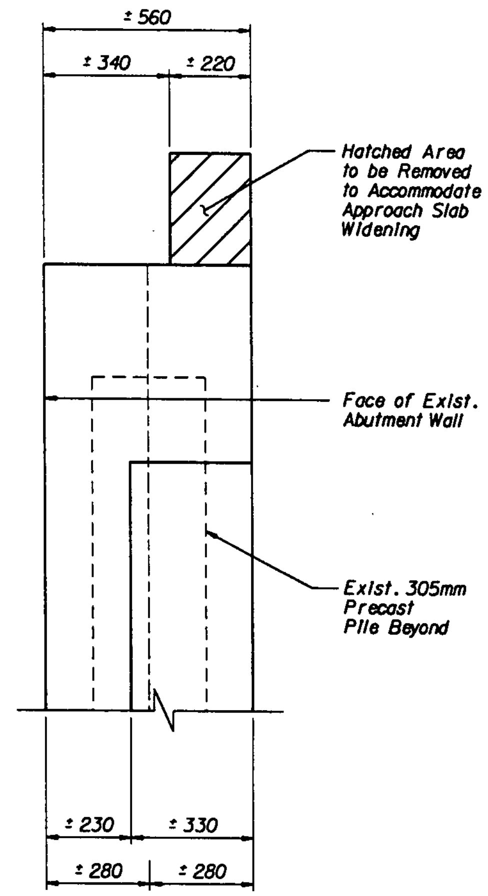
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-6



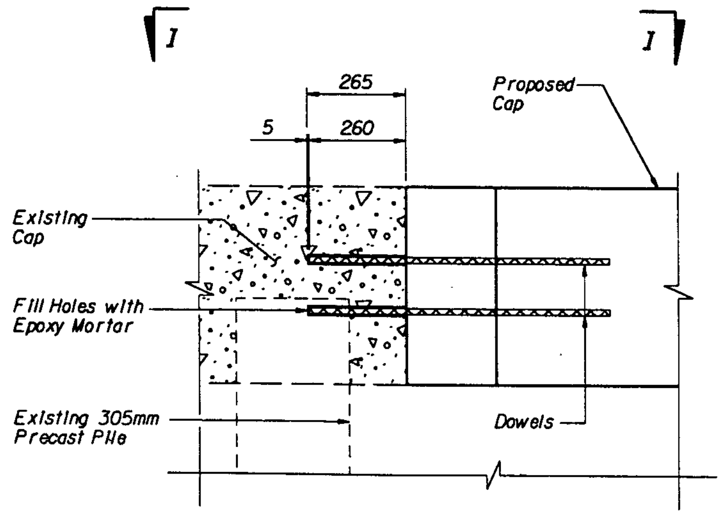
SECTION C-C



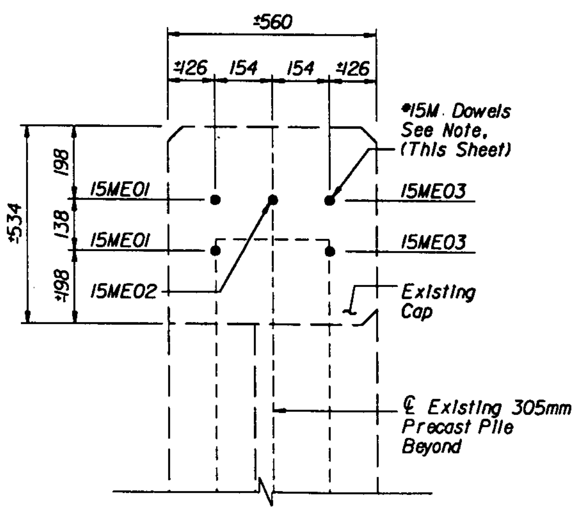
SECTION D-D



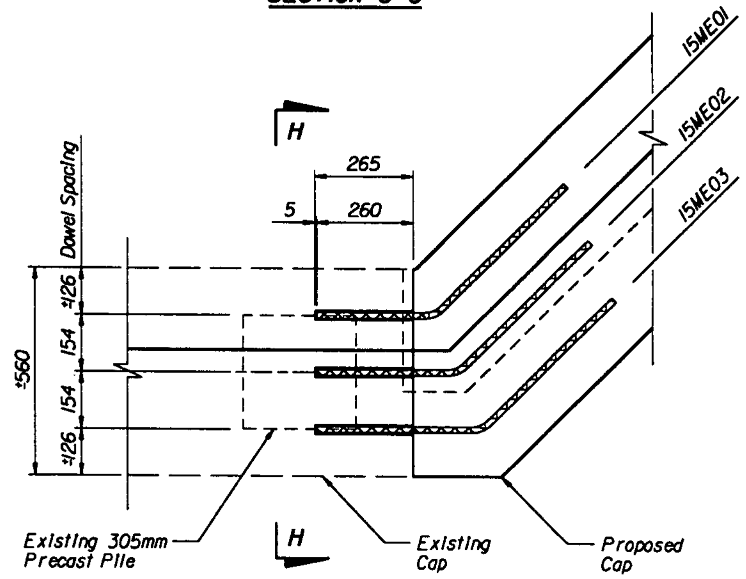
SECTION G-G



DOWEL DETAIL ELEVATION



SECTION H-H



SECTION I-I PLAN

NOTE:

1. 6-19mm Ø x 265mm Deep Drilled Holes for Dowels. Set Dowels in Approved Epoxy or Capsule Adhesive, (Class IV). See Dowel Details (This Sheet). See Notes on Sheet D-8.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

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SEAL: 9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATION DETAILS (1 OF 2)

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

Drawing No.

Index No.

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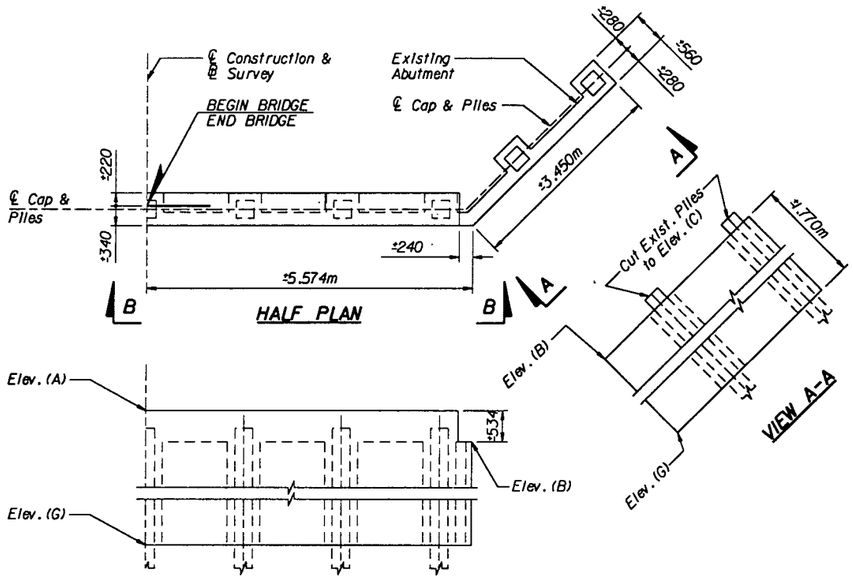
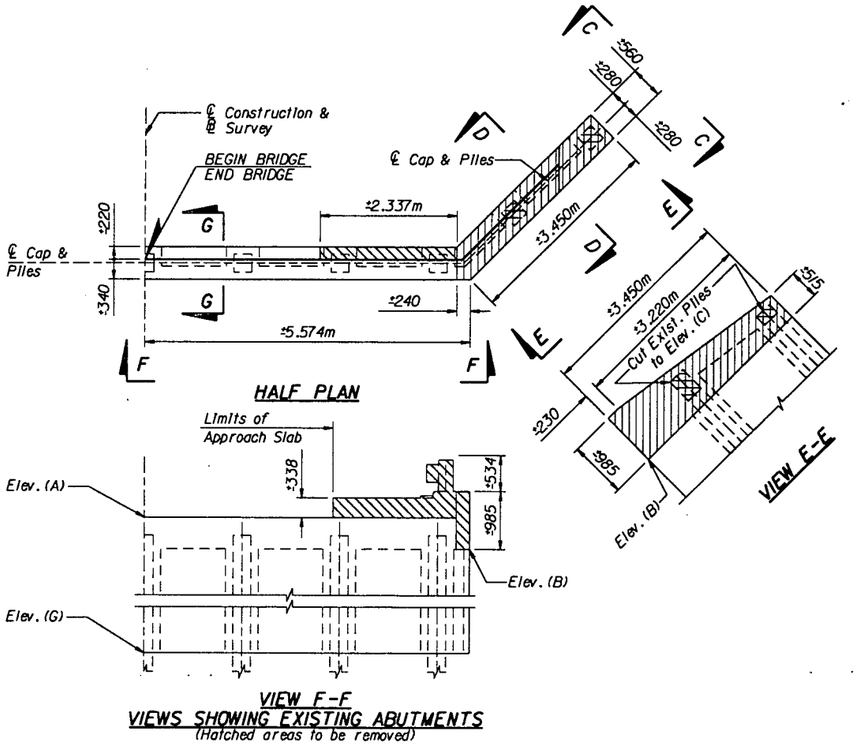
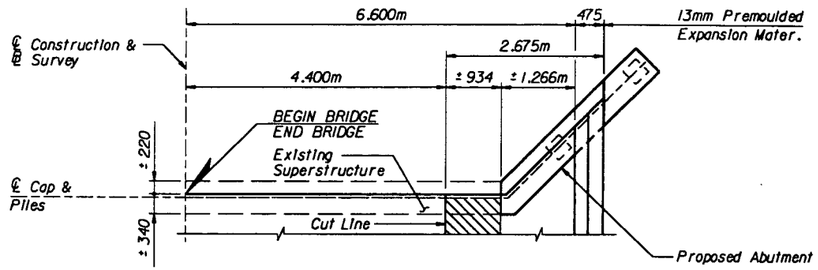
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-7



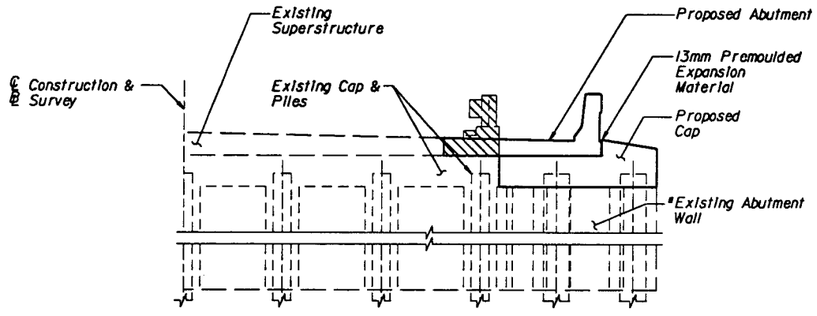
VIEW B-B
VIEWS SHOWING PORTION OF EXISTING ABUTMENTS TO REMAIN



VIEW F-F
VIEWS SHOWING EXISTING ABUTMENTS
(Hatched areas to be removed)



HALF PLAN



HALF ELEVATION
VIEW SHOWING COMPLETED STRUCTURE
*Existing Vertical Steel In Abutment Wall shall remain In place. Bars shall be Cleaned and Embedded In Proposed Portion of Cap. Where necessary Existing Bars shall be cut to provide 100mm Min. Clearance.

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m^3	2.3
Reinforcing Steel (Substructure)	kg	256
455 mm Sq. Prestressed Concrete Piles	m	* *

* Estimated Quantities are for one End Bent only.
* * See Summary of Bridge Pay Items

NOTES:

1. For Table of Elevations, See Sheet D-5.
2. For Sections C, D, and G, See Abutment Modifications Detail Sheet D-6.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

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FL REGISTRATIONS: EB0005022 AAC002142

SEAL:
9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATION DETAILS (2 OF 2)
PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032
Drawing No.
Index No.

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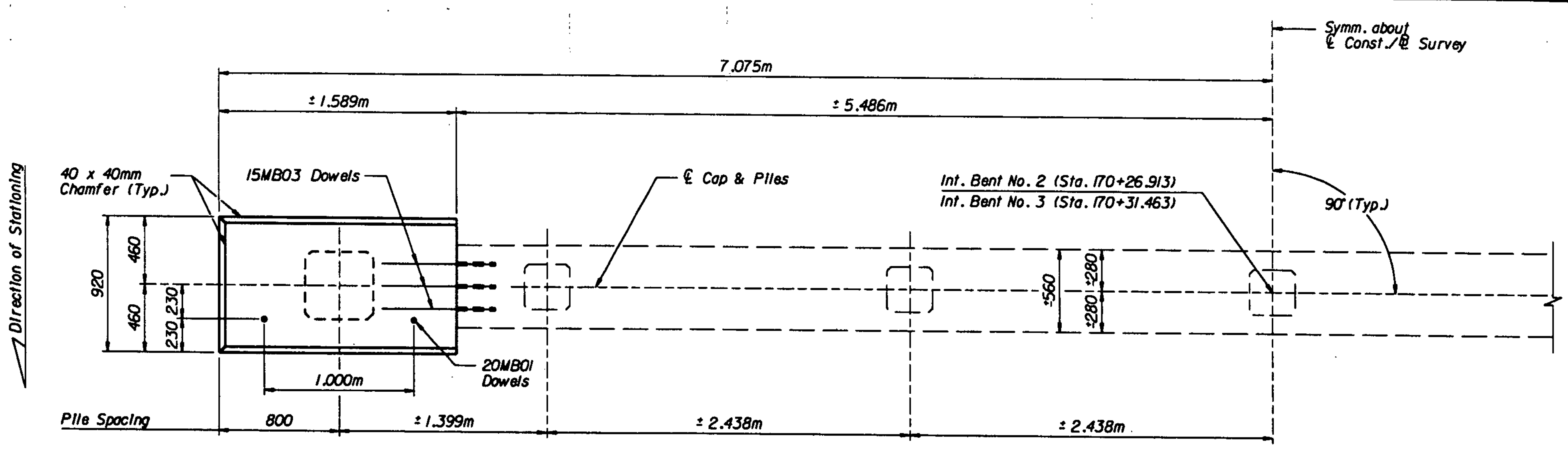
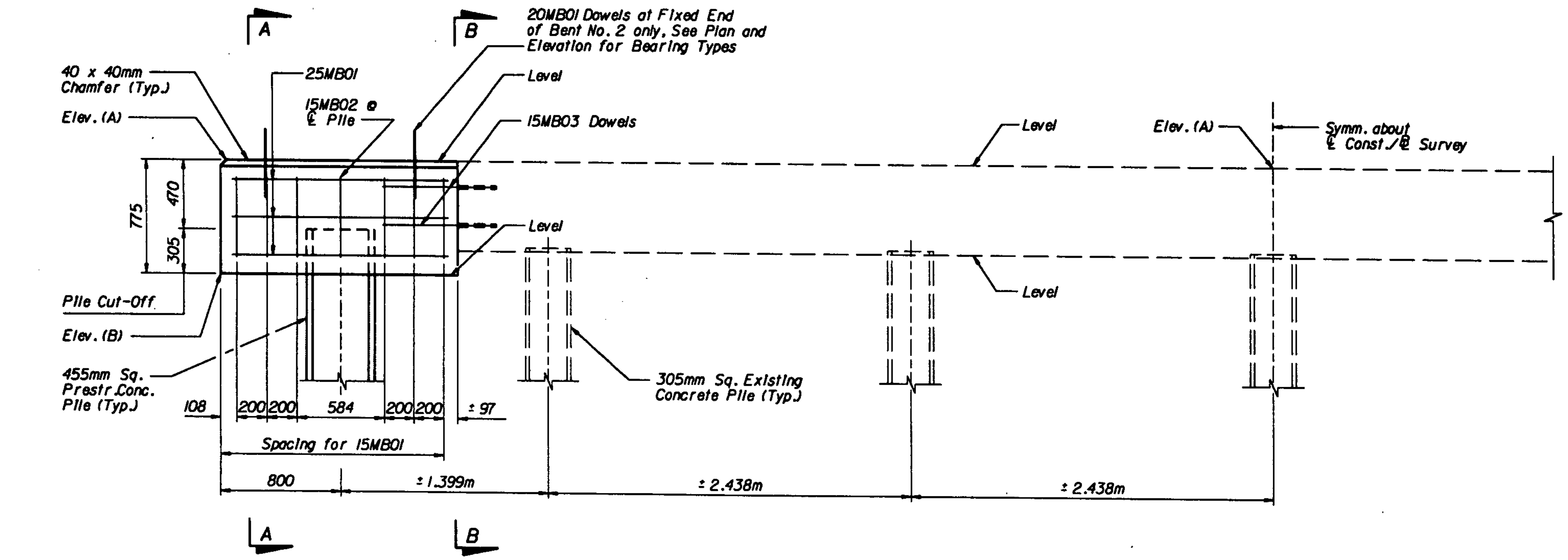
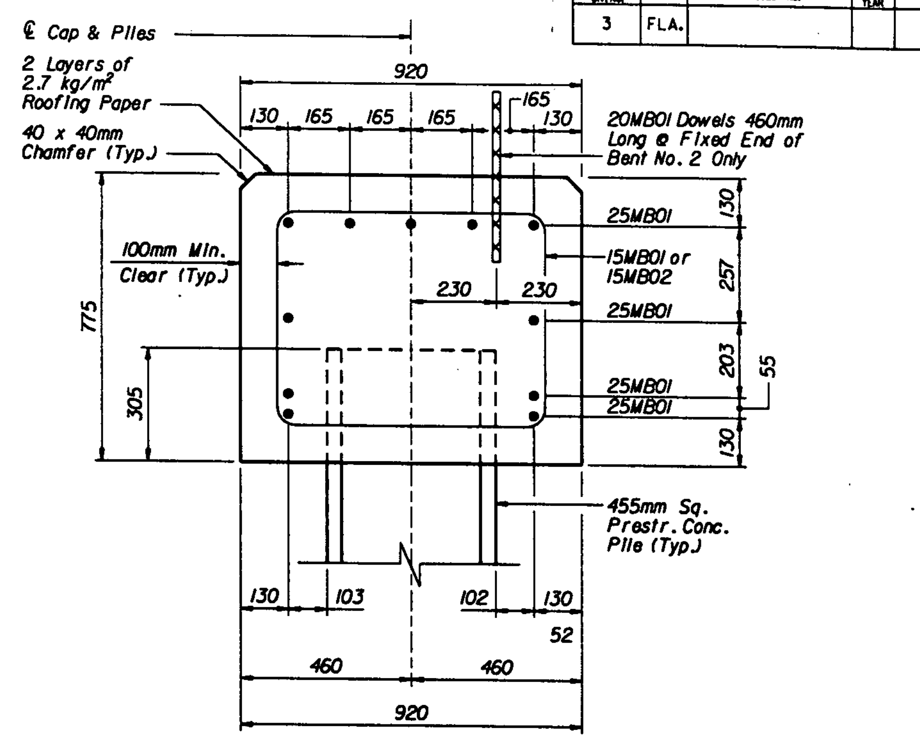


