

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

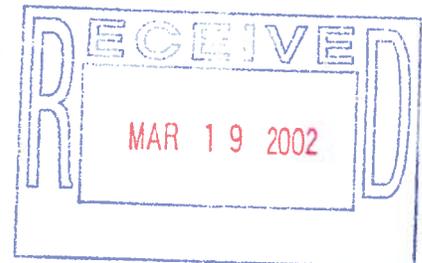
FILE: STP-0000-00(409) Spalding County
P.I. No.: 0000409
SR 16 @ Old 85 Conn. & CR 496/Hollonville Road
Safety/Intersection Improvements

OFFICE: Traffic Safety and Design
Atlanta, Georgia

DATE: March 18, 2002

PA
FROM: Phillip M. Allen, State Traffic Safety & Design Engineer

TO: Glenn Durrence, District Engineer, Thomaston
Attn: David Millen



SUBJECT: **APPROVED CONCEPT REPORT**

Attached is a copy of the approved concept report on the above listed project for your use and further handling.

This project consists of widening SR 16 6 ft. symmetrically to provide for a right and left turn lanes in both the eastbound and westbound directions. CR 496/Hollonville Road will be realigned 6 ft. to the west to provide for a right turn lane. The vertical alignment on the westbound approach of SR 16 will be improved to provide greater sight distance. A stop and go traffic signal is not warranted.

By copy of this letter, this office is requesting for this project be assigned to Chuck Hasty as Project Manager. The design of this project will be handled under our Consultant Design Contract, STP-0001-00(853).

Should you have any questions, please contact Ken Werho of this office at 404-635-8144.

PMA:kms

Attachments

cc: Frank Danchetz
Tom Turner, w/attach.
David Mulling, w/attach.
Wayne Hutto, w/attach.
Herman Griffin, w/attach.
Harvey Keeper, w/attach.
Keith Rohling, w/attach.
General Files

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

SPALDING COUNTY

STP-0000-00(409)

FEDERAL ROUTE NO:

