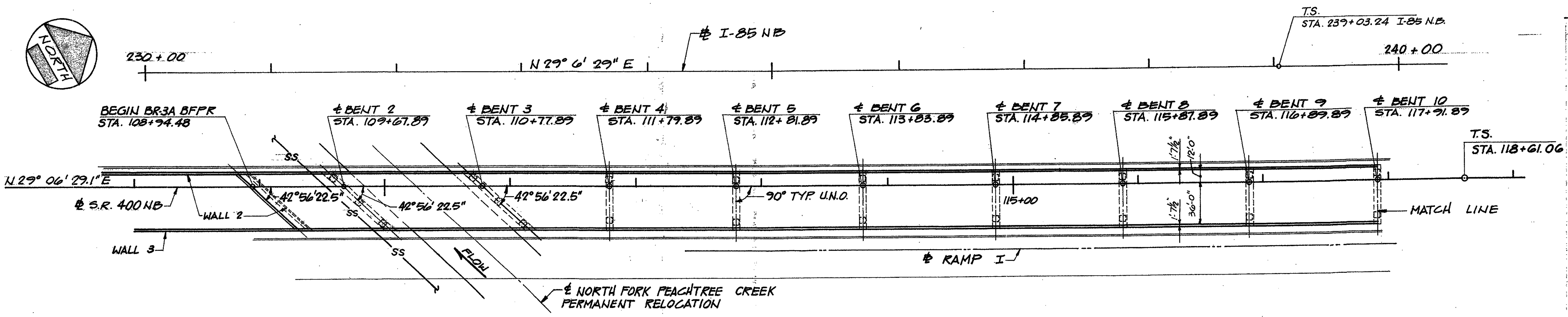
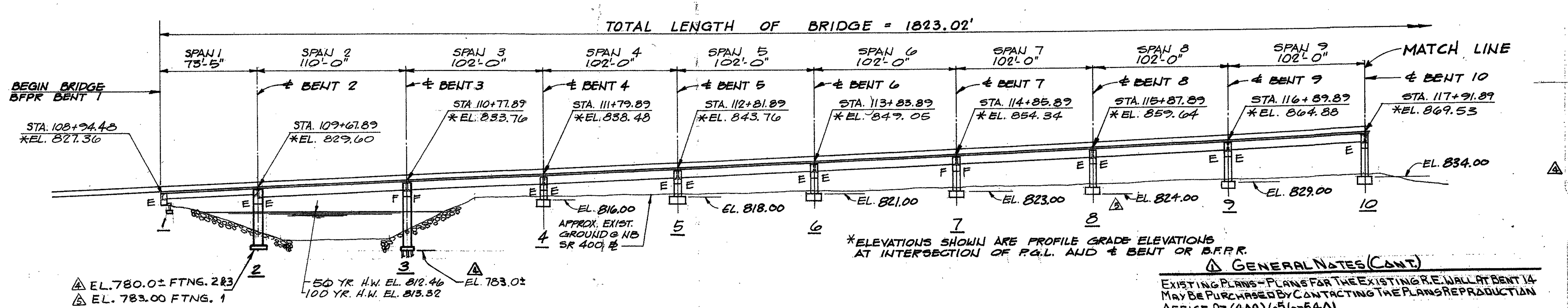
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	IXAF-0005(1)	522	934

REV. 11-6-89
REV 12-18-89
REV 3-23-90
REV. 6-5-90
REV 10-29-90
REV 10-13-89

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	CM-056-1(56)	61	157



PLAN
1" = 50'



*ELEVATIONS SHOWN ARE PROFILE GRADE ELEVATIONS AT INTERSECTION OF P.G.L. AND ℄ BENT OR B.F.P.R.

NOTE: PILES & CAISSONS NOT SHOWN.

ELEVATION
1" = 50'-0"

GENERAL NOTES:

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS DATED 1983 AND THE 1989 SUPPLEMENTAL SPECIFICATIONS, AS MODIFIED BY CONTRACT DOCUMENTS.

PROTECTIVE SURFACE TREATMENT - PROTECTIVE SURFACE TREATMENT AS PER THE GEORGIA STANDARD SPECIFICATIONS SECTION 500.13C WILL BE REQUIRED AT THIS SITE.