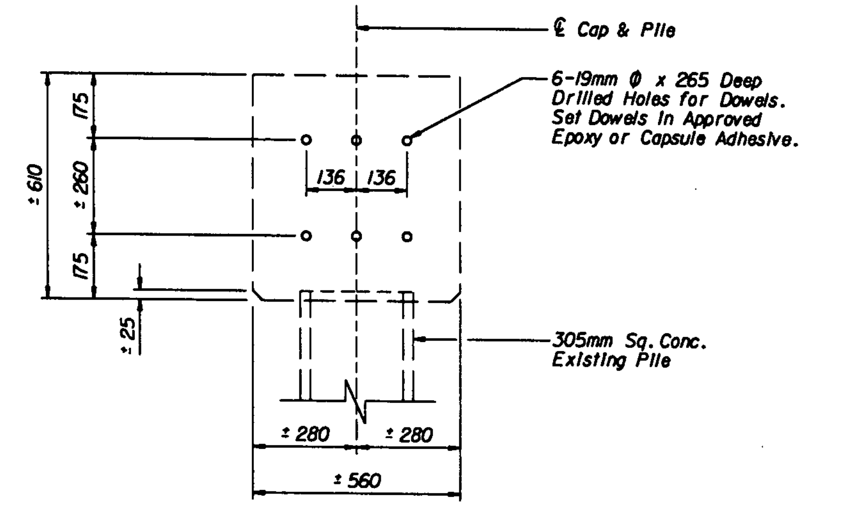
PLAN



ELEVATION



SECTION A-A

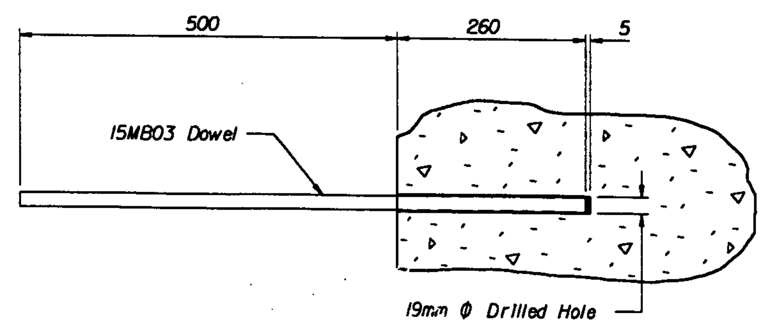


SECTION B-B

ESTIMATED QUANTITIES **			
ITEM	UNIT	BENT 2	BENT 3
Class IV Concrete (Substructure)	m^3	2.2	2.2
Reinforcing Steel (Substructure)	kg	198	194
455mm Prestressed Concrete Piles	m	*	*

* See Summary of Bridge Pay Items.
** Quantities are for one Intermediate Bent only.

BENT CONSTRUCTION ELEVATIONS		
Location	Bent No. 2 170+26.913	Bent No. 3 170+31.463
Elev. (A)	12.058	12.058
Elev. (B)	11.283	11.283
Pile Cut-Off	11.588	11.588



DOWEL DETAIL

NOTES:

1. Dowels shall be set in approved epoxy or capsule adhesive (Class IV). Where reinforcing is encountered, shift hole to clear. The cost of approved epoxy or capsule adhesive and installing dowels shall be included in the Contract Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
2. All piles are plumb.
3. The removal of a 50mm layer of gunite coating will be required where the cap extension meets the existing cap.
4. Dowel holes shall be cleaned thoroughly and free of moisture prior to anchor installation. See adhesive manufacturer's instructions for specific installation procedures.
5. The Gunite shall be removed in a manner that provides a clean smooth surface to which the cap extension will be added. The cost of Gunite Removal shall be included in the Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
6. For Pile Loads, See Sheet D-4.
7. For Bill of Reinforcing, See Sheet D-10.

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-8

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	B. Loeffler	August 1997
Checked by	S. Beltre	August 1997
Designed by	S. Beltre	August 1997
Checked by	R.T. Carballo	August 1997
Approved by	R.T. Carballo, P.E.	

ENGINEER OF RECORD:
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FL REGISTRATIONS: EB0005022 AAC002142

SEAL:
9/12/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: INTERMEDIATE BENT MODIFICATIONS

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

Drawing No.

Index No.

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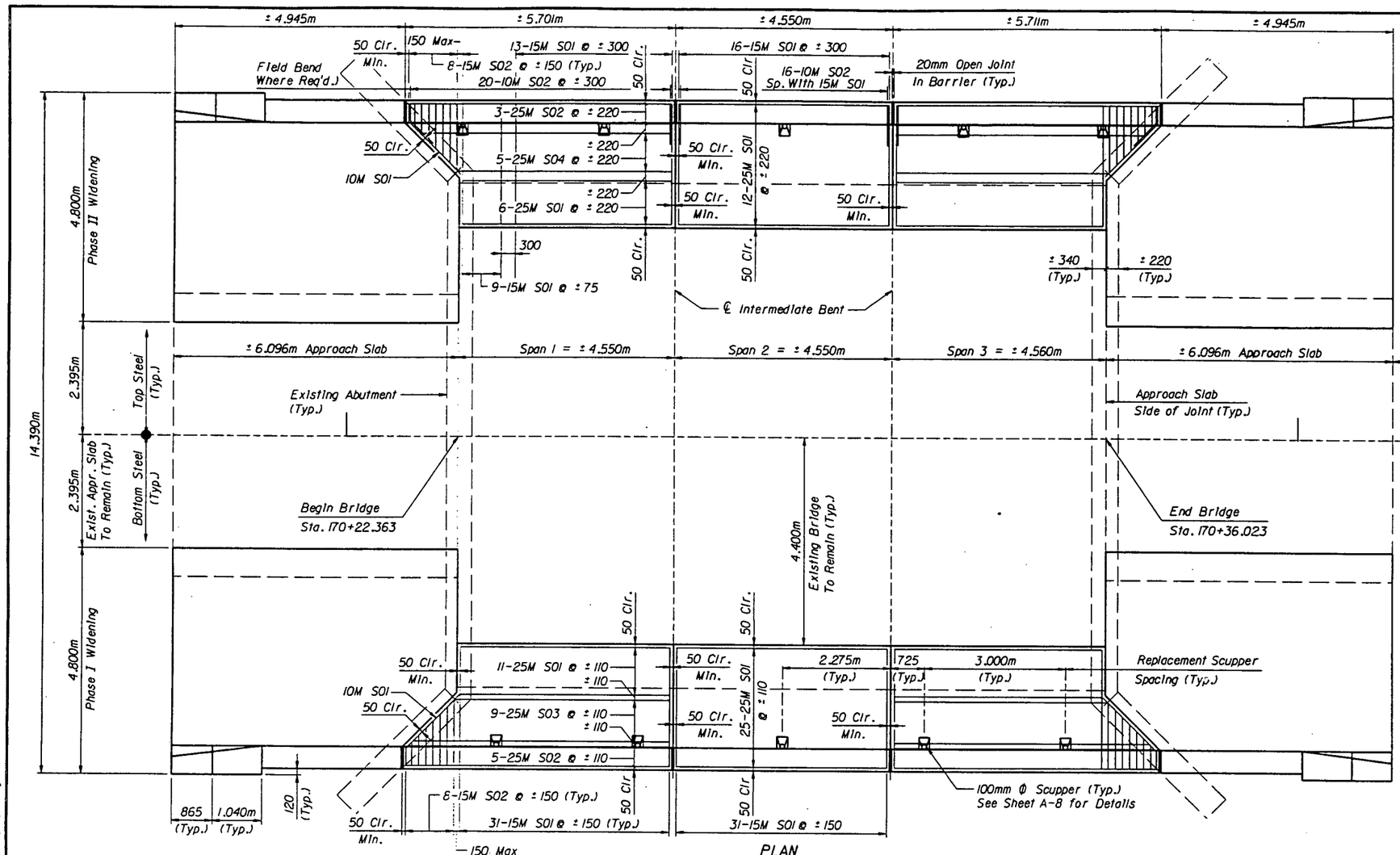
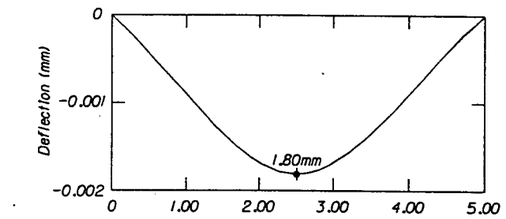
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-9



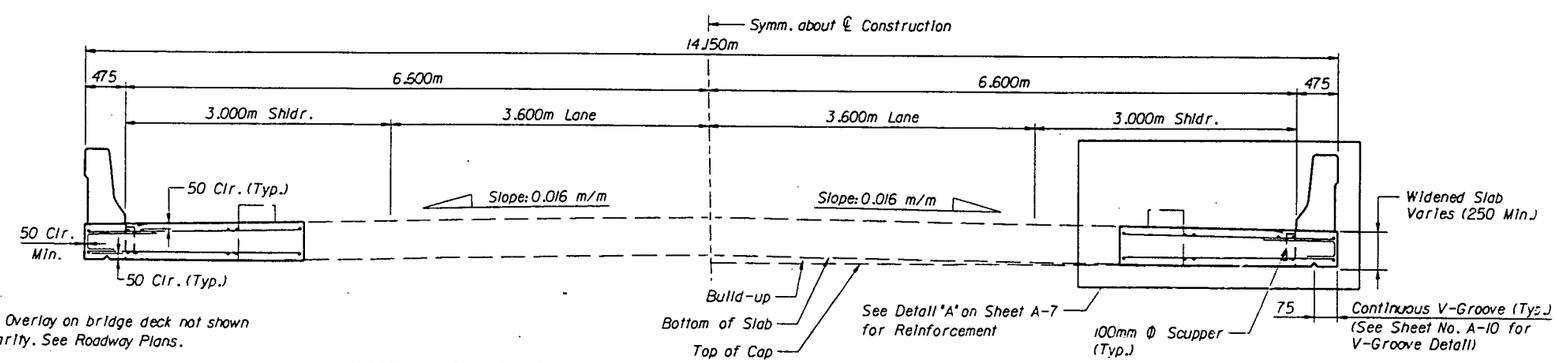
3-SPAN SUPERSTRUCTURE POURING DIAGRAM



DEAD LOAD DEFLECTION DIAGRAM

NOTES:

1. Set bars in slab for Barrier as detailed on Barrier Sheet.
2. Pouring Sequence: After pouring the first unit, succeeding pours shall begin at the end away from and proceed toward the previously placed unit. (The first unit may be at either end of bridge)
3. No unit shall be placed adjacent to a previously placed unit that is not a minimum of 72 hours old.
4. The contractor shall camber the forms to compensate for the combined effect of the deflection of the forms and the dead load deflection of the slab.
5. The contractor may submit for approval a revised casting sequence. The submittal shall include structural analysis by the specialty Engineer reflecting the new casting sequence and its effect on the Camber Diagram. The revision shall be in conformance with Chapter 19 of the Structures Design Guidelines.



NOTE: Asphalt Overlay on bridge deck not shown for clarity. See Roadway Plans.

HALF SECTION AT MID-SPAN (SPAN 2 - SEE PLAN VIEW) HALF SECTION AT BENTS

*ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Class IV Concrete - Superstructure	m^3	21.58
Reinforcing Steel (Superstructure)	kg	5653
Concrete Traffic Railing Barrier **	m	31.9

* Quantities are for the complete Superstructure.

REVISIONS						Names	Dates
Date	By	Description	Date	By	Description	Drawn by	BL 8-97
						Checked by	SB 8-97
						Designed by	SB 8-97
						Checked by	RTC 8-97
						Approved by	

ENGINEER OF RECORD:
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FL REGISTRATION: EB0005822 AAC002142

SEALED 10/16/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 3-SPAN SUPERSTRUCTURE

Drawing No.

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

Index No.