STATE ROUTE NO: 16

GADOT P.I. NO: 0000409

SEE ATTACHED
LOCATION SKETCH

Date of Report: December 6, 2001

RECOMMENDED: 12/20/01
DATE

Phillip M. Allen
STATE TRAFFIC SAFETY & DESIGN ENGINEER

RECOMMENDED: 1-2-02
DATE

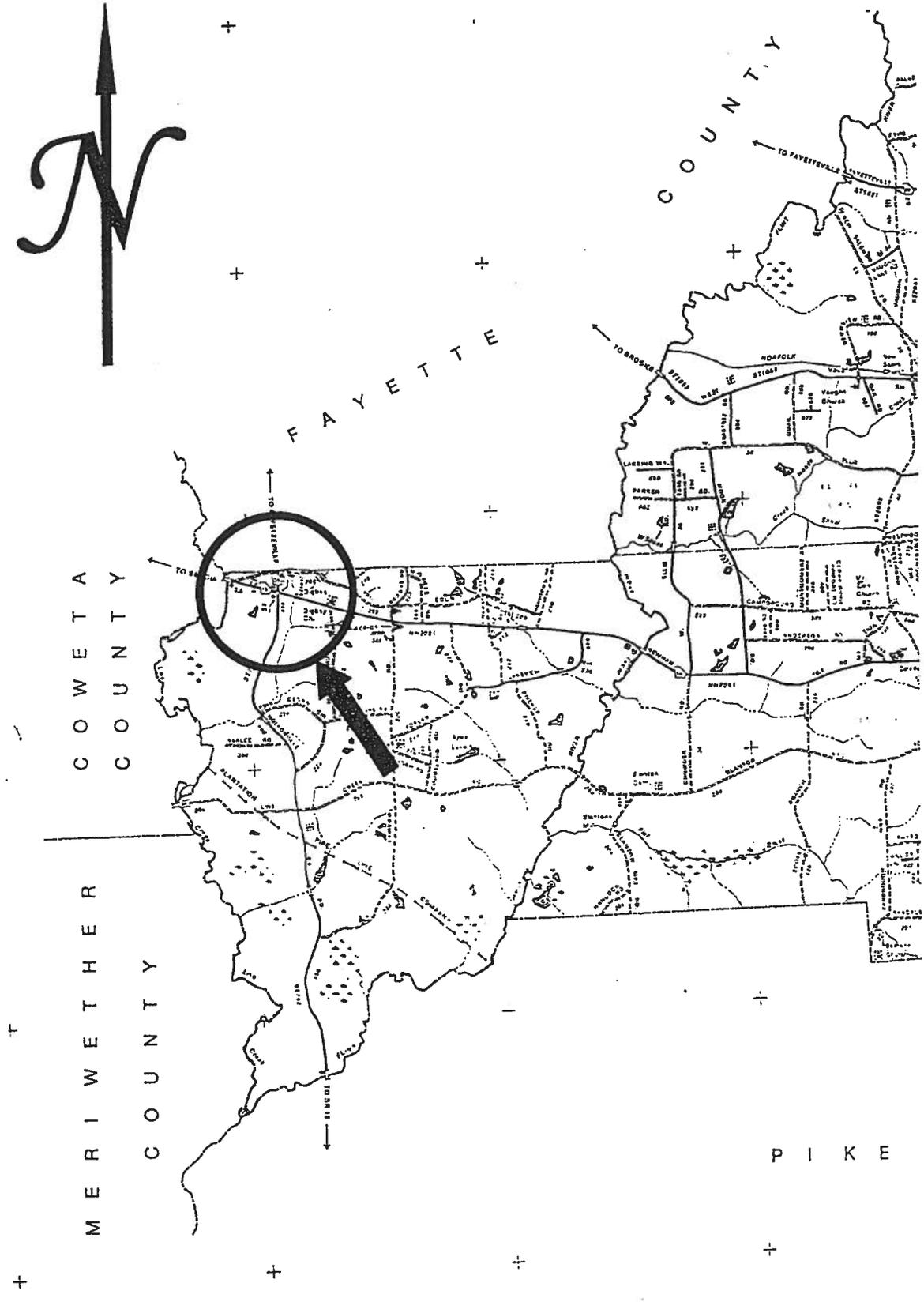
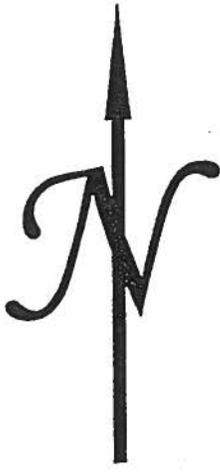
Alan W. Durrence
DISTRICT ENGINEER

RECOMMENDED: 1/16/02
DATE

John L. Dandridge
CHIEF ENGINEER

APPROVED: _____
DATE

J. Tom Colman
COMMISSIONER



PROJECT CONCEPT REPORT

P.I. No.: 0000409

Project No.: STP-0000-00(409) Spalding County

Route No.: S.R. 16
 Old S.R. 85 Connector/Hollonville Road

Location: The intersection of S.R. 16 at Old S.R. 85 Connector/Hollonville Road is located approximately 13 miles west of the City of Griffin and 1/2 mile east of the Coweta County Line.

Description: S.R. 16 will be widened six feet symmetrically to provide right and left-turn lanes in both the eastbound and westbound directions. The Hollonville Road approach will be realigned six feet to the west and a right-turn lane will be constructed. The vertical alignment on the westbound approach of S.R. 16 will be improved to provide greater sight distance.

Traffic – Current ADT:

S.R. 16	-----	5,993 (2001 ADT)
Old S.R. 85 Conn.	-----	1,500 (1998 ADT)
Hollonville Road	-----	1,700 (1998 ADT)

Existing Typical: S.R. 16: 2-12 ft. travel lanes with 2 ft. paved shoulders and 6 ft. grassed shoulders.

Old S.R. 85 Connector: 2-12 ft. travel lanes with 4 ft. grassed shoulders.