REINFORCING STEEL - ALL REINFORCING STEEL SHALL BE PLACED AND TIED IN ACCORDANCE WITH THE GEORGIA STANDARD SPECIFICATIONS. WELDING OF REINFORCING STEEL WILL NOT BE PERMITTED.

PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.

GROOVING CONCRETE - THE ENTIRE LENGTH OF THE BRIDGE SHALL BE GROOVED TRANSVERSELY AS PER GEORGIA STANDARD SPECIFICATIONS SECTION 500.11.C.6.C.(2).

CHAMFER - ALL EXPOSED CONCRETE EDGES SHALL BE CHAMFERED 3/4 INCH UNLESS NOTED OTHERWISE.

PRECAST CONCRETE DECK PANELS - PRECAST CONCRETE DECK PANELS WILL NOT BE ALLOWED AT SPANS 12, 13 & 14.

STAY-IN-PLACE METAL FORMS - STAY-IN-PLACE METAL FORMS WILL NOT BE ALLOWED IN SPAN 12.

PROTECTIVE PLATFORMS - PROTECTIVE PLATFORMS WILL BE REQUIRED OVER LINDBERGH DRIVE, I-85 NORTHBOUND AND SOUTHBOUND AND H.O.V. ENTRANCE AND EXIT RAMPS. SEE GEORGIA STANDARD SPECIFICATIONS SECTION 510. THE CONTRACTOR SHALL MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 16'-6" DURING CONSTRUCTION.

WAITING PERIOD - PILES AT END BENT 16 SHALL NOT BE DRIVEN UNTIL COMPLETED ENDFILL HAS BEEN IN PLACE FOR AN ESTIMATED PERIOD OF 60 DAYS.

STRUCTURAL STEEL - STRUCTURAL STEEL ON THIS SITE SHALL CONFORM TO ASTM A572, GRADE 50 AND AASHTO M223 DESIGNATIONS, UNLESS OTHERWISE INDICATED ON THE BRIDGE PLANS.

PAINT - ALL STRUCTURAL STEEL SHALL BE PAINTED IN ACCORDANCE WITH SPECIAL PROVISION 535.

DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1 AND 16.

COFFERDAMS - COFFERDAMS PROVIDED IN THE SUMMARY OF QUANTITIES ARE LOCATED AT BENTS 2 AND 3.

△4 PILE POINTS - REINFORCE ALL PILE TIPS WITH PRUYN POINT NO. 75750 OR AN APPROVED EQUAL. PAYMENT SHALL BE PILE TIPS, PER EACH. PILES AT BENT 3 SHALL NOT HAVE PILE TIPS.

CONCRETE SLABS AND/OR BOULDERS ARE PRESENT AT BENTS 2 AND 3. THESE SHALL BE REMOVED TO ALLOW THE CONSTRUCTION OF THE SEALS AND FOOTINGS AT THESE BENTS.

FOOTING ELEVATIONS - FOOTING ELEVATIONS, AS SHOWN ON THE PLANS, SHALL NOT BE LOWERED MORE THAN 3 FEET WITHOUT THE APPROVAL OF THE STATE BRIDGE ENGINEER. THIS SAME REQUIREMENT APPLIES TO THE SEAL CONCRETE.

INCIDENTAL ITEMS - COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS SHALL BE INCLUDED IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF TEMPORARY SHORING, 3-PLY WATERPROOFING, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

TRAFFIC CONTROL - SEE ROADWAY PLANS FOR DETAILS OF TRAFFIC CONTROL. TRAFFIC CONTROL IS A ROADWAY PAY ITEM.

ROADWAY LIGHTING - ELECTRICAL JUNCTION BOXES AND CONDUIT ARE ROADWAY PAY ITEMS.

TEMPORARY BARRIERS ARE REQUIRED AT THIS SITE AND SHALL BE PAID FOR AS A ROADWAY PAY ITEM.