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16 OCT 97

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			D-10

MARK SIZE	MARK DES	METERS LENGTH	NO BARS	TYP BAR	STY A	STY G	METERS B	C	D	E	F	H	J	K	N	Ø
LOCATION ABUTMENTS NOS. 1 AND 4 (PER SIDE) NO. REQUIRED = 4																
15M	E01	0.820	2	12			0.500	0.320								45
15M	E02	0.880	1	12			0.500	0.380								45
15M	E03	0.945	2	12			0.500	0.445								45
15M	E04	1.670	11	4	4	4	0.335	0.360								
15M	E05	0.960	7	11			0.360	0.300	0.300							
15M	E06	0.935	1	1			0.935									
15M	E07	0.635	1	1			0.635									
15M	E08	1.050	1	11			0.450	0.300	0.300							
15M	E09	1.030	2	11			0.360	0.335	0.335							
20M	E01	0.460	6	1			0.460									
25M	E01	3.000	4	1			3.000									
25M	E02	3.598	2	40			0.135	0.345	1.210	0.350	0.795	3.000			2	
LOCATION INTERMEDIATE BENT NOS. 2 AND 3 (PER 1 BENT) NO. REQUIRED = 2																
15M	B01	2.870	12	4	4	4	0.575	0.720								
15M	B02	2.030	2	5			0.575	0.720	0.080	0.080						
15M	B03	0.760	12	1			0.760									
25M	B01	1.380	22	1			1.380									
LOCATION INTERMEDIATE BENT NO. 2 (PER SIDE) NO. REQUIRED = 2																
20M	B01	0.460	2	1			0.460									
LOCATION SUPERSTRUCTURE NO. REQUIRED = 1																
10M	S01	1.625	8	1			1.625									
10M	S02	1.080	112	11			0.130	0.200	0.750							
15M	S01	2.575	306	1			2.575									
BARS 15M S02 VARY IN 8 SETS OF 8 BARS EACH IN INCREMENTS OF 0.150 M																
15M	S02	VARY	64	1			1.480									
		0.955					0.430									
25M	S01	4.380	142	1			4.380									
25M	S02	5.530	32	1			5.530									
BARS 25M S03 VARY IN 9 SETS OF 4 BARS EACH IN INCREMENTS OF 0.110M																
25M	S03	VARY	36	1			5.395									
		4.955		1			4.515									
BARS 25M S04 VARY IN 5 SETS OF 4 BARS EACH IN INCREMENTS OF 0.220M																
25M	S04	VARY	20	1			5.395									
		4.955		1			4.515									

END OF LIST

NOTE:

1. All Reinforcing Steel shown on this sheet shall be ASTM A615M-92, Grade 420.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

	NAMES	DATES
DRAWN BY	BL	8-97
CHECKED BY	SB	8-97
DESIGNED BY	SB	8-97
CHECKED BY	RTC	8-97
APPROVED BY		

ENGINEER OF RECORD:
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FL REGISTRATIONS: EB0005022 AAC002142

SEAL: 6/22/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: REINFORCING BAR LIST

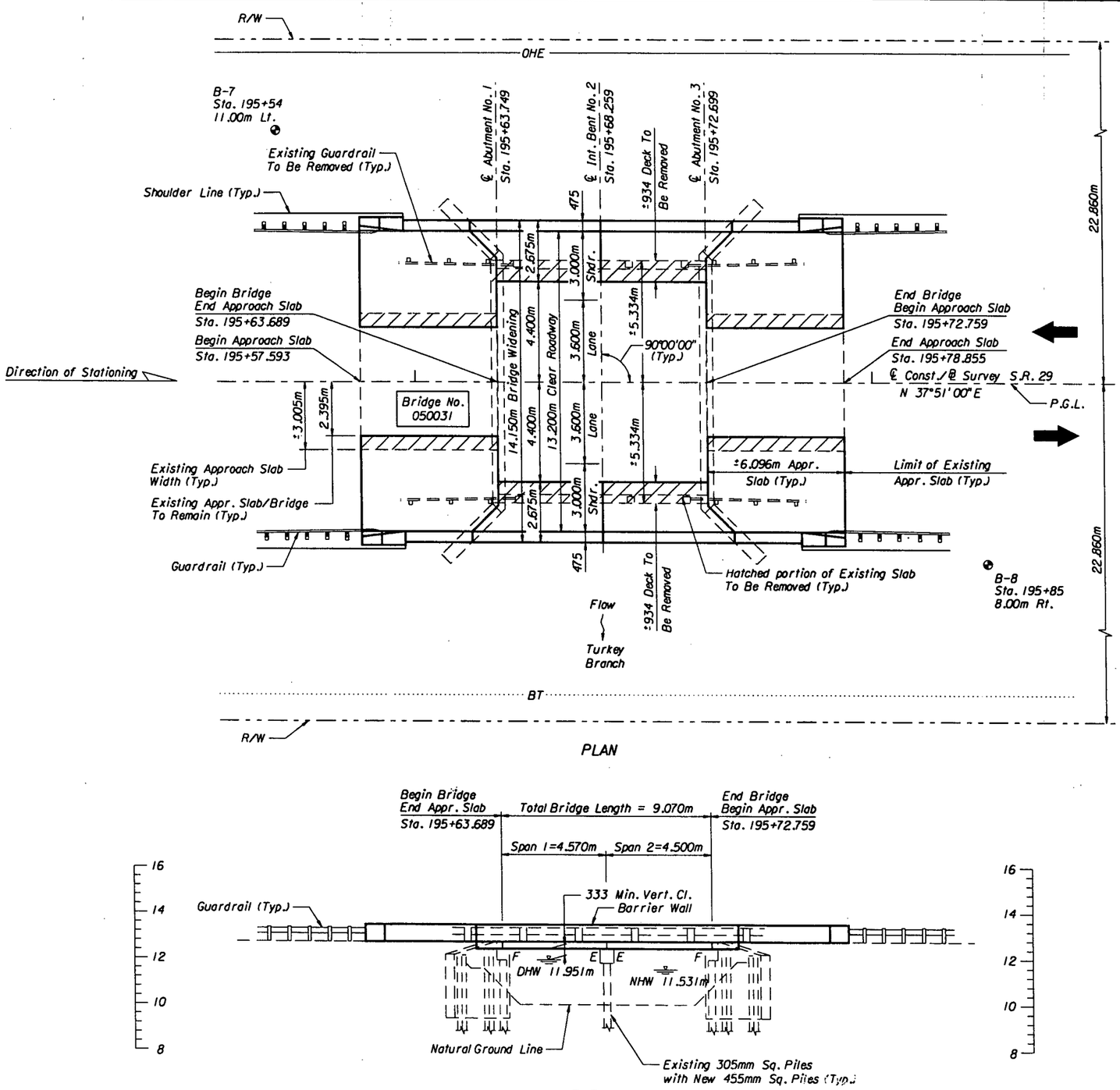
DRAWING NO.

PROJECT NAME: S.R. 29 BRIDGE OVER YORK BRANCH, BRIDGE NO. 050032

INDEX NO.

22 JUN 98 18:40:26 Brett Loeffler t:\0717_D\york\050032\gnrebar3.dgn

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-1



PLAN

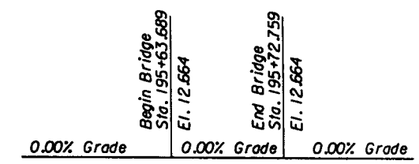
ELEVATION

TRAFFIC DATA

K = 10.4%
D = 55.6%
T = 32.6% (24 HR.)
T = 16.3% (DESIGN HR.)

1996 AADT = 2800
1999 EST. ADT = 3000
2019 EST. ADT = 4800

DESIGN SPEED 100 km/h



PROFILE GRADE S.R. 29
(Along ℄ Construction)

NOTE:

1. Elevations shown in the Profile Grade Diagram refer to top of deck elevations. The PGL elevations is a maximum of 85 mm above the ℄ deck elevation due to the asphalt overlay. Refer to the Roadway Plans for the asphalt overlay.

W.P.I. No. 1110874

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 7/14/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: PLAN AND ELEVATION

Drawing No.

PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031

Index No.

$FILE$
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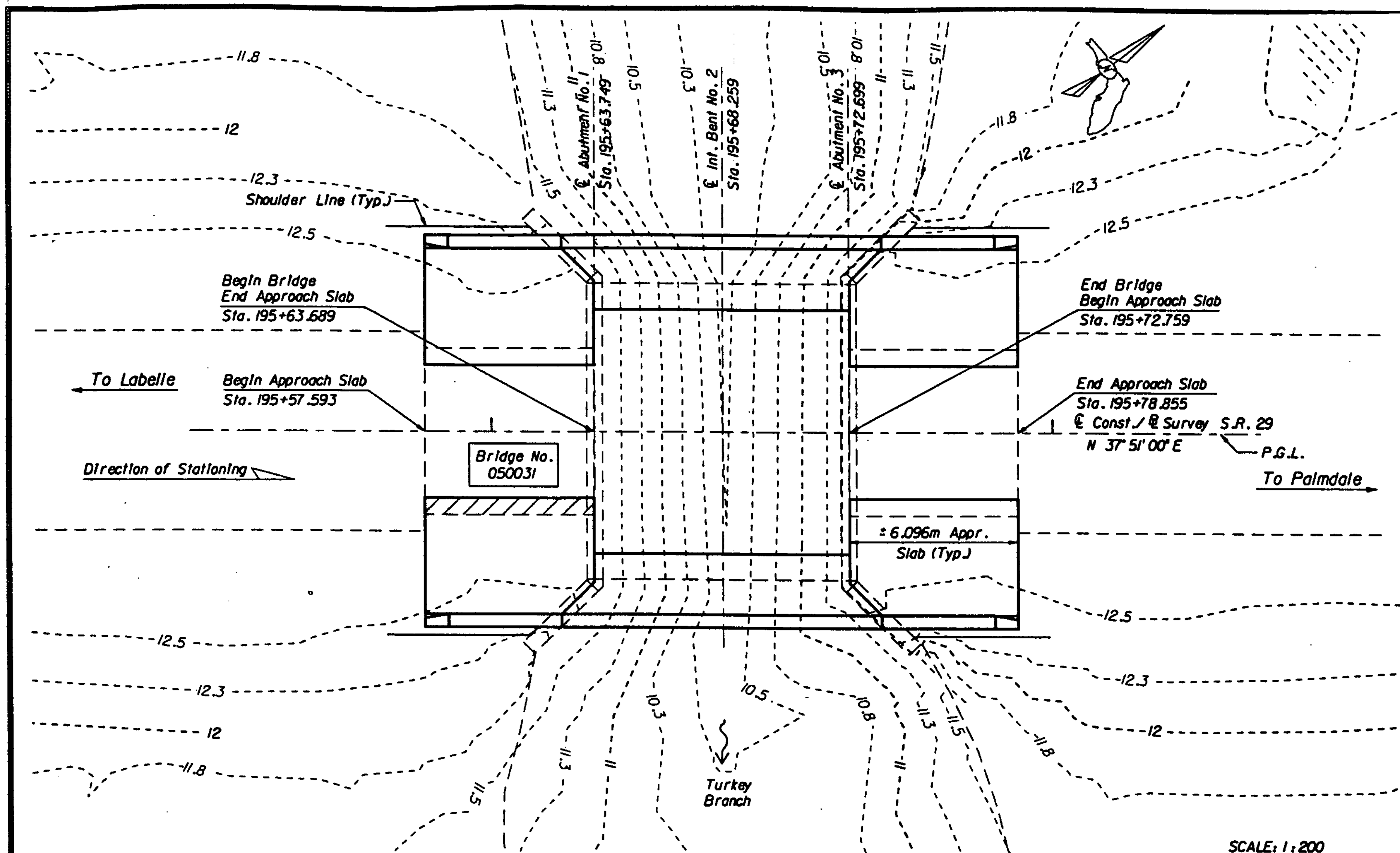
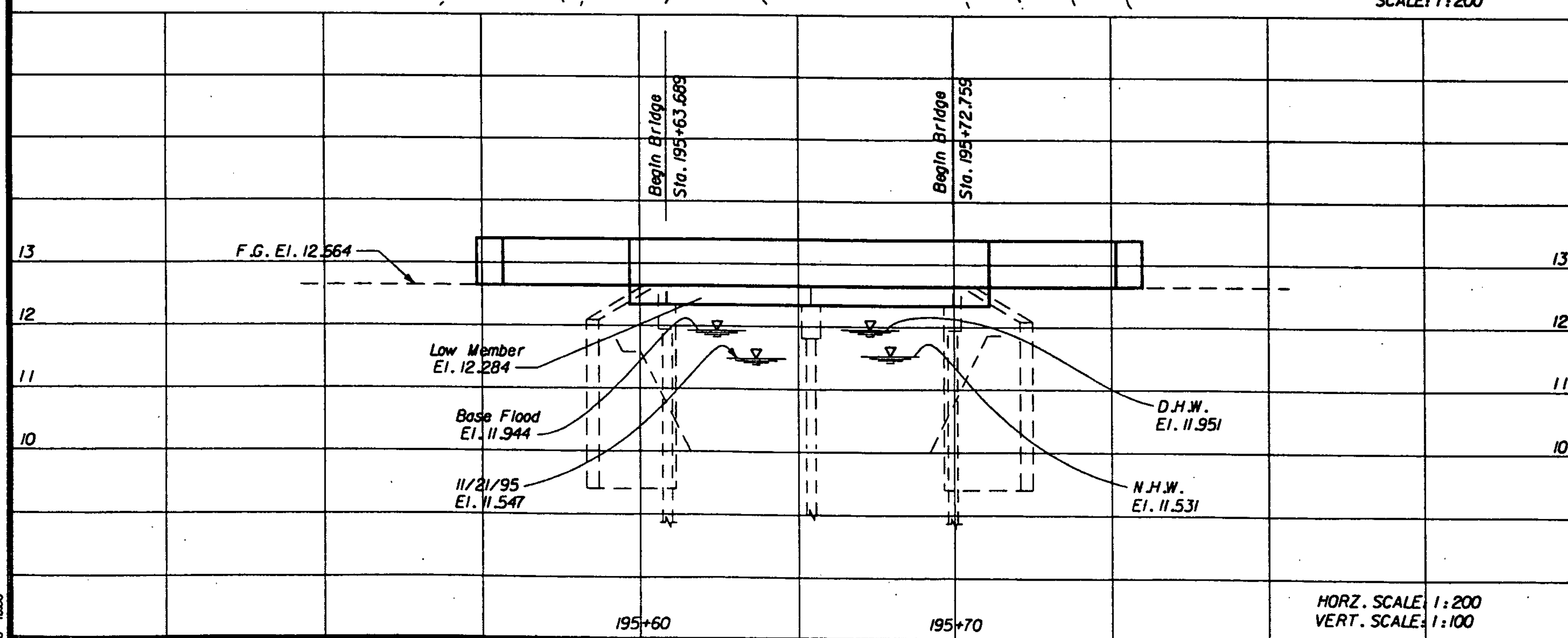
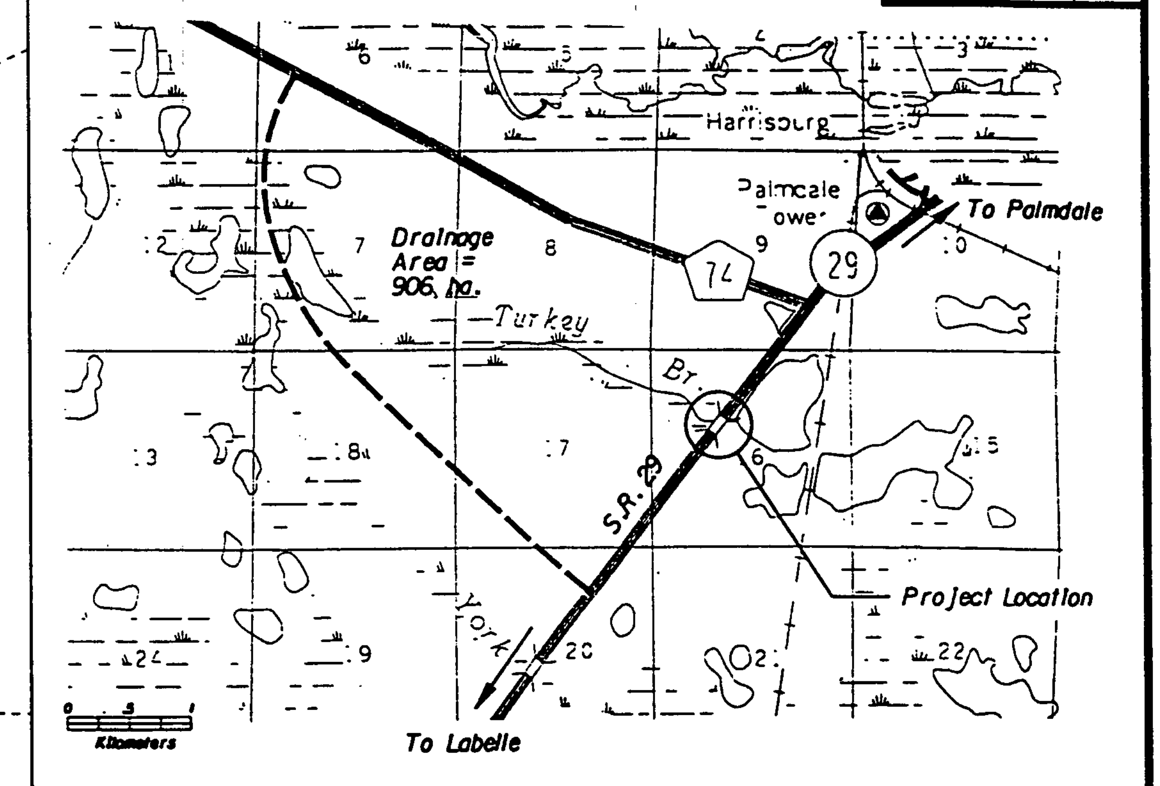
$DATE$

STATE PROJ. NO.	SHEET NO.
05090-1511	E-2







EXISTING STRUCTURES

(REFERENCE)	(1)	(2)	(3)	(4)	ASSUMED CONFIGURATION
FOUNDATION	0.305 Piles	N/A	N/A	N/A	0.305 Piles
OVERALL LENGTH	9.070				9.070
SPAN LENGTH	± 4.572				± 4.572
TYPE CONSTRUCTION	Flat Slab				Flat Slab
AREA OF OPENING @ H.W.	± 14.307				± 14.307
ROADWAY WIDTH	± 10.668				14.150
ELEV. LOW MEMBER	12.284				12.284

HYDRAULIC DESIGN DATA

NOTE: The hydraulic data is shown for informational purposes only to indicate the flood discharges and water surface elevations which may be anticiated in any given year. This data was generated using highly variable factors determined by a study of the watershed. Many judgements and assumptions are required to establish these factors. The resultant hydraulic data is sensitive to changes, particularly antecedent conditions, urbanization, channelization and land use. Users of this data are cautioned against the assumption of precision which cannot be obtained.