Hollonville Road: 2-12 ft. travel lanes with 4 ft. grassed shoulders.

Existing Right of Way:

S.R. 16	-----	80' (Estimated)
Old S.R. 85 Conn.	-----	42' (Estimated)
Hollonville Road	-----	60' (Estimated)

Existing Traffic Control: S.R. 16 is a through movement. Old S.R. 85 Connector and Hollonville Road are controlled by stop signs and stop bars. Old S.R. 85 Connector has double indicated stop signs, stop ahead signs, and rumble strips.

Existing Major Structures: None.

Statement of Need & Purpose: Accident history for this intersection shows 3 accidents since March 2000, including one rear-end collision and two right-angle collisions. The addition of left and right-turn lanes, as well as an improved vertical alignment on S.R. 16 should reduce the accidents at this intersection. To improve the safety and orderly progression of traffic through the intersection, these improvements are recommended.

Bicycle & Pedestrian Considerations: None.

Length: 0.40 mile

<u>Termini:</u>	S.R. 16	Old S.R. 85 Conn.	Hollonville Road
From M.P.	0.34	0.00	4.68
To M.P.:	0.64	0.01	4.77

PDP Class: Minor Existing

Functional Class: S.R. 16 ----- Rural Principal Arterial
Old S.R. 85 Conn. ----- Rural Major Collector
Hollonville Road ----- Rural Major Collector

Max Degree of Curve: +/-1.0 Degrees **Max Grades:** +/-3.0 %

Design Speed: S.R. 16 ----- 55 mph
Old S.R. 85 Conn. ----- 45 mph
Hollonville Road ----- 45 mph

Proposed Typical Section: S.R. 16: 2-12 ft. travel lanes with a 12 ft. left and right-turn lane in each direction with 10.5 ft. shoulders, 6.5 ft. paved and 4 ft. grassed. A 12 ft. deceleration lane with curb and gutter will also be provided in the eastbound direction for the Citgo driveway.

Old S.R. 85 Connector: 2-12 ft. travel lanes with 10 ft. shoulders, 4 ft. paved and 6 ft. grassed.

Hollonville Road: 2-12 ft. travel lanes with 10 ft. shoulders, 4 ft. paved and 6 ft. grassed. A 12 ft. right-turn lane with curb and gutter will also be constructed.

Proposed Major Structures: None.

Type Access: By Permit.

Traffic Control During Construction: Existing operation shall be maintained during construction.

Right-of-Way Requirement: Spalding County shall be responsible for the acquisition of all Required Right of Way for this project.

Utilities: Spalding County shall be responsible for all Utility adjustments.

Estimated Cost:

<u>Item</u>	<u>Total Amount</u>	
Right-of-way	\$ 507,600	(By Spalding Co.)
Utilities	\$ 70,000	(By Spalding Co.)
Estimated GDOT Total	\$577,600	
Construction	\$ 276,018	
Traffic Signal	\$ 0	
Railroad Equipment	\$ 0	
E & C 10 %	\$ 27,601	
Total Construction	\$ 303,619	

Permits Required: None.

Level of Environmental Analysis: Categorical Exclusion.

Level of Public Involvement: None.

Time Saving Procedures Appropriate: Yes (X) No ()

Design Variances Required: None.

Alternates Considered: At the present time, this intersection does not meet any warrants in the traffic signal warrant evaluation, but right of way is being acquired for a future signal at this location.