BOULDERS OF VARYING SIZE AND EXTENT MAY BE ENCOUNTERED DURING THE CONSTRUCTION OF DRILLED SHAFTS. THE CONTRACTOR SHALL ADJUST HIS BID PRICE PER LINEAR FOOT OF DRILLED SHAFT TO COMPENSATE FOR ADDITIONAL WORK AND EQUIPMENT REQUIRED TO EXCAVATE OR PENETRATE THE BOULDERS. NO ADDITIONAL COMPENSATION WILL BE MADE. THE SHAFT EXCAVATION SHALL BE FREE OF STANDING WATER BEFORE PLACEMENT OF CONCRETE. THE SHAFTS SHALL BE CASED TO PARTIALLY WEATHERED ROCK OR DEEPER TO ALLOW INSPECTION OF EXCAVATION BY THE GEOTECHNICAL ENGINEERING BUREAU.

48 IN DIA DRILLED CAISSONS AT BENTS 4-10, 13, 14 & 15
60 IN DIA DRILLED CAISSONS AT BENTS 11 AND 12

△1 GENERAL NOTES (CONT.)

EXISTING PLANS - PLANS FOR THE EXISTING R.E. WALL AT BENT 14 MAY BE PURCHASED BY CONTACTING THE PLANS REPRODUCTION OFFICE AT (404) 656-5401.
THE EXISTING WALL WAS BUILT UNDER PROJECT NO. ACI-1-1D-85-2(27) CT.1 FULTON CO. (PLANS SHEETS 53 AND 56 OF 114)
TEMPORARY SHORING - TEMPORARY SHORING WILL BE REQ'D FOR CONSTRUCTION OF BENT 14, SEE BR. SHEET S-5 FOR DETAILS.

△2 GENERAL NOTES CONT. ON BR. SHT S-2.

BRIDGE CONSISTS OF:

1 - 73'-5" PSC SIMPLE AASHTO GIRDER SPAN..........SPECIAL DESIGN
1 - 110'-0" PSC SIMPLE AASHTO GIRDER SPAN.........SPECIAL DESIGN
7 - 102'-0" PSC SIMPLE AASHTO GIRDER SPAN.........SPECIAL DESIGN
1 - 75'-7 3/8" PSC SIMPLE AASHTO GIRDER SPAN......SPECIAL DESIGN
1 - 117'-0" PSC SIMPLE AASHTO GIRDER SPAN.........SPECIAL DESIGN
1 - 109'-6" PSC SIMPLE AASHTO GIRDER SPAN.........SPECIAL DESIGN
1 - 280'-0", 280'-0" CURVED COMPOSITE CONTINUOUS PLATE GIRDER UNIT..................SPECIAL DESIGN
1 - 63'-6" PSC SIMPLE AASHTO GIRDER SPAN..........SPECIAL DESIGN
2 - STEEL "H" PILE END BENTS......................SPECIAL DESIGN
14 - CONCRETE INTERMEDIATE BENTS..................SPECIAL DESIGN
BAR BENDING DETAILS...........................GA. STD. NO. 3901 (8-69)
TYPICAL FILL DETAIL AT END OF BRIDGE...........GA. STD. NO. 9037 (4-2-86)
END POST AND END POST GUARDRAIL ATTACHMENT DETAILS..........................GA. STD. NO. 3054 (5-89)
L = 4'-0", W = 1'-3", H = 2'-8"
TEMPORARY STANDARD CONCRETE BARRIER...........GA. STD. NO. 4960 (10-85)

UTILITIES

NONE

DESIGN DATA:

SPECIFICATIONS: AASHTO 1983, INCLUDING INTERIMS 1984 THROUGH 1988. GUIDE SPECIFICATIONS FOR HORIZONTALLY CURVED HIGHWAY BRIDGES, 1980; INCLUDING INTERIMS 1981, 1982 AND 1984 THROUGH 1989.

LIVE LOADING: HS 20-44 AND/OR MILITARY LOADING, IMPACT ALLOWED.

FUTURE PAVING ALLOWANCE: 30 PSF

CONCRETE:
SUPERSTRUCTURE............f'c = 3,500 psi (CLASS AA)
SUBSTRUCTURE..............f'c = 3,000 psi (CLASS A) (END BENTS 1 AND 16 AND INTERMEDIATE BENTS 2 - 12 AND 15)
SUBSTRUCTURE..............f'c = 4,500 psi (CLASS AA-1) (INTERMEDIATE BENTS 13 & 14)

PSC BEAMS.................f'c = 5,000 psi (SPANS 10 AND 15)
PSC BEAMS.................f'c = 6,000 psi (SPANS 1 - 9, 11 AND 12)
△ CAISSONS ....f'c = 3,500 psi