DEFINITIONS:

Design Flood: The flood utilized to assure a desired level of hydraulic performance.
Base Flood: The flood having a 1% chance of being exceded in any year. (100 Year Frequency)
Overtopping Flood: The flood which causes flow over the highway, over a watershed divide or thru emergency relief structures.
Greatest Flood: The most severe flood which can be predicted where overtopping is not practicable.

WATER SURFACE ELEVATIONS: N.H.W. (Non-Tidal) 11.531 M.H.W. N/A M.L.W. N/A

☐ OVERTOPPING FLOOD
☒ GREATEST FLOOD

FLOOD DATA:	MAX. EVENT OF RECORD	DESIGN FLOOD	BASE FLOOD	GREATEST FLOOD
STAGE ELEV. NGVD (M)	Unknown	11.951	11.994	12.082
DISCHARGE (CM/M)	•	447	518	691
AVERAGE VELOCITY (M/S)	•	0.521	0.594	0.771
EXCEEDANCE PROB. (%)	•	2%	1%	0.2%
FREQUENCY (YR.)	•	50	100	500

HYDRAULIC RECOMMENDATIONS

1. BEGIN BRIDGE STATION 195+63.689 END BRIDGE STATION 195+72.759 SKEW ANGLE 0°
2. CHANNEL SECTION: ℄ STATION 195+66.199 BOTTOM WIDTH 8.534 ELEV. 10.119 SIDE SLOPE 0
3. LIMITS OF CHANNEL EXCAVATION: RT. N/A LT. N/A
4. CLEARANCE: NAVAGATION: HORIZ. N/A VERT. N/A ABOVE EL. N/A DRIFT: HORIZ. 3.962 VERT. 0.333 ABOVE EL. 11.951
5. SCOUR PREDICTION: 100 YEAR DESIGN SCOUR EL. 7.95 DEPTH = 7.12
   500 YEAR SCOUR EL. 7.19 DEPTH = 9.61
6. SLOPE PROTECTION: None
7. DECK DRAINAGE: Runoff will sheet flow off bridge into existing roadway ditches
8. OTHER:

REMARKS:

9/23/97

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

REVISIONS

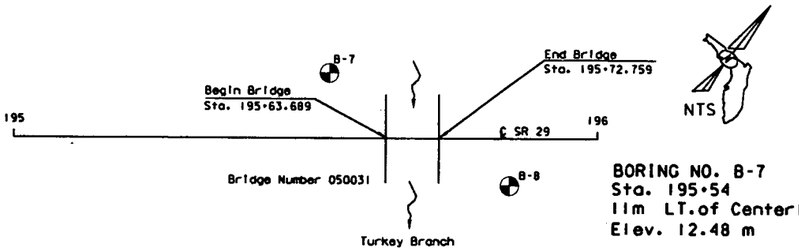
JMI ENGINEERS, INC.
1424 Piedmont Drive East
Tallahassee, Florida 32312
Tel: 904-385-1450 Fax: 904-385-3545

FLORIDA DEPARTMENT OF TRANSPORTATION

BRIDGE HYDRAULIC RECOMMENDATIONS
S.R. 29 BRIDGE NO. 050031

FILE: e:\cadd\fdot\95230\hydr04.dgn
DATE: 16-Oct-96 16:00

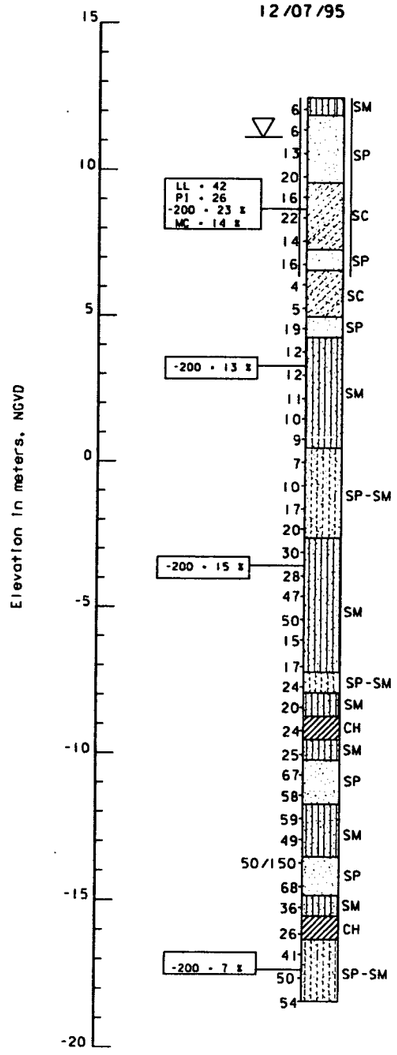
FED.ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.	05090-3511		E-3



NTS

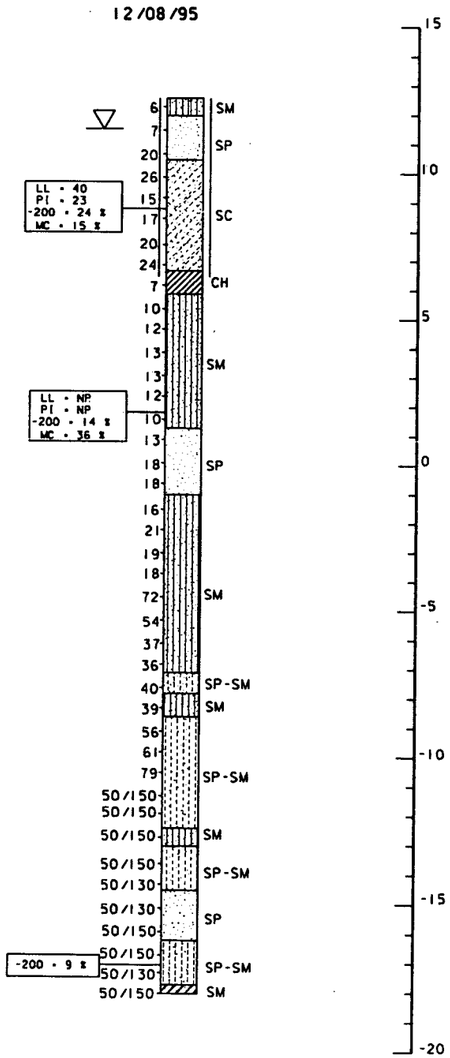
BORING NO. B-7
Sta. 195+54
11m LT.of Centerline
Elev. 12.48 m

12/07/95



BORING NO. B-8
Sta. 195+85
8m RT.of Centerline
Elev. 12.56 m

12/08/95



LEGEND :

- SP, Poorly graded sands, sand-silt mixtures.
- SC, Clayey sands, sand-clay mixtures.
- SM, Silty sands, sand-silt mixtures.
- SP-SM, Poorly graded sands and gravelly sands, to silty sands, sand-silt mixtures.
- CH, Inorganic clays of High plasticity, fat clays.

NOTES :

Numbers to the left of borings indicate SPT values for 300 mm penetration. (Unless otherwise noted.)

50/90 - Numbers of blows for 90 mm of penetration.

▽ - Water Table

|0| - Casing used

Rig Used - Failing 1500

Hammer Type - 63.5 kn Manual

WATER :

Resistivity : 10,000 ohms-cm, Chlorides : 40 ppm, Sulfates :<2, pH : 5.5.

ENVIRONMENTAL CLASSIFICATION

Substructure : Concrete : Moderately Aggressive
Steel : Extremely Aggressive (Due to pH)
Superstructure : Slightly Aggressive

Granular Materials- Relative Density	SPT (Blows/300mm)
Very Loose	Less than 4
Loose	4 - 10
Medium or Compact	10 - 30
Dense	30 - 50
Very Dense	Greater than 50

Silts and Clays- Consistency	SPT (Blows/300mm)
Very Soft	Less than 2
Soft	2 - 4
Firm	4 - 8
Stiff	8 - 15
Very Stiff	15 - 30
Hard	Greater than 30

REVISIONS

Date	By	Description	Date	By	Description
11/18/96	TNP	Hammer Type revised	03/14/97	DML	Added note 50/90 - Number of blows for 90 mm of penetration
02/10/97	MEH	N value's corrected	06/20/97	TNP	Begin & End Bridge stations, corrected Sheet Numbers, added

	Names	Dates
Drawn by	DML	6/97
Checked by	MEH	6/97
Designed by		
Checked by		
Approved by	T.N. Puckett	

ENGINEER OF RECORD:
MATERIALS OFFICE
DISTRICT 1
801 N. Broadway
Bartow, Florida 33830-1249

LOGO:

SEAL:
Clarence Puckett 6/20/97

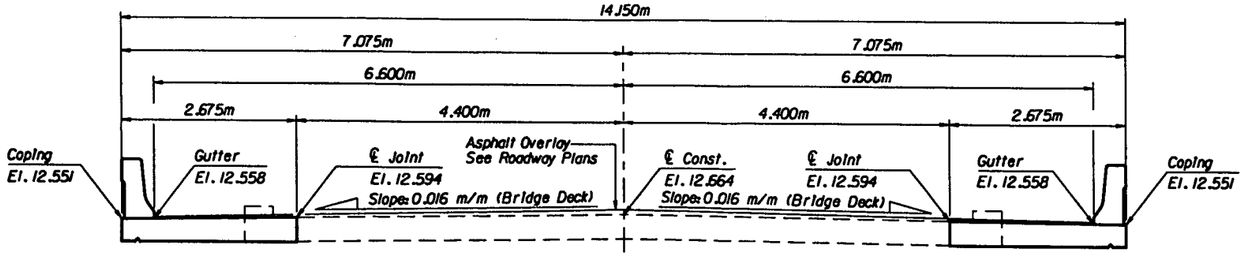
FLORIDA DEPARTMENT OF TRANSPORTATION
MATERIALS OFFICE

ROAD NO.	COUNTY	PROJECT NO.
29	Glades	05090-3511

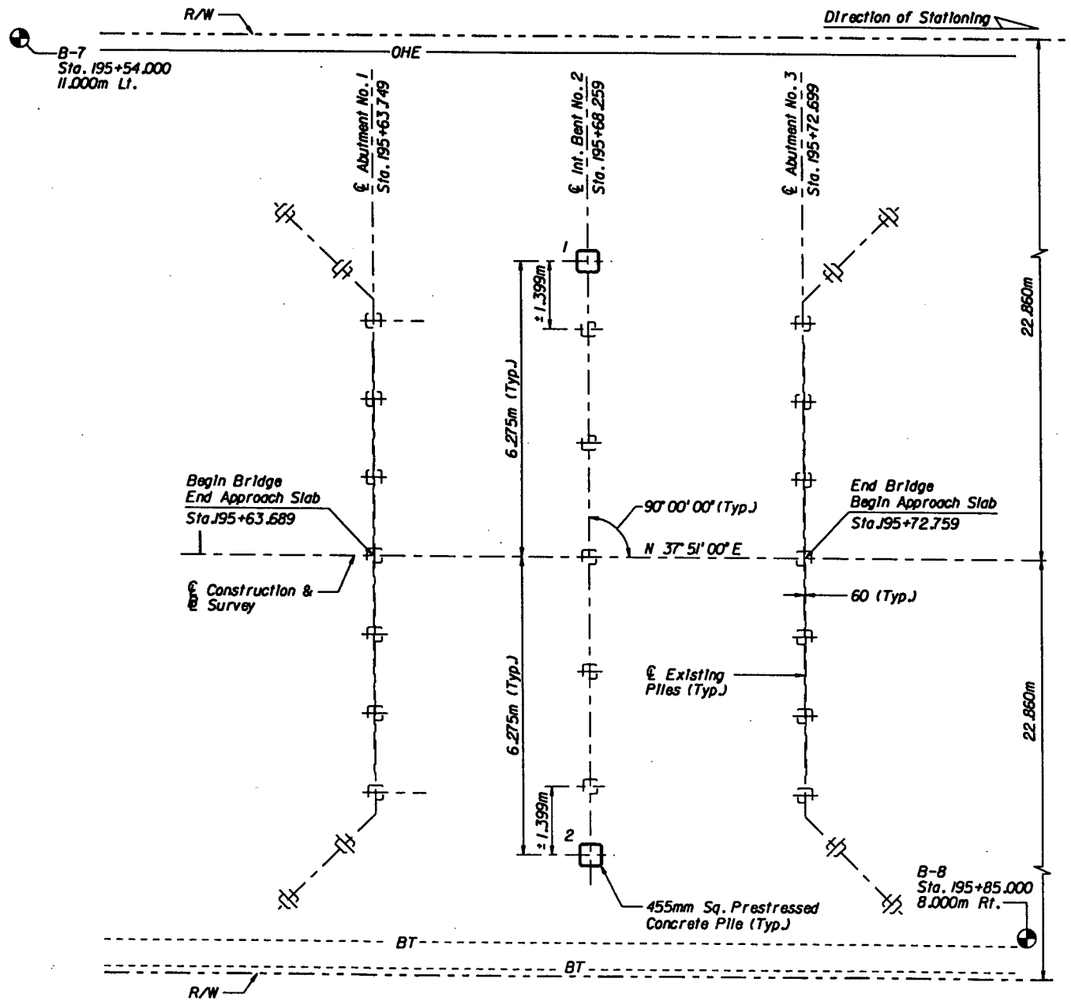
SHEET TITLE: Report of Core Borings
Drawing No. 1
PROJECT NAME: SR 29/over Turkey Branch
Index No.

Fri Jun 20 12:26:43 1997 /usr4/proj/soils/05511b.dgn

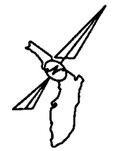
FLA. ROAD DEPT. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-4



SECTION THRU SUPERSTRUCTURE SHOWING FINISH DECK ELEVATIONS



FOUNDATION LAYOUT



PILE INSTALLATION TABLE-TURKEY BRANCH BRIDGE • 050031

Bent	Pile Size (mm)	Design Load (kN)	Min. Tip Elev. (m,NGVD)	Scour Elev. (m,NGVD)	Total Scour Resistance* (kN)	Total Down Drag (kN)	Reqd. Preform to Elev. (m)	Reqd. Jet to Elev. (m)	Net Scour Resistance** (kN)	Test Pile Length (m)
2	455	280	+2.0	+7.9	300	N.A.	N.A.	N.A.	300	N.A.

RDR= (Design Load x FS) + Net Scour Resistance + Total Downdrag where FS is the appropriate safety factor in accordance with the Standard Specifications A455-3.12.2

NOTES:

1. * Total side resistance from ground line to the scour elevation.
2. ** Net side friction resistance from the required preformed or jetting elevation to the scour elevation.
3. RDR is the Required Driving Resistance. All piles shall be driven to the design load times the appropriate factor of safety in accordance with Section A455-3.12.2 of the Standard Specifications plus the total downdrag and net scour resistance.
4. Pile driving criteria will be established using the Wave Equation Method by the District Geotechnical Office.
5. If jetting or preforming elevations differ from those on the table, the engineer shall be responsible for determination of the required driving resistance.
6. Scour has been considered in the design with scour elevations shown in the table.
7. The minimum tip elevation shown is required for lateral stability. Under no circumstance shall the pile be installed above the minimum tip elevation shown in the table.
8. Recommended Production Pile Lenghs are 17.000m.

LEGEND:

□ Denotes 455mm Sq. Prestressed Concrete Piles

[ ] Denotes 305mm Sq. Concrete Existing Piles

GENERAL NOTES:

1. All New Piles are 455mm Sq. Prestressed Concrete Piles.
2. All New Piles are Plumb.
3. For the Pile Cutoff Elevations, see Substructure sheets.
4. All existing piles are to remain.

REVISIONS						
Date	By	Description	Date	By	Description	

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: FOUNDATION LAYOUT & FINISH GRADE ELEVATIONS

PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031

Drawing No.

Index No.

