

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0006077, Bulloch County
CSSTP-0006-00(077)
SR 67 @ SR 46 Intersection Improvements

OFFICE Preconstruction

DATE March 27, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO  SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

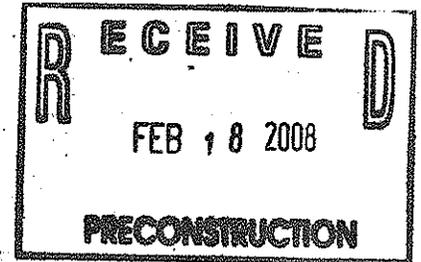
Attachment

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DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

Interdepartmental Correspondence



File: CSSTP-0006-00(077) Bulloch County
Desc. SR 67 at SR 46
P.I. No. 0006077

Office: Jesup

Date: 2/13/08

From: Glenn W. Durrence, P.E., District Engineer *A.D. (ADO)*

To: Genetha Rice-Singleton, Asst. Director of Preconstruction

Subject: Revised Project Concept Report

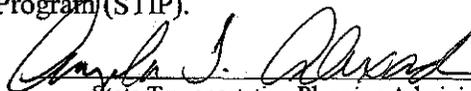
Remarks:

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

Originally the existing intersection was described as SR 46 crossing SR 67. However the intersection of SR 67 actually includes SR 46 to the west and CR 927 to the east. The intersection will now be divided into two separate T-intersections, separating CR 927 from SR 46. Both CR 927 and SR 46 will be realigned to intersect SR 67 at 90°. No four laning or type B median crossovers will be included in the design. Instead, the project will include adding a third lane east of the existing SR 67 alignment and striping/markings the middle lane as to allow for left turns at the approaches to SR 46 and CR 927. Right turn lanes on both approaches will also be included. 660' tapers will provide transitioning between the existing two lane roadway and the proposed three lane section. Project length and termini are also revised.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTIP) and/or the State Transportation Improvement Program (STIP).

Date 2-18-08


State Transportation Planning Administrator

GWD:ADO: my

Copies to:

Brad Saxon, Preconstruction Engineer
Dennis Odom, District Design Engineer
Brian Summers, Project Review Engineer
Glenn Bowman, State Environmental/Location Engineer
Keith Golden, State Traffic Safety and Design Engineer
Angela Alexander, State Transportation Planning Administrator
Jamie Simpson, State Financial Management Administrator
General File Unit, Atlanta
Jesup File

REVISED PROJECT CONCEPT REPORT

Need and Purpose: The purpose for this project is to improve the safety and operation of the intersection of State Route 67 at State Route 46 in Bulloch County. SR 67 is a minor arterial route between I-16 and Statesboro. State Route 46 is a Rural Major Collector between Register and SR67. The accident history shows that in a 24 month period beginning from 2002 to 2003, there were sixteen accidents at this intersection. Of these, thirteen were angle-intersecting collisions, two were rear end collisions and one was fatal. This intersection has a store located on the southwest quadrant, cotton fields are located at the northeast and southeast quadrant, and the northwest quadrant is a wooded lot. It is recommended that SR 46 be realigned so that it intersects with SR 67 at more of a 90 degree angle.

Project Location: The intersection of SR 67 and SR 46 is located in Brooklet, Ga. at (SR 46) MP 14.77 1 mile north of Interstate 16, and 13 miles south of Statesboro, Ga. The project length is 0.65 miles, and the termini for SR 67 are MP 6.93 to 7.69. The beginning and ending termini for SR 46 are MP 14.52 and MP 15.15 respectively.

Description of the approved concept: The approved concept consists of widening SR 67 to a 4-lane divided highway with a 44 foot median and type B median crossovers to provide for left-turn lanes on both approaches of the intersection. Right turn lanes are also provided. SR 46 is to be realigned to come in at more of a 90 degree angle and have separate right turn lanes at both approaches onto SR 67.

PDP Classification:

Full Oversight(), Exempt (X), SF (), Other ()

Functional Classification: Rural Minor Arterial (SR 67)/Rural Major Collector (SR 46)

U.S. Route Number(s):None

State Route Number(s): 67 & 46

Traffic (AADT) as shown in the approved concept:

Current Year: (2005) 3575 SR 67

Design Year: n/a

(2005) 1100 SR 46-

Proposed features to be revised: Originally the existing intersection was described as SR 46 crossing SR 67. However the intersection of SR 67 actually includes SR 46 to the west and CR 927 to the east. The design is being revised so that the need and purpose can be more adequately addressed. Safety will be enhanced by dividing the intersection into two separate T-intersections, separating CR 927 from SR 46. Both CR 927 and SR 46 will be realigned to intersect SR 67 at 90°. Each feature requiring a revision is listed below:

- **Typical Section-** The current proposed typical consists of widening the existing 2 lane SR 67 to a four lane divided highway, with 44-foot median, Type "B" Crossovers. 10' shoulders (6.5' paved), 12' front slopes, 4 foot flat bottom ditches, and 4:1 back slopes were proposed. Currently the proposed typical for SR 46 consists of two 12'

- travel lanes with a 12' left turn lane and an auxiliary right turn lane. These typicals will need to be updated and a separate typical for CR 927 should be included.
- **Project Termini:** The current project length is 0.65 miles and the termini for SR 67 are MP 6.93 to MP 7.69. The beginning and ending termini for SR 46 are MP 14.52 and MP 15.15 respectively.
 - **Right of way limits:** Although specifics on right of way were not included in the original concept report, it is estimated that the overall right of way required will be decreased upon implementation of the revised design.
 - **Alignment:** Currently the proposed alignment includes SR 46 intersecting a four-laned SR 67 at approximately 65°. Although this angle is a slight improvement from the existing angle of intersection, separating SR 46 and CR 927 and providing two 90° T-intersections would be more beneficial in terms of safety.

Describe the revised feature(s) to be approved:

- **Typical Section:** SR 67 will be widened east of the existing alignment to include a third 12' lane. 660' tapers on each end of the project will allow for transition between the two lane section of roadway and the three lane section. The middle lane will be striped and marked to allow for left turns at the approach to CR 927 and the approach of SR 46. Right turn lanes will also be provided at both approaches. Shoulders, front slopes, ditches and back slopes will remain the same as stated in the original concept on the west side of SR 67. On the east side of SR 67, however, 10' shoulders with only 2' paved is desired. (Although a design variance will be required to implement this reduced paved shoulder width, it is desired to minimize the anticipated construction impacts and waste that will result from the future widening project, P.I. No. 522460.) Ditch, front slope, and back slope will remain the same on the east side of SR 67 as is currently proposed in the original concept. CR 927 will consist of two 12' travel lanes (one in each direction). SR 46 will be a three lane road with one 12' lane traveling east towards SR 67 and two 12' lanes traveling west away from SR 67. These two lanes provide for those turning right onto SR 46 and those turning left onto SR 46. 10' shoulders (6.5' paved), 12' front slopes, 4 foot flat bottom ditches, and 4:1 back slopes are proposed for both CR 927 and SR 46.
- **Project Termini:** The proposed project will extend from SR 67 MP 6.851 northwest to MP 7.495. The project length will be 0.64 miles.
- **Revised Alignment:** CR 927 will approach SR 67 from the east at exactly 90 degrees. The intersection will be at MP 7.088. SR 46 will approach SR 67 from the west at a 90 degree angle. This intersection will be at MP 7.338.

Design Variances Anticipated: A variance for shoulder width is anticipated for the east side of SR 67 between mileposts 6.867 and 7.482. In order to reduce construction impacts and waste that will result from future implementation of the widening project, P.I. No. 522460, a 2' paved shoulder is desired over the GDOT Design Standard of 6.5' paved shoulders for rural arterials.

Updated traffic data (AADT):

Current Year: 2009
7348 SR 67
1903 CR 927
2260 SR 46

Design Year: 2029
11298 SR 67
2953 CR 927
3460 SR 46

Programmed/Schedule:

PE 2005 R/W: LUMP Construction: LUMP

Revised cost estimates:

1. Construction cost including ~~inflation and~~ E&C, 1,803,000
2. Right-of-way, and \$ 93,000
3. Utilities - 0 - REIMBURSABLE - 0 -

Is the project located in a Non-attainment area? ___ Yes X No.

Recommendation: Recommend that the proposed revision to the concept be approved for implementation.

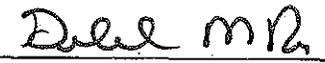
Attachments:

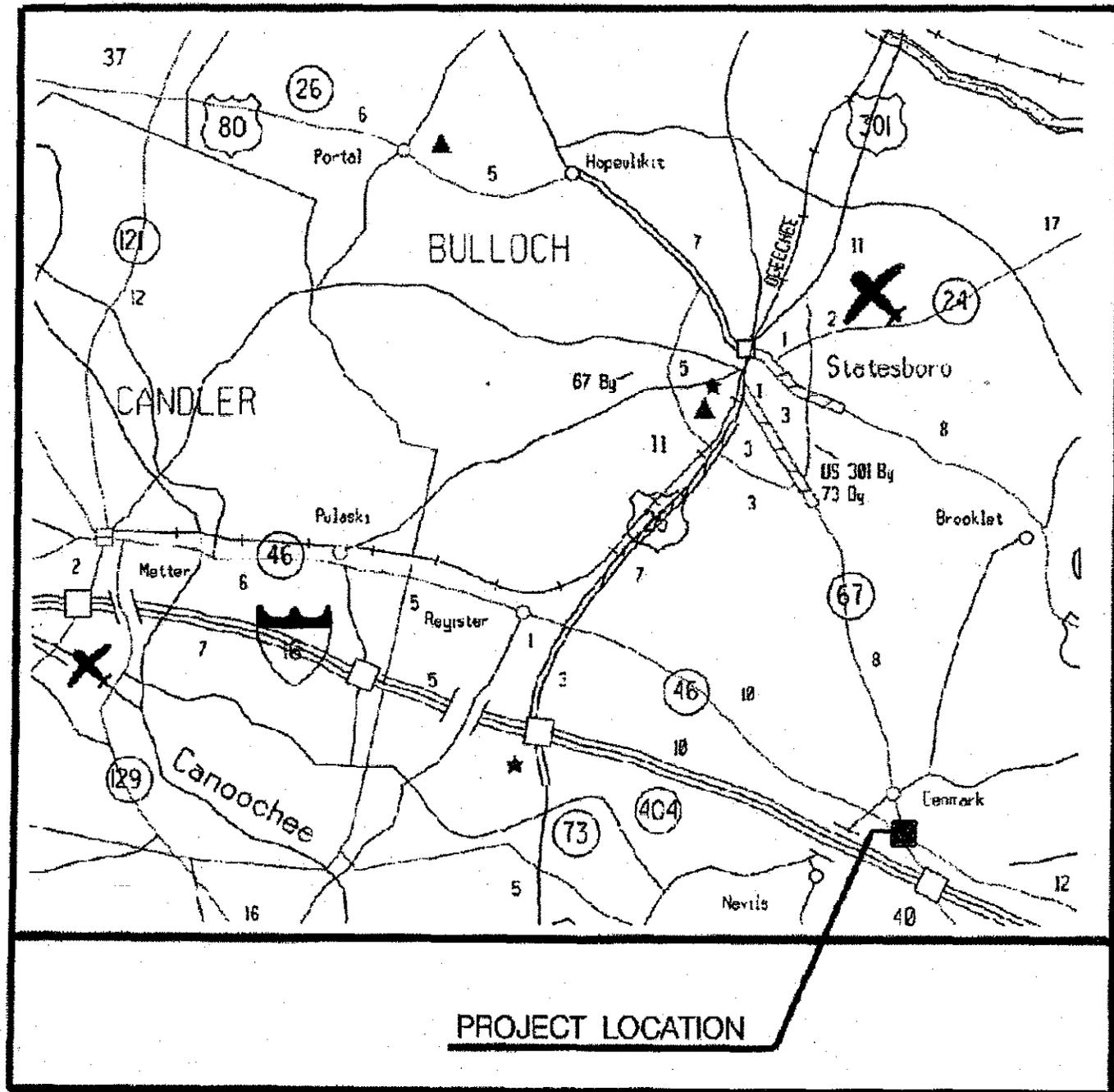
1. Sketch Map
2. Cost Estimate
3. Revised Proposed Typicals

Concur: _____


Director of Preconstruction

Approve: _____


Chief Engineer



Estimate Report for file "New0006077..."

Section ROADWAY ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	Lump	LS	84294.14	TRAFFIC CONTROL -	84294.14
207-0203	3	CY	60.38	FOUND BK FILL MATL, TP II	181.14
210-0100	Lump	LS	542256.41	GRADING COMPLETE -	542256.41
310-5100	15000	SY	16.47	GR AGGR BASE CRS, 10 INCH, INCL MATL	247050.00
402-1812	1026	TN	63.86	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	65520.36
402-3121	4126	TN	64.41	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	265755.66
402-3131	1752	TN	66.39	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	116315.28
402-3192	1651	TN	62.64	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL	103418.64
413-1000	1200	GL	2.08	BITUM TACK COAT -	2496.00
446-1100	7500	LF	5.35	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	40125.00
550-1300	20	LF	68.89	STORM DRAIN PIPE, 30 IN, H 1-10	1377.80
550-3330	1	EA	1706.07	SAFETY END SECTION 30 IN, STORM DRAIN, 4:1 SLOPE	1706.07
634-1200	15	EA	105.83	RIGHT OF WAY MARKERS	1587.45
Section Sub Total:					\$1,472,083.95