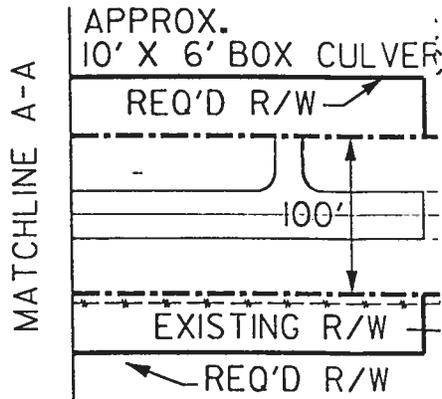
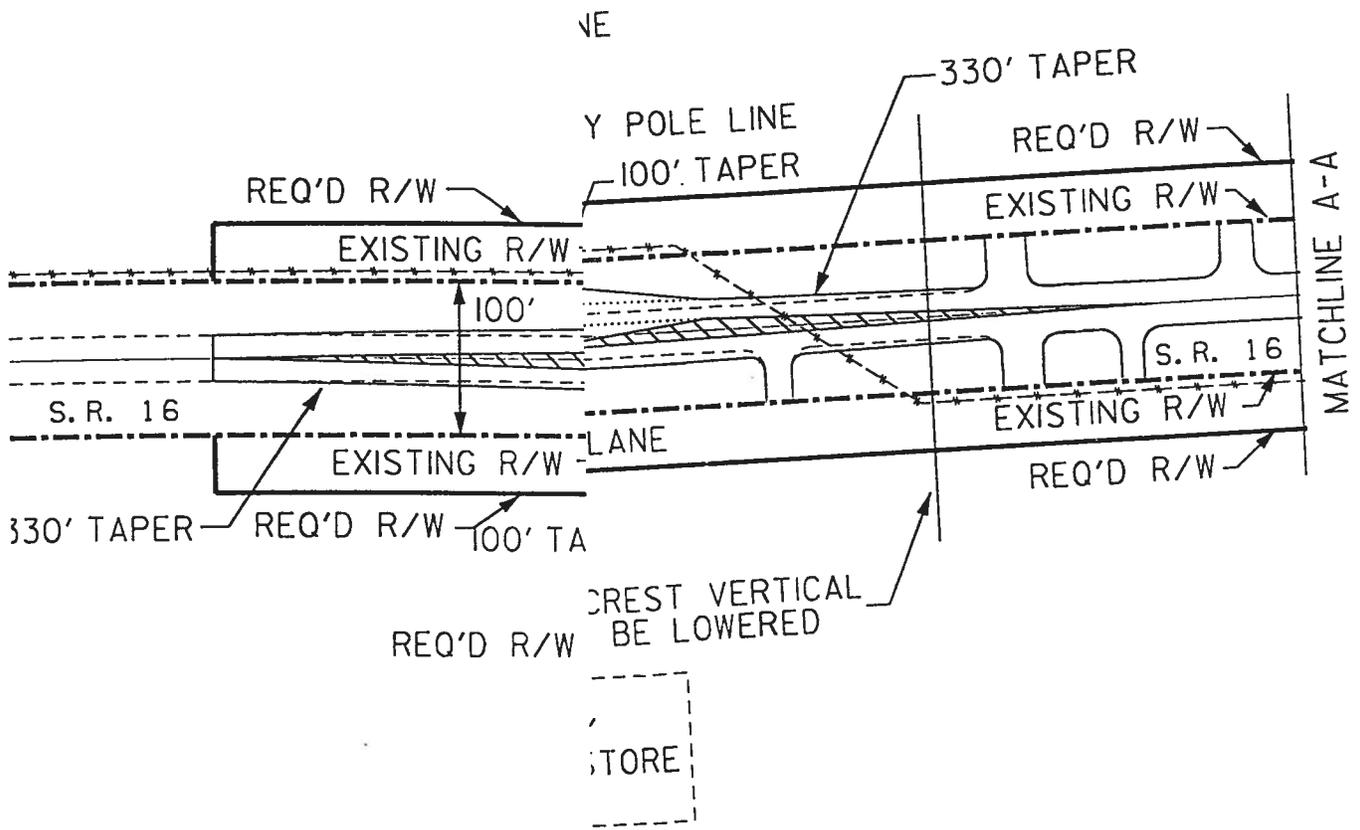
Comments: None.