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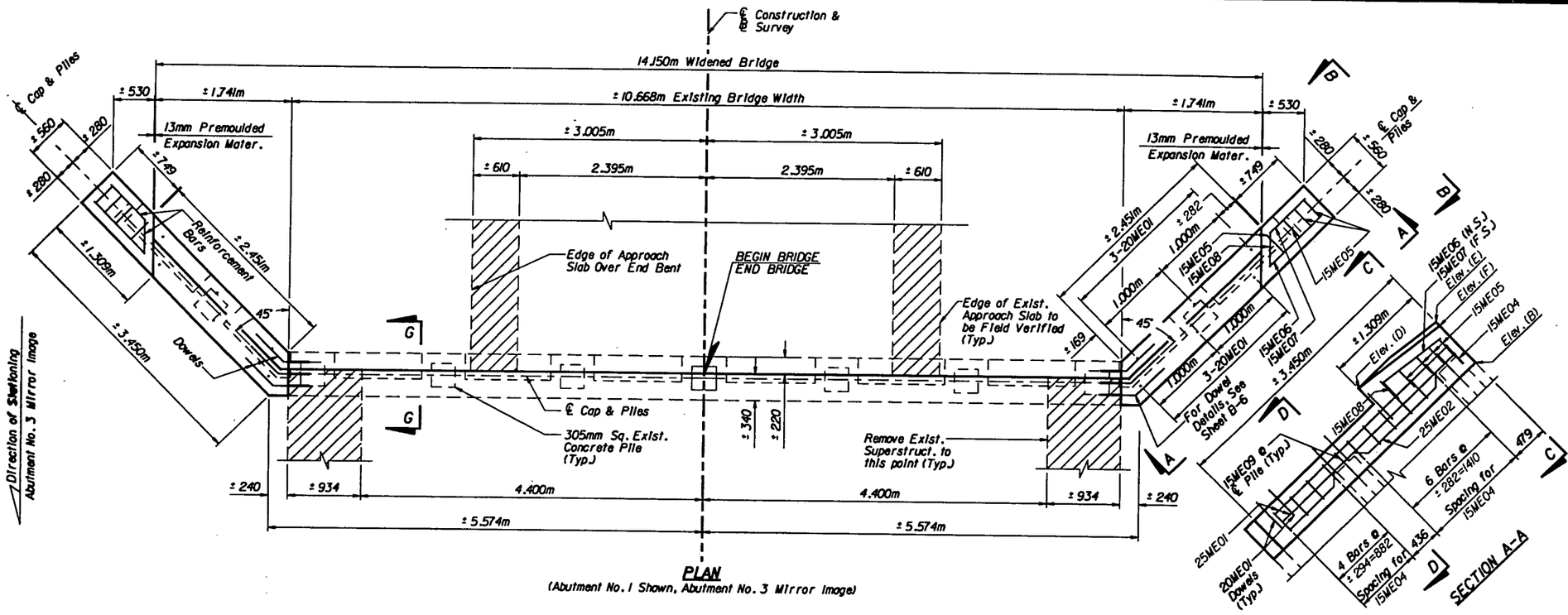
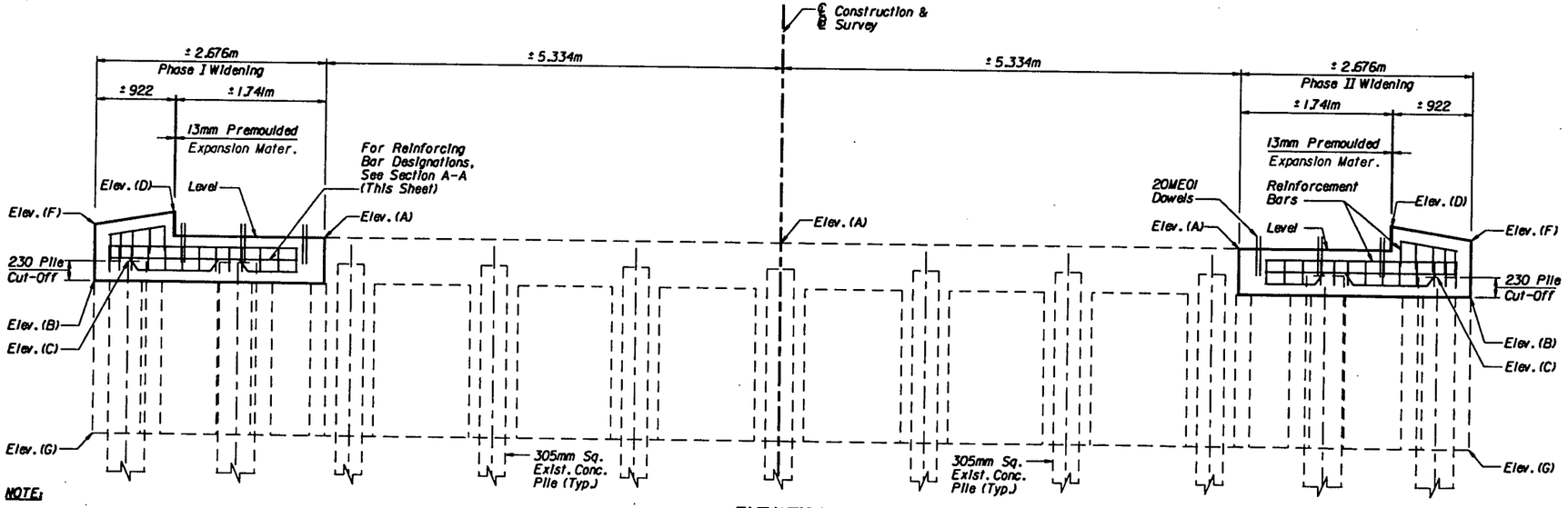
23 JUN 98

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-5





ELEVATION

NOTE:
Existing vertical steel in abutment wall shall remain in place. Bars shall be cleaned and embedded in proposed portion of cap. Where necessary existing bars shall be cut to provide 100mm minimum clearance.

ABUTMENT CONSTRUCTION ELEVATIONS	
Location	Abutment Nos. 1 & 3
Elev. (A)	12.284 (Top of Cap)
Elev. (B)	11.750 (Bottom of Cap)
Elev. (C)	11.980 (Pile Cut-Off)
Elev. (D)	12.564
Elev. (E)	12.476
Elev. (F)	12.410
Elev. (G)	*9.906

* Elevation G has been obtained from the existing plans. Contractor to field verify if required.

LEGEND:

Area to be Removed

NOTES:

1. For Estimated Quantities, See Abutment Modification Detail Sheet E-7.
2. For Detailed Removal of Approach Slab, See Approach Slab Sheet in the Roadway Plans.
3. All contact surfaces between old and new concrete shall be cleaned.
4. For Sections C, D, and G, See Abutment Modifications Detail Sheet E-6.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
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LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATIONS
Drawing No.
PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031
Index No.

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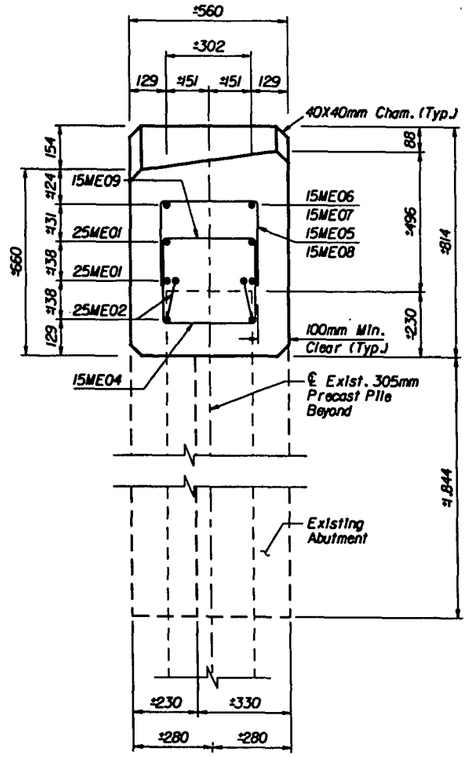
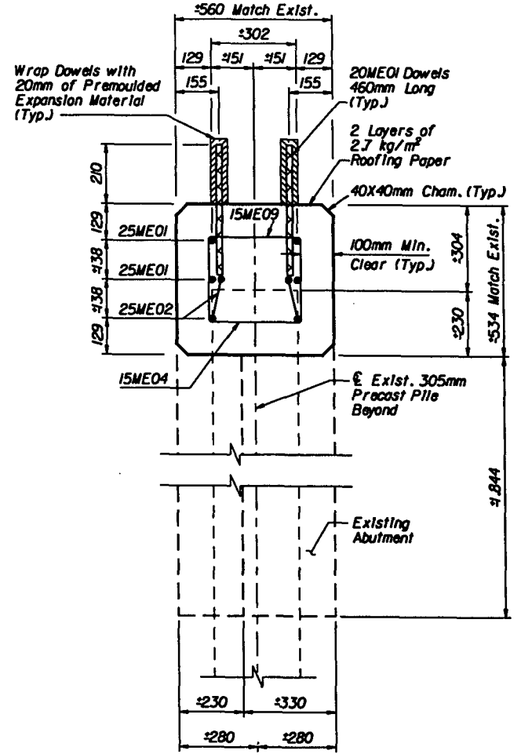
3	FLA.			E-6



SECTION C-C



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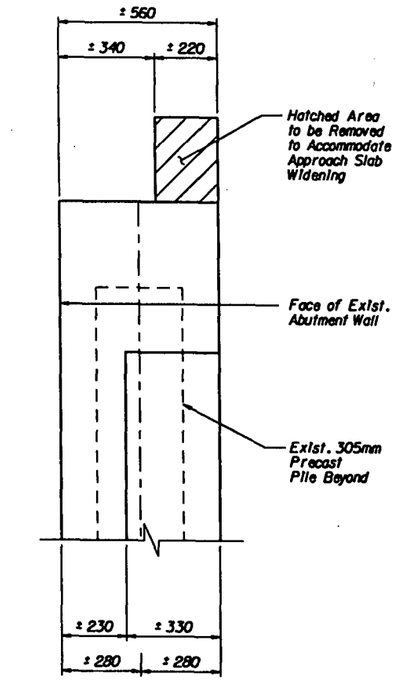

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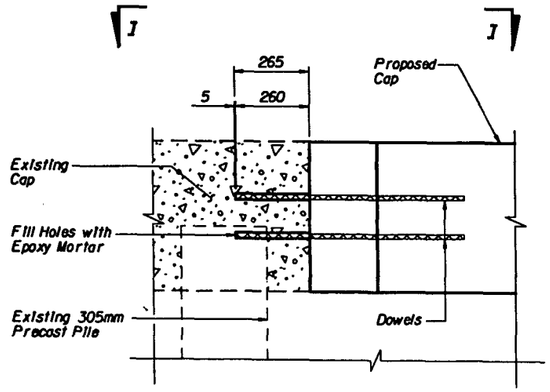
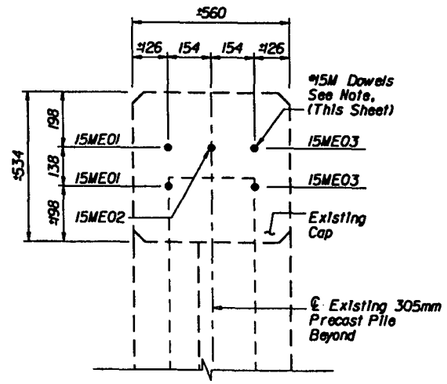
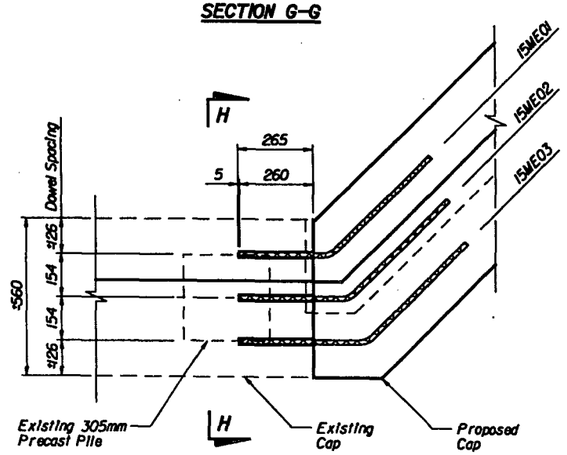


DOWEL DETAIL ELEVATION



SECTION H-H



SECTION I-I PLAN

6-19mm Ø x 265mm Deep Drilled Holes for Dowels. Set Dowels in Approved Epoxy or Capsule Adhesive, (Class IV). See Dowel Details (This Sheet). See Notes on Sheet E-8.

REVISIONS						
Date	By	Description	Date	By	Description	

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
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Tele 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATION DETAILS (1 OF 2)
Drawing No.
PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031
Index No.

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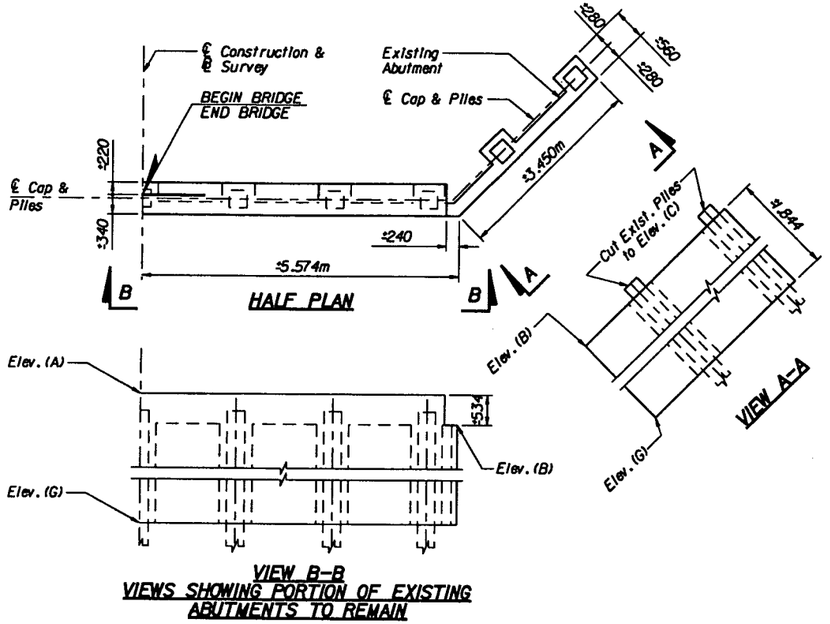
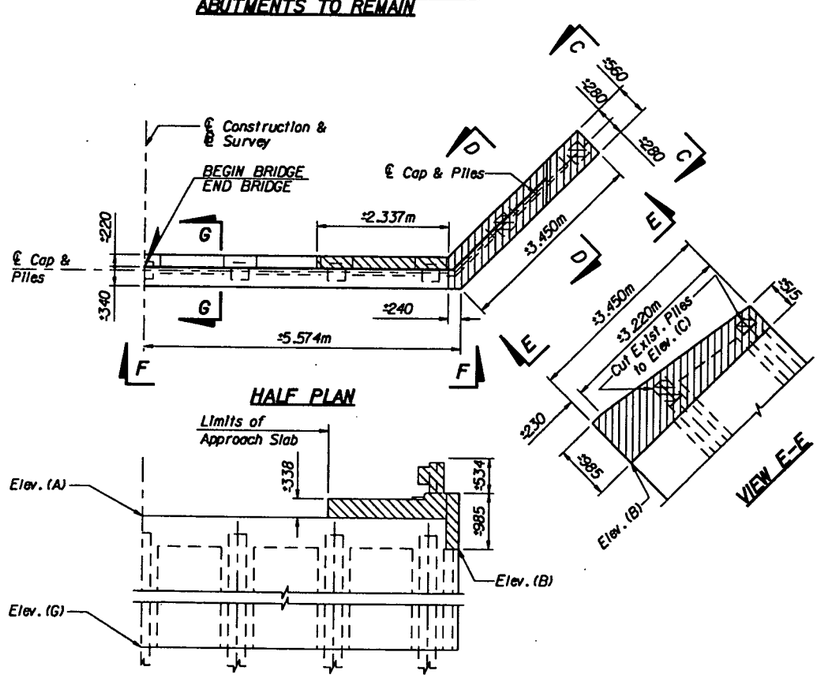
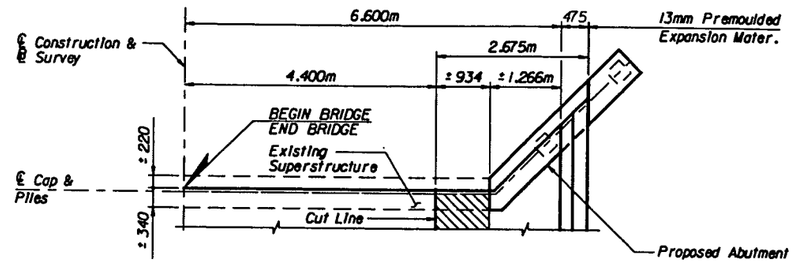
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-7



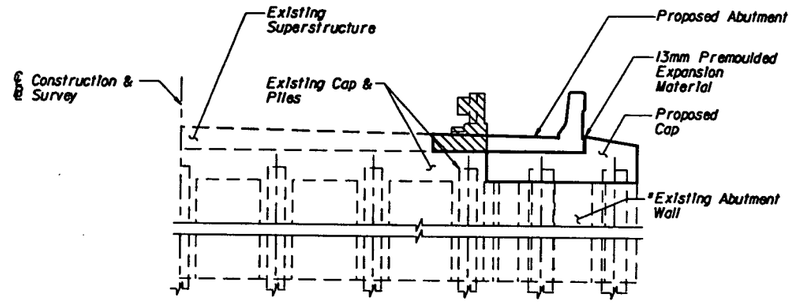
VIEW B-B
VIEWS SHOWING PORTION OF EXISTING ABUTMENTS TO REMAIN



VIEW F-F
VIEWS SHOWING EXISTING ABUTMENTS
(Hatched areas to be removed)



HALF PLAN



HALF ELEVATION
VIEW SHOWING COMPLETED STRUCTURE
*Existing Vertical Steel in Abutment Wall shall remain in place. Bars shall be Cleaned and Embedded in Proposed Portion of Cap. Where necessary Existing Bars shall be cut to provide 100mm Min. Clearance.