Section PAVEMENT MARKINGS & SIGNS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	160	SF	14.70	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	2352.00
636-1029	131	SF	16.52	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 3	2164.12
636-1031	178	SF	19.56	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	3481.68
636-2070	1076	LF	8.25	GALV STEEL POSTS, TP 7	8877.00
653-0120	15	EA	70.45	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	1056.75
653-1501	11400	LF	0.63	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	7182.00
653-1502	5600	LF	0.63	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	3528.00
653-1704	25	LF	5.33	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	133.25
653-3501	1000	GLF	0.54	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	540.00
653-3502	2440	GLF	0.31	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	756.40
653-6004	175	SY	2.70	THERMOPLASTIC TRAF STRIPING, WHITE	472.50
653-6006	1720	SY	3.32	THERMOPLASTIC TRAF STRIPING, YELLOW	5710.40
654-1001	150	EA	3.64	RAISED PVMT MARKERS TP 1	546.00
654-1003	150	EA	3.69	RAISED PVMT MARKERS TP 3	553.50
Section Sub Total:					\$37,353.60

Section GRASSING					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	7	AC	604.06	TEMPORARY GRASSING	4228.42
163-0240	130	TN	180.48	MULCH	23462.40
700-6910	13	AC	987.28	PERMANENT GRASSING	12834.64
700-7000	26	TN	61.37	AGRICULTURAL LIME	1595.62
700-7010	3	GL	20.24	LIQUID LIME	60.72
700-8000	8	TN	350.95	FERTILIZER MIXED GRADE	2807.60
700-8100	650	LB	2.25	FERTILIZER NITROGEN CONTENT	1462.50
Section Sub Total:					\$46,451.90

Section TEMPORARY EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0300	4	EA	2465.64	CONSTRUCTION EXIT	9862.56
163-0520	200	LF	17.18	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	3436.00
163-0521	25	EA	214.41	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS	5360.25
163-0530	11000	LF	3.83	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	42130.00
170-1000	20	LF	12.89	FLOATING SILT RETENTION BARRIER	257.80
171-0030	1000	LF	4.11	TEMPORARY SILT FENCE, TYPE C	4110.00
716-2000	100	SY	1.27	EROSION CONTROL MATS, SLOPES	127.00
Section Sub Total:					\$65,283.61

Section MAINTENANCE OF EROSION CONTROL

Item Number	Quantity	Units	Unit Price	Item Description	Cost
165-0040	25	EA	83.42	MAINTENANCE OF EROSION CONTROL CHECKDAMS/DITCH CHECKS	2085.50
165-0050	10	LF	4.29	MAINTENANCE OF SILT RETENTION BARRIER	42.90
165-0070	5500	LF	2.25	MAINTENANCE OF BALED STRAW EROSION CHECK	12375.00
165-0101	4	EA	659.48	MAINTENANCE OF CONSTRUCTION EXIT	2637.92
Section Sub Total:					\$17,141.32

Total Estimated Cost: \$1,638,314.38

+ 10% E&C 163,831.48

1,802,145.81

1,803,000

1000 3/12/2008

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: CSSTP-0006-00(077), Bulloch, PI# 0006077

OFFICE: Utilities-Jesup, Georgia

DATE: March 6, 2008

FROM: Karon Ivery, District Utilities Engineer

TO: Dennis Odom, District 5 Design

SUBJECT: Utility Cost Estimate- Intersection Improvement on SR 46 @ SR 67

Per a request received March 6, 2008, a review of the preliminary plans and an onsite inspection was made by this office and the following utilities were found to be located within the project limits:

Telephone	Bulloch Rural Telephone Cooperative
Power	Excelsior EMC

This project consists of safety improvement and realigning intersection.

All existing facilities appear to be on existing R/W.

This estimate is based upon a field visit to the project and utility plans dated 3-06-08.

The existing telecommunication facilities that may be in conflict consist of a 25-150 pair cable belonging to Bulloch Rural Telephone consisting of approximately 725 LF of buried lines appearing to be on existing right of way and are not reimbursable to them, but is estimated to cost them \$7,250.00 to relocate (including temporary work).

The existing electrical facilities that may be in conflict consist of 9 – 3 phase power poles at \$7,000 a pole.

The total estimated relocation cost for this project is \$50,750.00.

The total estimated reimbursable cost for this project is \$0.00.

If there are any questions please contact Rosalind Russell at rrussell@dot.ga.gov or (912) 427-5779.

Revised Right of Way Cost Estimate
(Corresponding to layout specified in the revised concept)

P.I. No: 0006077

County: Bulloch

Description: SR 46/CR 927/SR 67 Intersection

Estimate:

2.56 acres x \$8,000/acre (agricultural)* = \$20,480

1.04 acres x \$20,000/acre (residential)* = \$20,800

1.02 acres x \$50,000/acre (industrial)* = \$51,000

Total Cost Estimate = \$92,280

*Average Prices per acre in the project area provided by the District Five Right of Way Office:

Agricultural Land - \$8,000/acre

Residential Land- \$20,000/acre

Commercial- \$200,000/acre

Industrial- \$50,000-\$100,000 /acre → \$50,000/acre for Cemetery

Approved Amara Hall
District 5 Right of Way Representative

Date: 3/10/08