REINFORCING STEEL:
SUPERSTRUCTURE............ASTM A615, GRADE 40 (fy = 40,000 psi)
△ SUBSTRUCTURE............ASTM A615, GRADE 40 (fy = 40,000 psi) (END BENTS 1 AND 16 AND INTERMEDIATE BENTS 2,3,5-12, AND 15)
△ SUBSTRUCTURE............ASTM A615, GRADE 60 (fy = 60,000 psi) (INTERMEDIATE BENTS 4, 13 AND 14)

PRETENSIONING STRANDS.........f's = 270,000 psi

DESIGN SOIL PRESSURE..........5 TONS/SQ. FT.
STRUCTURAL STEEL .... SERVICE LOAD DESIGN

SR 400 TRAFFIC DATA

1990 ADT -------25375
2010 ADT --------33700
2010 AM DHV ------2720
2010 PM DHV ------3595
T = 2%
SU = 1.5%
COMB = 0.5%

SUMMARY OF QUANTITIES:

Item	Quantity	Description
211-0200	1514	CU YD BRIDGE EXCAVATION, GRADE SEPARATION
441-0004	626	SQ YD CONC SLOPE PAV, 4 IN
449-1000	1	EACH BRIDGE DECK JOINT SEAL BT NO 13, BR NO 3A
449-1000	1	EACH BRIDGE DECK JOINT SEAL BT NO 15, BR NO 3A
500-0100	9288	SQ YD GROOVING CONCRETE
500-1006	LUMP	SUPERSTR CONC (CL AA), BR NO 3A (3568)
△5 △4 △3 500-3102	~~1422~~ ~~1427~~ ~~1627~~ 1447	CU YD CL A CONC
500-3650	609	CU YD CL AA-1 CONC
△4 500-3700	~~306~~ 0	CU YD SEAL CONC
501-3000	LUMP	STR STEEL, BR NO 3A (2,463,314)
507-9003	733	LIN FT PSC BEAMS, AASHTO TYPE III
507-9005	7196	LIN FT PSC BEAMS, AASHTO TYPE V
△5 △4 △3 511-1000	~~378841~~ ~~388747~~ ~~398313~~ 398052	LB BAR REINF STEEL
511-3000	LUMP	SUPERSTR REINF STEEL, BR NO 3A (371,417)
514-1000	LUMP	EPOXY COATED SUPERSTR REINF STEEL, BR NO 3A (438,285)
520-0353	16	EACH PILE POINTS, 12 BP 53
△4 520-1125	~~1047~~ 1350	LIN FT PILING IN PLACE, STEEL H, 12 BP 53
520-4125	1	EACH LOAD TEST, STEEL H, 12 BP 53 (IF REQD)
525-1000	6	EACH COFFERDAM
524-0010	1262	LIN FT DRILLED CAISSON - 48 IN DIA
581-1000	LUMP	POT BEARING, BR NO 3A (15)
603-2030	938	SQ YD STN DUMPED RIP RAP, TP I, 30 IN
524-0010	138	LIN FT DRILLED CAISSON - 60 IN DIA

FOR INFORMATION ONLY

BRIDGE NO. 3A   P.I. NO. 71259△

RS&H
Reynolds, Smith and Hills
Architects • Engineers • Planners, Incorporated
Atlanta, Georgia

	DATE	REVISIONS	BY
△5	9-25-90	REV. DETAILS & QTYS	RTA
△4	5-30-90	REV. Details & QTY'S	RTA
△3	2-26-90	REV. QUANTITIES	C.L.
△2	11-22-89	REV. AS PER AMEND. No. 4	RTA
△1	10-31-89	REV. SHEET	RTA

GEORGIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION-BRIDGE DESIGN

PLAN & ELEVATION (1 of 2)

GA 400 N.B. OVER I-85

FULTON COUNTY   IXAF-0005(3) CT4

SCALE: AS SHOWN   DATE: OCT. 1989

DESIGNED CL   CHECKED C.L.   REVIEWED RJS/BDM
DRAWN GD   DOT LIASON R.T.A.   APPROVED PVL

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 11269 CRAIG ALAN LUDTKE
10-10-89

BRIDGE SHEET S-1 OF 62

304015