ESTIMATED QUANTITIES		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m^3	2.3
Reinforcing Steel (Substructure)	kg	228
455 mm Sq. Prestressed Concrete Piles	m	* *

* Estimated Quantities are for one End Bent only.
* * See Summary of Bridge Pay Items

NOTES:

1. For Table of Elevations, See Sheet E-5.
2. For Sections C, D, and G, See Abutment Modifications Detail Sheet E-6.

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Register, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
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Tele 407-875-8550 Fax 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: ABUTMENT MODIFICATION DETAILS (2 OF 2)
PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031
Drawing No.
Index No.

23 JUN 98 13:05:46
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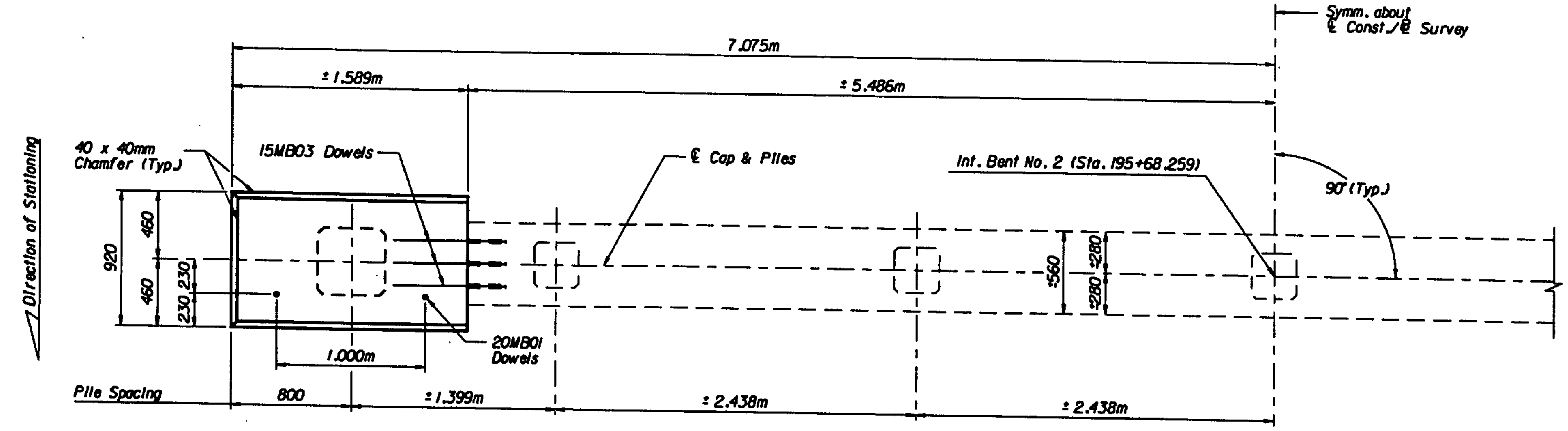
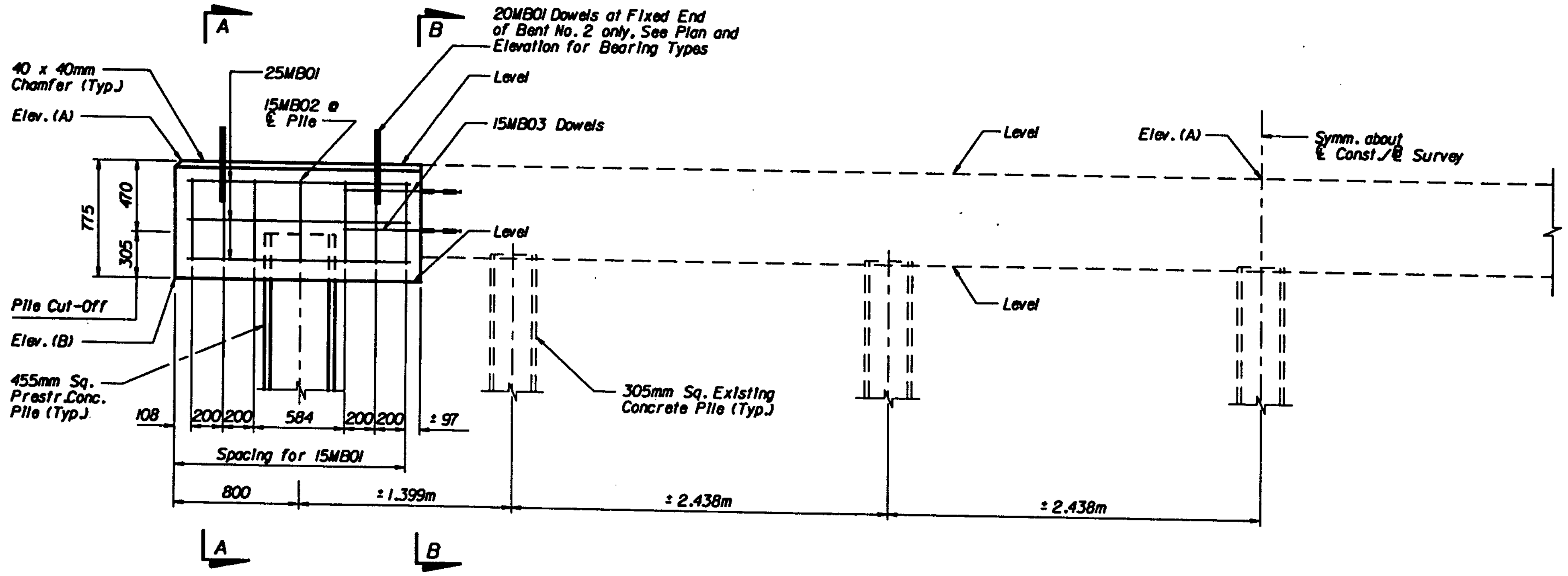
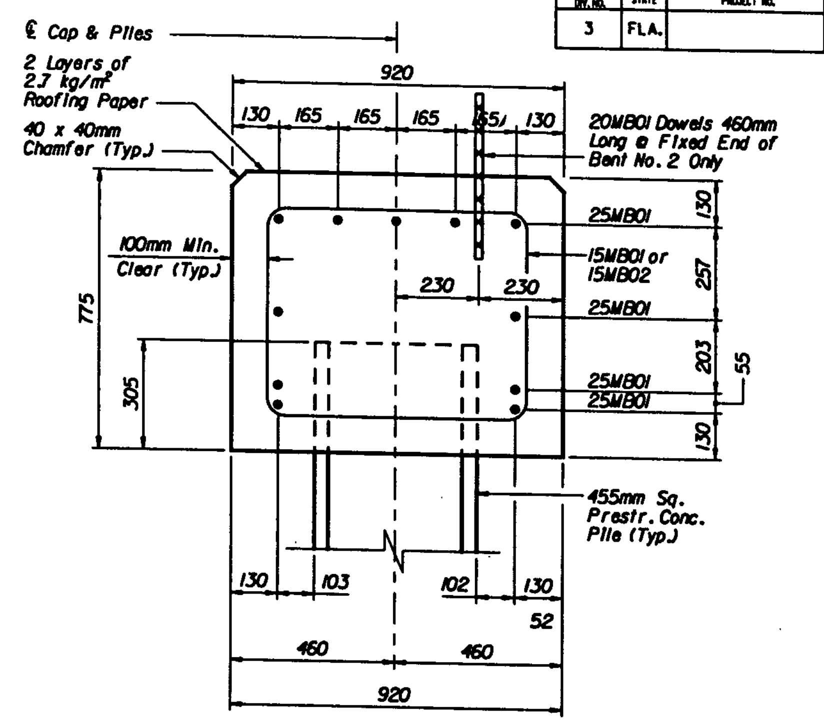
FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-8



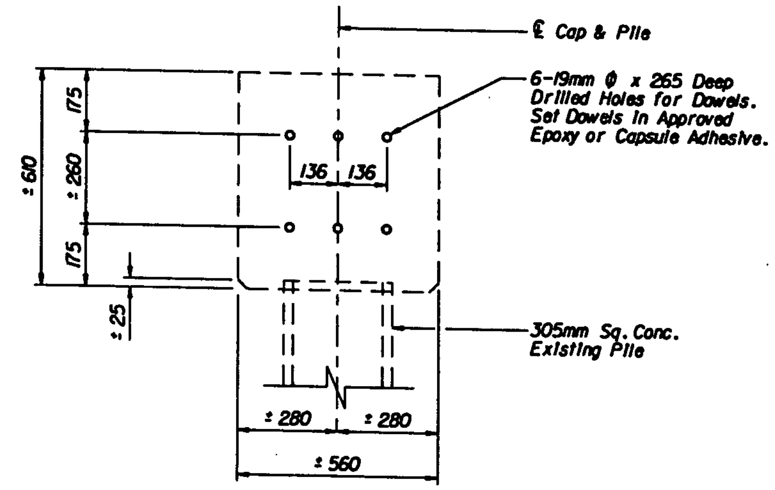
PLAN



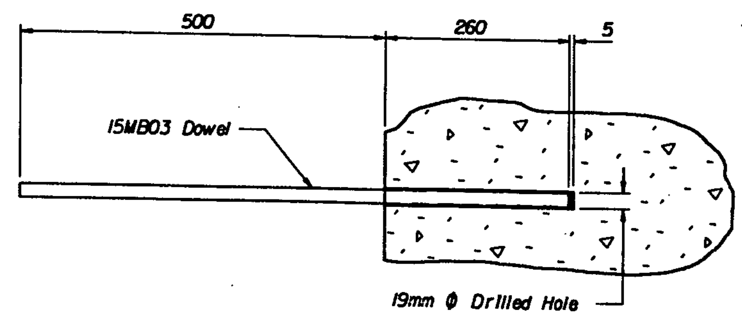
ELEVATION



SECTION A-A



SECTION B-B



DOWEL DETAIL

ESTIMATED QUANTITIES **		
ITEM	UNIT	QUANTITY
Class IV Concrete (Substructure)	m^3	2.2
Reinforcing Steel (Substructure)	kg	194
455mm Prestressed Concrete Piles	m	*

* See Summary of Bridge Pay Items.
** Quantities are for one Intermediate Bent only.

BENT CONSTRUCTION ELEVATIONS	
Location	Bent No. 2 195+68.259
Elev. (A)	12.284
Elev. (B)	11.509
Pile Cut-Off	11.814

NOTES:

1. Dowels shall be set in approved epoxy or capsule adhesive (Class IV). Where reinforcing is encountered, shift hole to clear. The cost of approved epoxy or capsule adhesive and installing dowels shall be included in the Contract Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
2. All piles are plumb.
3. The removal of a 50mm layer of gunite coating will be required where the cap extension meets the existing cap.
4. Dowel holes shall be cleaned thoroughly and free of moisture prior to anchor installation. See adhesive manufacturer's instructions for specific installation procedures.
5. The Gunite shall be removed in a manner that provides a clean smooth surface to which the cap extension will be added. The cost of Gunite Removal shall be included in the Unit Price of Item No. 2400-4-5 Class IV Concrete (Substructure).
6. For Pile Loads, See Sheet E-4.
7. For Bill of Reinforcing, See Sheet E-10.

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: INTERMEDIATE BENT MODIFICATIONS

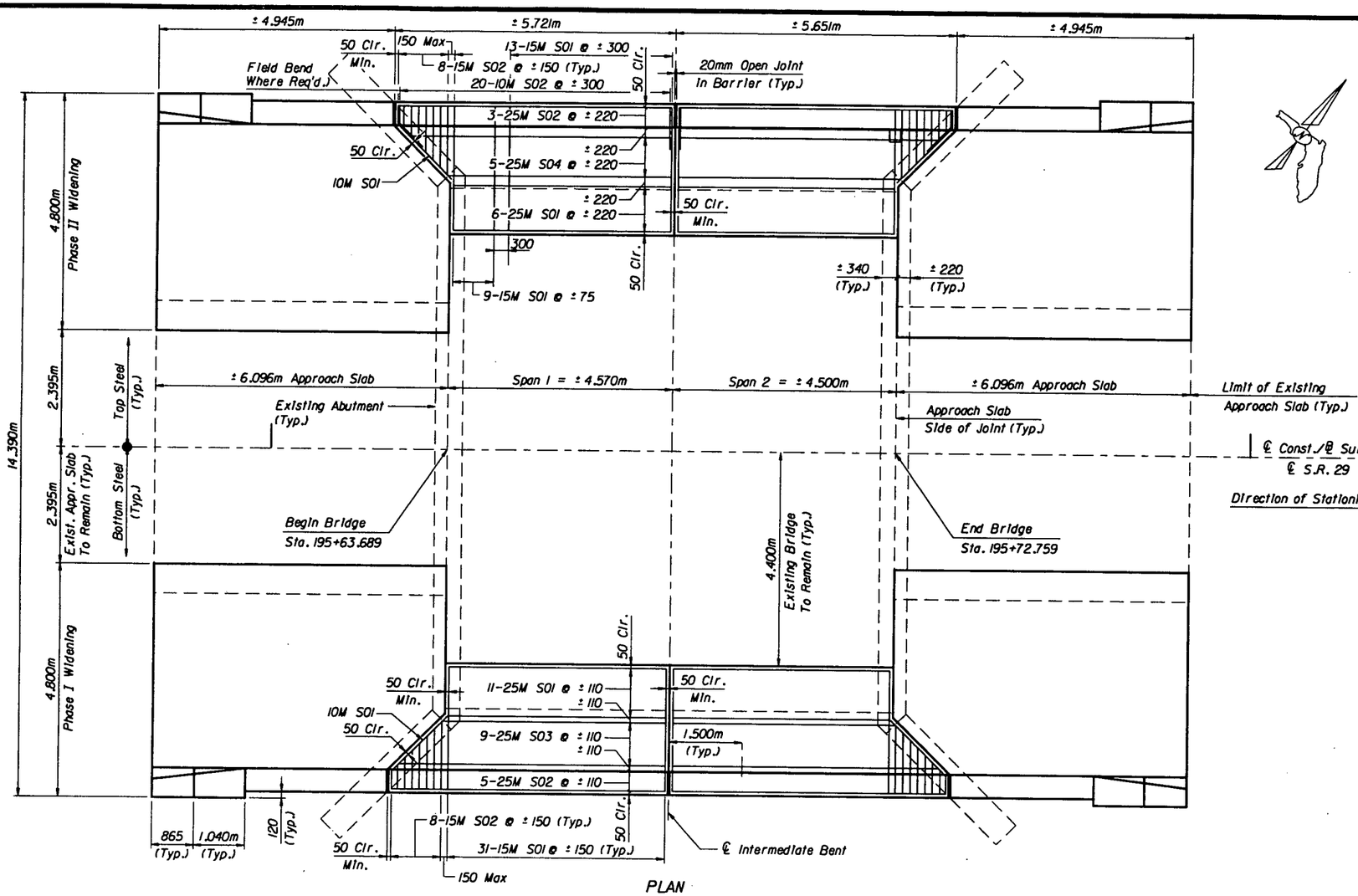
PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031

Drawing No.