Attachments: None

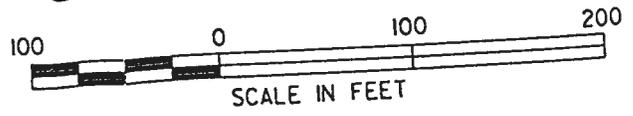
Prepared by Gresham, Smith and Partners on behalf of the Office of Traffic Safety and Design of the Georgia Department of Transportation.

Michael R. Holt, P.E.

ESTIMATED REQUIRED RIGHT OF WAY
 AREA #1 - 20,040 SQ FT
 AREA #2 - 27,419 SQ FT
 AREA #3 - 26,966 SQ FT
 AREA #4 - 31,883 SQ FT ELD
 TOTAL AREA - 106,308 SQ FT



16 @ HOLLONVILLE ROAD /
 S.R. 85 CONNECTOR
 SPALDING COUNTY



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: S.R. 16 @ Hollonville Road/SR 85 C Traffic Operations
Spalding County Thomaston
DATE: June 1, 2001

FROM: Glenn W. Durrence, ^{*GWD*} District Engineer

TO: Marion G. Waters, P.E., State Traffic Operations Engineer
Attn: Melinda Boothe

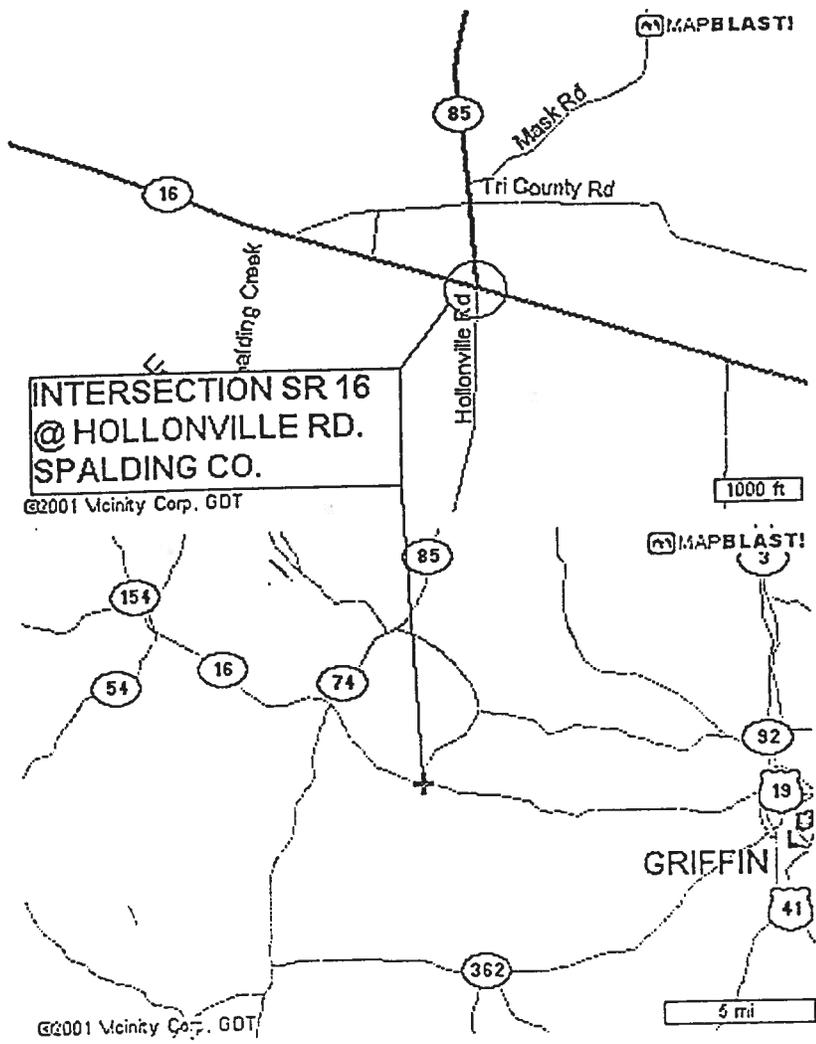
SUBJECT: Traffic Engineering Study

Please find the attached traffic engineering report for the subject location.