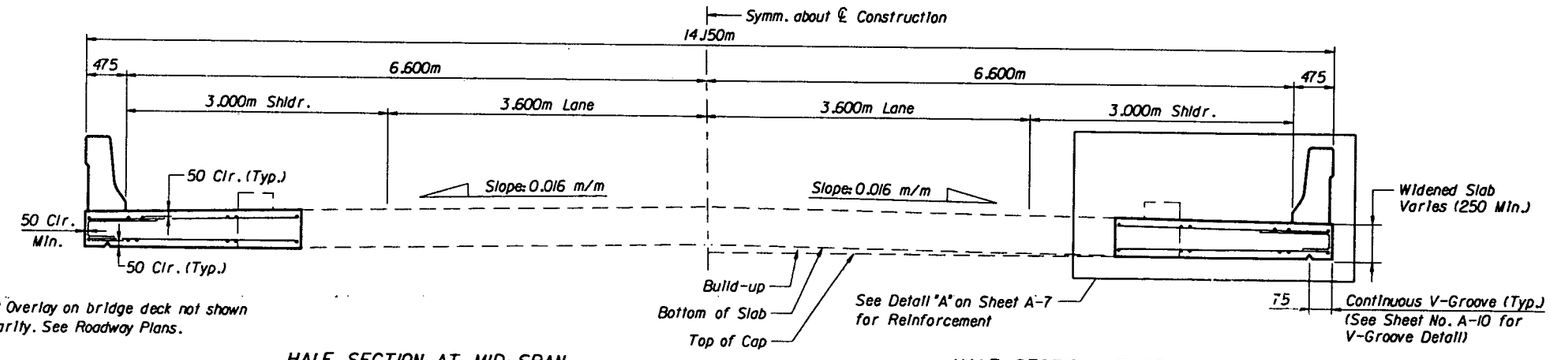
Index No.

i:\projects\9523-01\drawings\working\05003\sb\02.dgn
120942
23 JUN 98

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-9



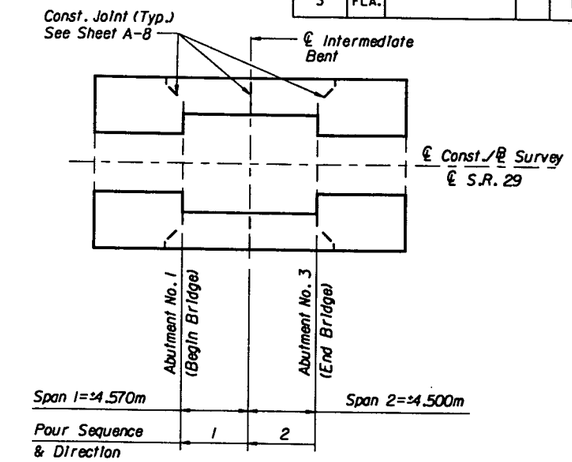
PLAN



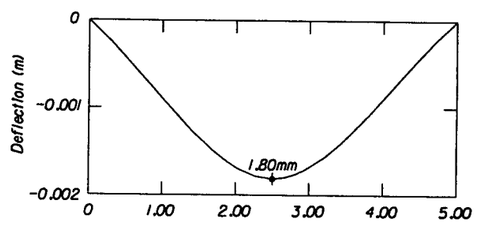
NOTE: Asphalt Overlay on bridge deck not shown for clarity. See Roadway Plans.

HALF SECTION AT MID-SPAN

HALF SECTION AT BENTS



2-SPAN SUPERSTRUCTURE POURING DIAGRAM



DEAD LOAD DEFLECTION DIAGRAM

NOTES:

1. Set bars in slab for Barrier as detailed on Barrier Sheet.
2. Pouring Sequence: After pouring the first unit, succeeding pours shall begin at the end away from and proceed toward the previously placed unit. (The first unit may be at either end of bridge)
3. No unit shall be placed adjacent to a previously placed unit that is not a minimum of 72 hours old.
4. The contractor shall camber the forms to compensate for the combined effect of the deflection of the forms and the dead load deflection of the slab.
5. The contractor may submit for approval a revised casting sequence. The submittal shall include structural analysis by the specialty Engineer reflecting the new casting sequence and its effect on the Camber Diagram. The revision shall be in conformance with Chapter 19 of the Structures Design Guidelines.

*ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Class IV Concrete - Superstructure	m^3	14.76
Reinforcing Steel (Superstructure)	kg	3983
Concrete Traffic Railing Barrier **	m	22.7

* Quantities are for the complete Superstructure.

REVISIONS

Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Reglste, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
900 Winderley Place, Ste. 148
Maitland, Florida 32751
Tel: 407-875-1550 Fax: 407-875-0560

LOGO: JMI ENGINEERS

SEAL: 9/23/97

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: 2-SPAN SUPERSTRUCTURE

PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031

Drawing No.

Index No.

$FILE$ $SOURCE$ $TIME$ $DATE$

FED. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.
3	FLA.			E-10

MARK		METERS	NO	TYP	STY		METERS								N	Ø
SIZE	DES	LENGTH	BARS	BAR	A	G	B	C	D	E	F	H	J	K		
LOCATION ABUTMENTS NOS. 1 AND 3 (PER SIDE) NO. REQUIRED = 4																
15M	E01	0.820	2	12			0.500	0.320								45
15M	E02	0.880	1	12			0.500	0.380								45
15M	E03	0.945	2	12			0.500	0.445								45
15M	E04	1.670	11	4	4	4	0.335	0.360								
15M	E05	0.960	4	11			0.360	0.300	0.300							
15M	E06	0.935	1	1			0.935									
15M	E07	0.635	1	1			0.635									
15M	E08	1.050	1	11			0.450	0.300	0.300							
15M	E09	1.030	2	11			0.360	0.335	0.335							
20M	E01	0.460	6	1			0.460									
25M	E01	3.970	4	1			3.970									
25M	E02	3.598	2	40			0.135	0.345	1.545	0.340	0.795	3.970			2	
LOCATION INTERMEDIATE BENT NO. 2 NO. REQUIRED = 1																
15M	B01	2.870	12	4	4	4	0.575	0.720								
15M	B02	2.030	2	5			0.575	0.720	0.080	0.080						
15M	B03	0.760	12	1			0.760									
25M	B01	1.380	22	1			1.380									
LOCATION SUPERSTRUCTURE NO. REQUIRED = 1																
10M	S01	1.625	8	1			1.625									
10M	S02	1.080	80	11			0.130	0.200	0.750							
15M	S01	2.575	212	1			2.575									
BARS 15M S02 VARY IN 8 SETS OF 8 BARS EACH IN INCREMENTS OF 0.150 M																
15M	S02	VARY	64	1			1.480									
		0.955					0.430									
25M	S01	4.380	68	1			4.380									
25M	S02	5.530	32	1			5.530									
BARS 25M S03 VARY IN 9 SETS OF 4 BARS EACH IN INCREMENTS OF 0.110M																
25M	S03	VARY	36	1			5.395									
		4.955		1			4.515									
BARS 25M S04 VARY IN 5 SETS OF 4 BARS EACH IN INCREMENTS OF 0.220M																
25M	S04	VARY	20	1			5.395									
		4.955		1			4.515									

END OF LIST

NOTE:

1. All Reinforcing Steel shown on this sheet shall be ASTM A615m-92, Grade 420.

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13-JUN-97

REVISIONS					
Date	By	Description	Date	By	Description

	Names	Dates
Drawn by	ISW	8-97
Checked by	HSH	8-97
Designed by	HSH	8-97
Checked by	JR	8-97
Approved by	J. Registe, P.E.	

ENGINEER OF RECORD:
JMI ENGINEERS, INC.
1424 Piedmont Drive East
Tallahassee, Florida 32312
Tele 904-385-7450 Faxi 904-385-3545

LOGO: JMI ENGINEERS

SEAL: 6/24/98

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
SR-29	GLADES	05090-3511

SHEET TITLE: REINFORCING BAR LIST

PROJECT NAME: S.R. 29 BRIDGE OVER TURKEY BRANCH, BRIDGE NO. 050031

Drawing No.

Index No.

℄ Abutment
Sta. 161+83.08

℄ Bent No. 1
Sta. 162+00

℄ Abutment
Sta. 162+14.92

Expansion Joint

Begin Bridge
Sta. 161+25

35'-0" Slab Width

End Bridge
Sta. 162+15

℄ Roadway
N 37°-51' E

Length of Bridge 30'-0"

BRIDGE NO 050941

PLAN

For Superstructure Details
See Std. Index No. 2184.

9'-0" 8'-0" 4'10" 4'-0" 8'-0" 6'-0"

℄ Metal Guard Rail

n. Gr. El. 36.10

F E E F

Slope 1½:1

Excavate to Elev. 27.0

Slope 1½:1

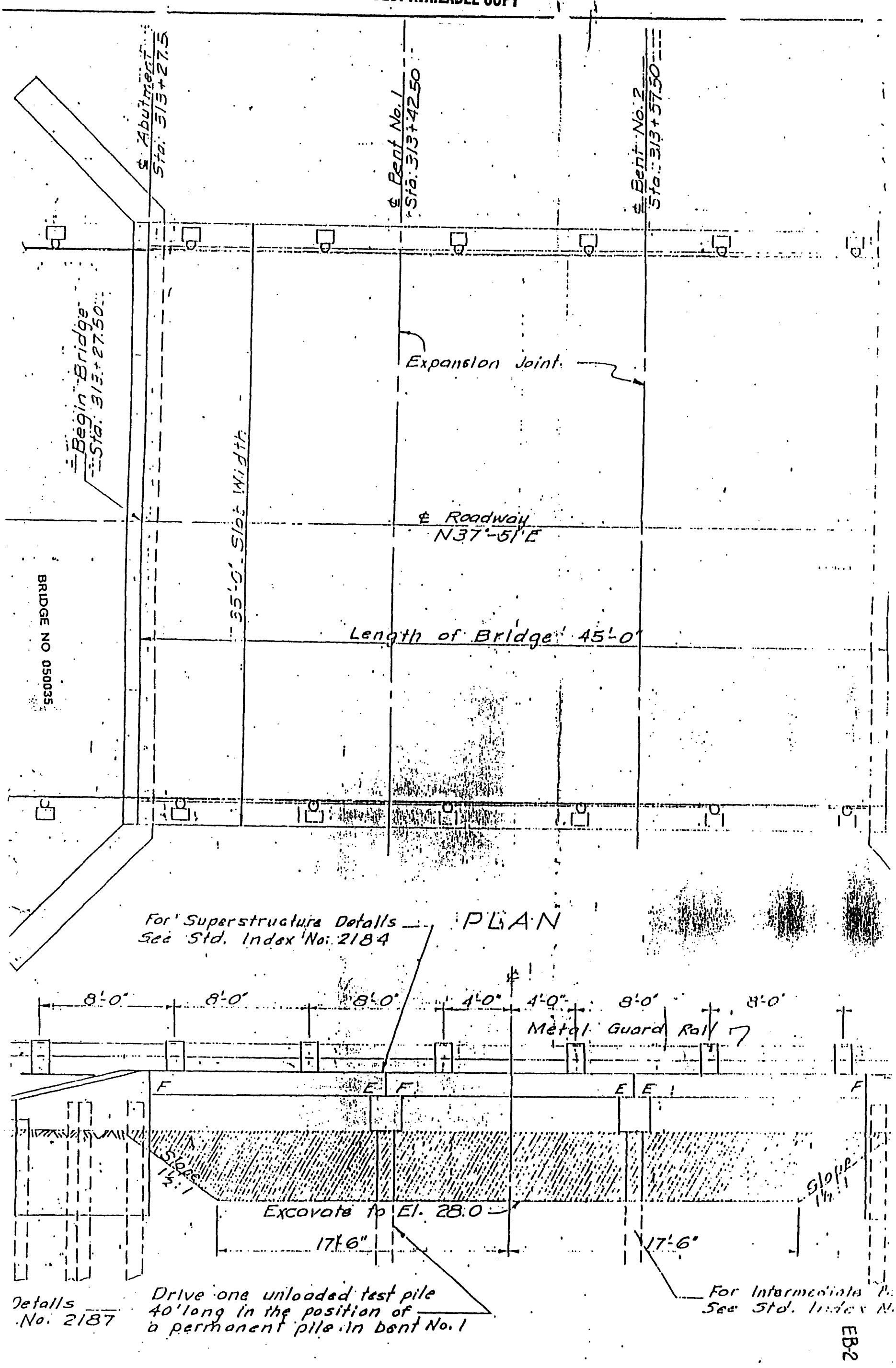
26.0

12'-6" 12'-6"

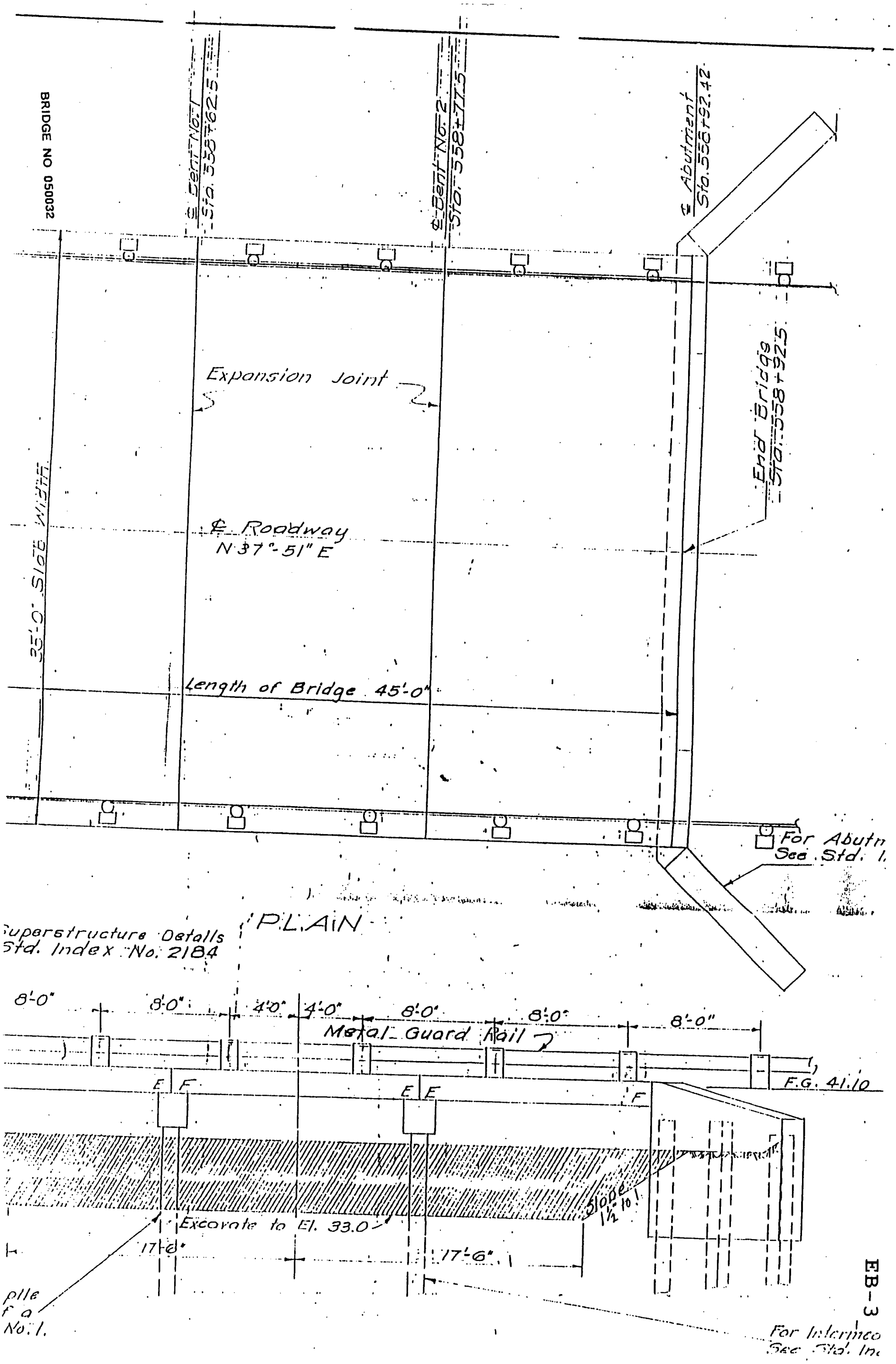
Drive one unlooded test pile 40' long in the position of a permonent pile in bent No. 1.

For Intermediate Bent Details See Std. Index No. 2183

EB



EB-2



BRIDGE NO 050031

℄ Abutment 1
Sta. 641+22.08

℄ Bent No. 1
Sta. 642+00

℄ Abutment 2
Sta. 642+22.92

Begin Bridge
Sta. 641+35

Sta. 642+45 End Bridge

35'-0" Slab Width

Expansion Joint

℄ Roadway
N 37°-51' E

Length of Bridge 30'-0"

ts. Details
x No.

PLAN

For Superstructure Details
See Std. Index No. 2184.

8'-0" 8'-0" 4'-0" 4'-0" 8'-0" 8'-0"

Metal Guard Rail

Fin Gr 41.70

Fin. G

F E E F

Slope 1½:1

Excavate to El. 33.5

12'-6" 12'-6"

Slope 1½:1

El.

EB-4

e Bent Details
No. 2183.

Drive one
40' long in
permanent

EB-5

HALF PLAN

HALF SECTION

ELEVATION

SECT A-A

SECT B-B

SECT D-D

Match Slope of Bridge Slab

Match construct. between Bridge and

Approach Slab

Symmetrical about ℄

Precoulded Slope Per Fig. 2

Fin EG

Stirrups S @ 12" ctrs

Hoops @ 12" ctrs

Bars A

Bars C

Bars E

Bars F

Bars G

¾" Chamfer

Elev. "B"

12" Sq. Conc. Piles

6" Clear to Pile

GENERAL NOTES

DESIGN LOAD FOR PILES: 20 Tons

OW: Dowels shown on Superstructure Drawing

CHAMFER: Chamfer all exposed edges ¾" Unless Otherwise Shown.

NOTE: All reinforcing steel unless otherwise shown shall be #40

BENDING DIAGRAMS

HOOPS "H"

STIRRUPS "S"

12"x12" PRECAST CONCRETE PILES - 30' TO 45' LONG

NOTE: For reinforcing steel and other details not shown, see Std. Index No. 1263

Length L

0.15 L

0.35 L

0.35 L

0.15 L

2'-0"

12"

Points for attaching handling lines

STATE OF FLORIDA
STATE ROAD DEPARTMENT

STANDARD CONCRETE
ABUTMENT - 15' SPAN 70 FT RD

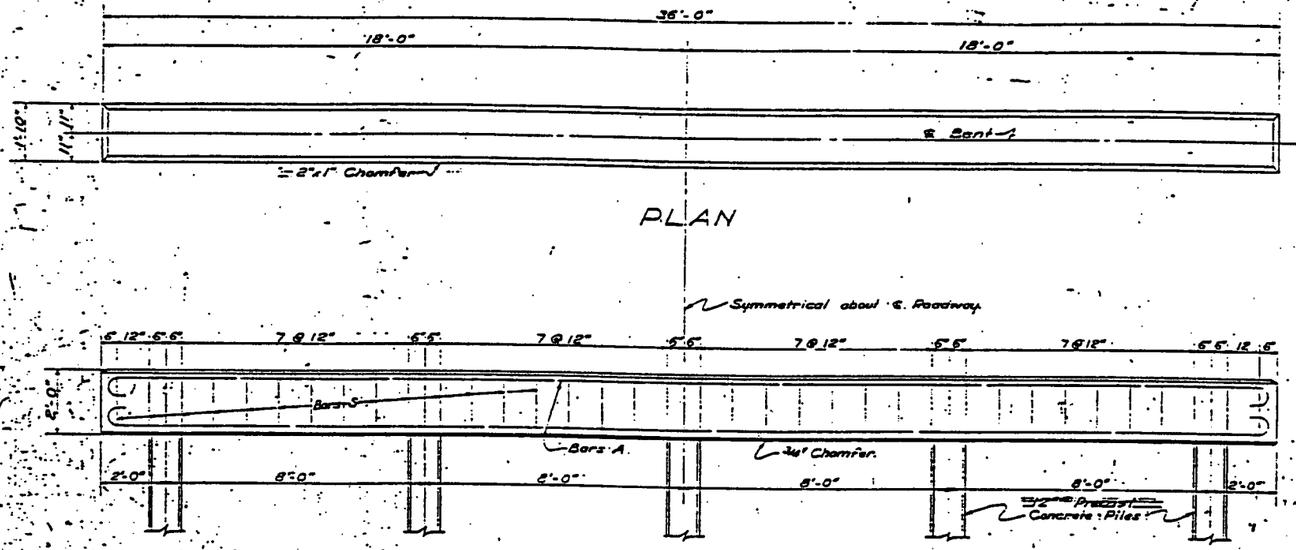
ROAD NO.	COUNTY	SECTION	JOB NO.

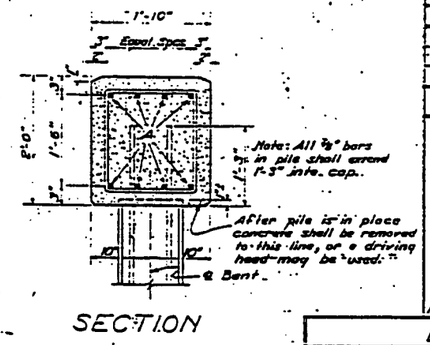
REVISIONS				
Number	Date	Description	Designed by	
			Checked by	
			Drawn by	C.A.
			Checked by	W.L.
			Quantities by	
			Checked by	
			Traced by	

Number | Date | Approved by

8-7-62

6

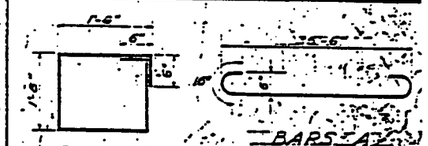




BILL OF REINFORCING STEEL

MARK	SIZE	LENGTH	NO. REQ.	BENDING
A	5"	37'-8"	8	See Diagram
S	½"	6'-11"	36	

BENDING DIAGRAMS



Note: All bar dimensions are given out to out.

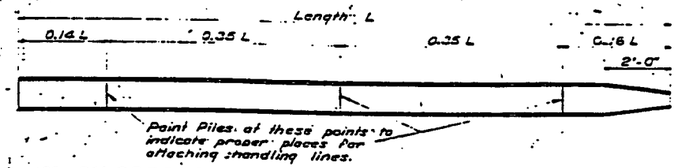
ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Concrete, Class A (Substructure)	Cu. Yd.	4.85
Reinforcing Steel	Lb.	1191
Precast Concrete Piling (12"ø)	Lin. Ft.	*

*. See Summary of Estimated Quantities.

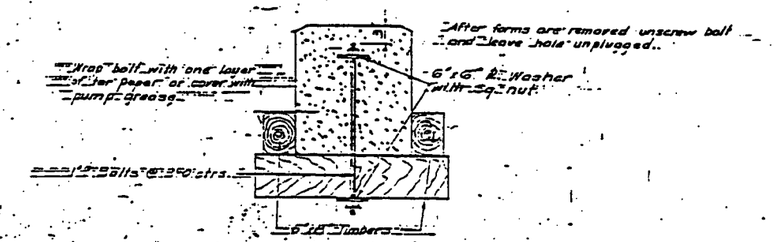
GENERAL NOTES:

DESIGN SPECIFICATIONS : A.A.S.H.O. 1944
LOADING : H-15-44
DESIGN LOAD FOR PILES : 20 Tons.
DOWELS : Set dowels shown on Superstr. Dwg.
CHAMFERS : Chamfer all exposed edges ¾" unless otherwise shown or directed by the Engineer.



12"x12" PRECAST CONCRETE PILES ~ 30' TO 45' LONG

Note: For reinforcing Steel and other details not shown see Standard Index No. 1282.



SECT. THRU CAP SHOWING PERMISSIBLE METHOD OF SUPPORTING SLAB FORMS

DETAILS OF INTERMEDIATE BENT

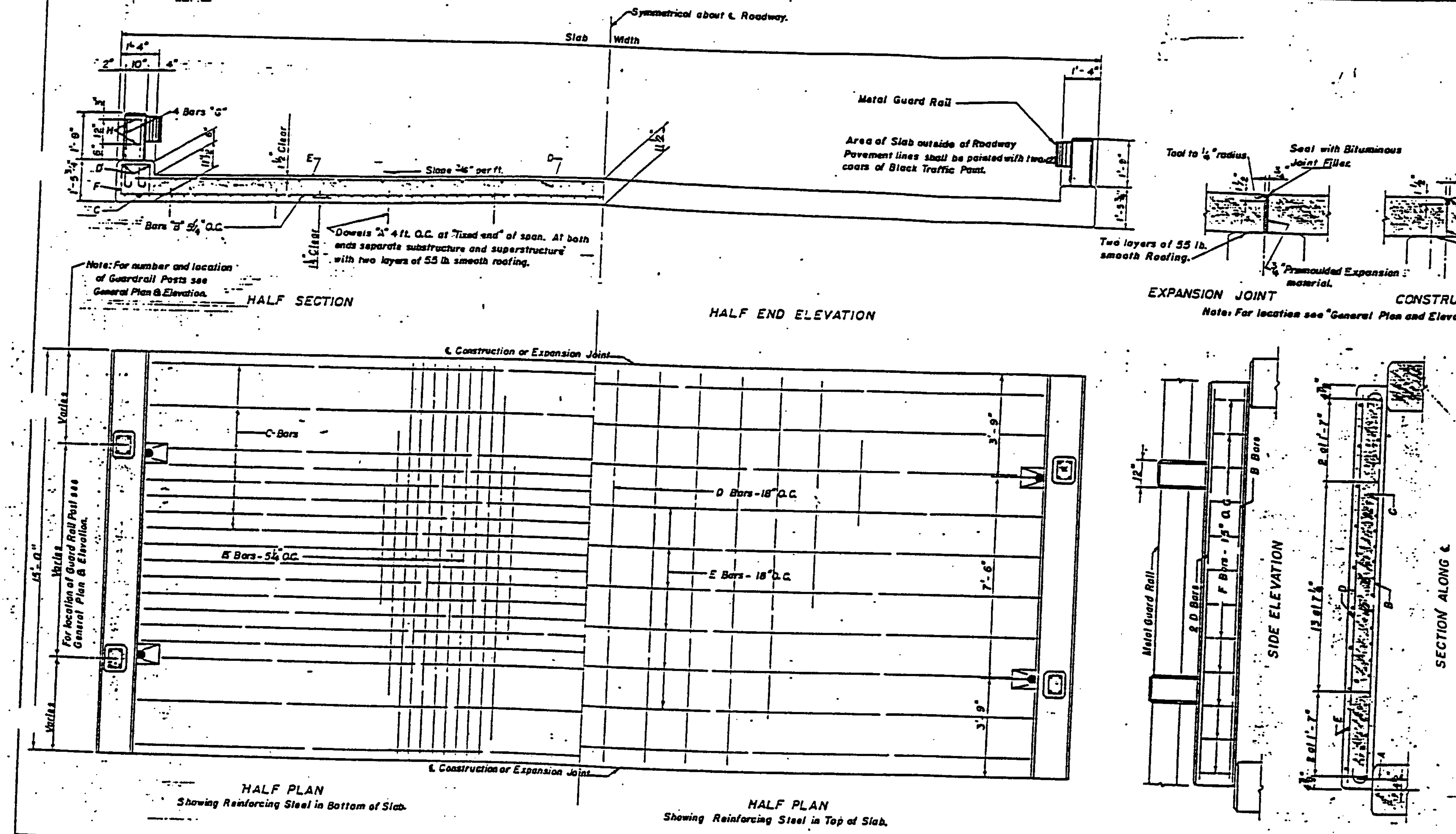
STATE OF FLORIDA
STATE ROAD DEPARTMENT

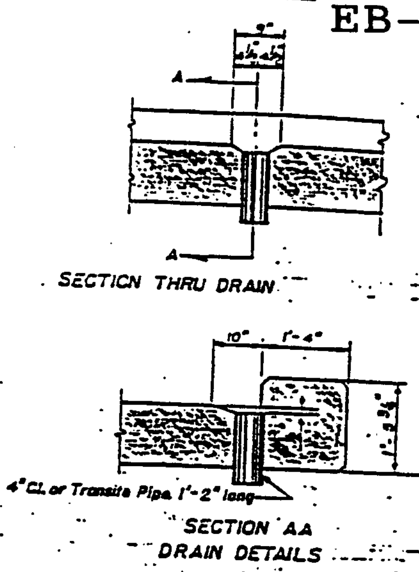
STANDARD CONCRETE PILE BENT
15 FT. SPAN 35 FT. SLAB WIDTH

ROAD NO.	COUNTY	SECTION	JOB NO.

REVISIONS			Drawn by	Date	Approved by
			Designed by		
			Checked by		
			Drawn by	C.E.S.	7-47
			Checked by	T.W.J.	7-47
			Quantities by	DWJ	8-47
			Checked by	W.M.C.	8-47
			Traced by		

3 OF 11 2103





GENERAL NOTES

DESIGN SPECIFICATIONS: A.A.S.H.O.-44.
LOADING: H-15-44.
CHAMFERS: All exposed edges and corners shall be chamfered 3/4" unless otherwise shown.
RAIL: The Rail, including the concrete post, shall be paid for at the contract unit price for Guard Rail.

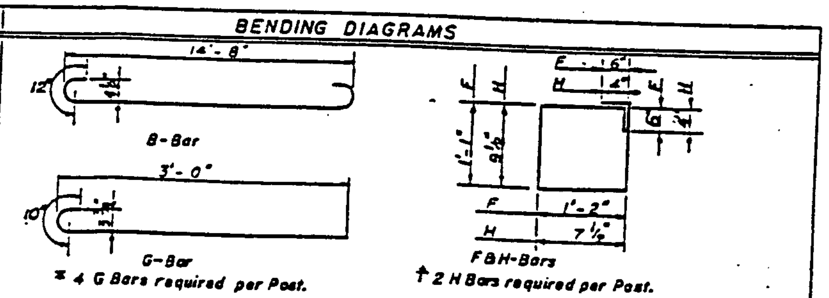
ESTIMATED QUANTITIES

ITEM AND UNIT	33' SLAB WIDTH	35' SLAB WIDTH	37' SLAB WIDTH	39' SLAB WIDTH	40' SLAB WIDTH	43' SLAB WIDTH
Concrete Class A Cu. Yd.		19.36			22.01	
Reinforcing Steel Lb.		3,183			3,635	

BILL OF REINFORCING STEEL

MARK	SIZE	33' SLAB WIDTH		35' SLAB WIDTH		37' SLAB WIDTH		39' SLAB WIDTH		40' SLAB WIDTH		43' SLAB WIDTH	
		No. Required	Length	No. Required	Length	No. Required	Length	No. Required	Length	No. Required	Length	No. Required	Length
A	3/4" ϕ			9	1'-3"								
B	3/4" ϕ			80	16'-4"					10	1'-3"		
C	5/8" ϕ			18	34'-7"					92	16'-4"		
D	1/2" ϕ			26	14'-6"					18	39'-7"		
E	1/2" ϕ			10	33'-0"					29	14'-6"		
F	1/2" ϕ			24	5'-1"					10	38'-0"		
G	5/8" ϕ			*	3'-8"					24	5'-1"		
H	1/2" ϕ			†	3'-1"					*	3'-8"		
										†	3'-1"		

BENDING DIAGRAMS



* 4 G Bars required per Post.

† 2 H Bars required per Post.

Cost of Bars G and H shall be included in Contract Unit Price for Guard Rail.

Bar dimensions are given out to out of bar.

STATE OF FLORIDA
STATE ROAD DEPARTMENT

15 FT. SPAN SLAB SUPERSTRUCTURE

Revisions		
C.E.S.	5-48	Slope changed from 1/4" to 3/16"
N.L.F.	5-48	removed haunches
W.G.B.	3-49	40' slab added

Designed by	T.W.J.	8-47
Checked by	R.M.M.	8-47
Drawn by	T.W.J.	8-47
Checked by	R.M.M.	8-47
Quantities by	T.W.J.	8-47
Checked by	W.M.J.	8-47
Traced by	W.H.W.	4-49

1 of 1 2184