This intersection did not warrant a signal at this time. The TE study recommends to build left and right turn lanes, improve the vertical alignment of SR 16, and acquire R/W for a future signal with the current programmed project - STP-0000-00(409) PI # 000409.

If you have any further questions, please contact John Moretto at 706-646-6563.

KBR: JCM
Attachments



GEORGIA DEPARTMENT OF TRANSPORTATION
Traffic Operations Division
Thomaston



TRAFFIC ENGINEERING STUDY
June 12, 2001

LOCATION: SR 16 @ Hollonville Road/Old SR 85 Connector M.P. 0.47

COUNTY: Spalding

REQUESTED BY: District 3 Design - Safety project (STP-0000-00(409))

REASON FOR STUDY: To determine if a Stop and Go signal is warranted for this location.

FINDINGS

TOPOGRAPHY: State Route 16 runs east/west from Griffin to Newnan. The intersection with Hollonville Road and old SR 85 Connector is a 4-way intersection approx. ten (10) miles to the west of Griffin. Hollonville Road runs south through a residential area to SR 362, approx. seven (7) miles. Old SR 85 Connector runs north also through residential land, connecting with SR 92 in approx. eleven (11) miles. The profile grade at the intersection is generally level, with a 2% downgrade on old SR 85 C southbound, a flat grade on Hollonville Road northbound, and flat grades coming in from both directions on SR 16. A slight crest and sag on SR 16 approx. 250' to the east limits sight distance at the intersection. At the intersection, the southeast quadrant has a Citgo Convenience store, while all other quadrants consist of fields and young-growth woods.

EXISTING TRAFFIC CONTROL: Hollonville Road /Old SR 85 C are both stop sign controlled.

VEHICLE VOLUMES: See attached counts

S.R. 16 @ Hollonville Road/Old SR 85 Connector - Spalding County

PEDESTRIAN MOVEMENTS: *No pedestrian movement has been observed at this intersection after several visits. There are no visible signs of foot paths.*

PARKING: *There have been no vehicles observed parking in this area. There are no visible signs or any indications that there are vehicles parking in or around this intersection.*

ACCIDENT HISTORY: *Accidents reviewed from March 2000 to March 2001 revealed a total of three (3) accidents at this intersection. Of these three, two (2) were right angle type accidents. (See the attached accident diagram.)*

WARRANT ANALYSIS: *Warrant #1 was met for one (1) hour. See the attached Traffic signal Warrant Evaluation.*

OTHER INFORMATION:

This intersection is programmed into the Construction Work Program as Safety Project STP-0000-00(409), PI# 0000409. This project will need to provide left and right turn lanes on SR 16 to both side roads(see attached sketch). Also, additional R/W should be acquired for the possibility of a future signal.

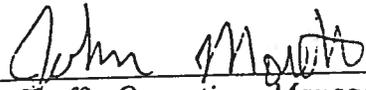
S.R. 16 @ Hollonville Road/Old SR 85 Connector - Spalding County

CONCLUSION:

It can be concluded from the data reviewed for this intersection and from on site observations that the traffic through this intersection does not warrant a stop and go signal. However, the traveling public would benefit from the addition of left and right turn lanes on SR 16, and by providing better sight distance to the east by correcting the vertical alignment on SR 16.

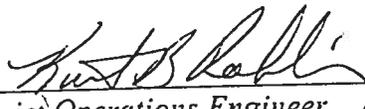
RECOMMENDATIONS:

It is recommended that under Project STP-0000-00(409) left and right turn lanes be constructed off SR 16 and the vertical alignment of SR 16 be improved with additional R/W acquired for future signal poles (see attached sketch).



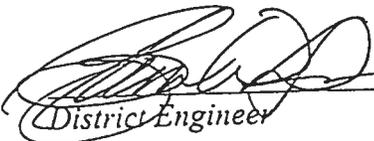
District Traffic Operations Manager

6-12-2001
Date



District Operations Engineer

6-12-01
Date



District Engineer

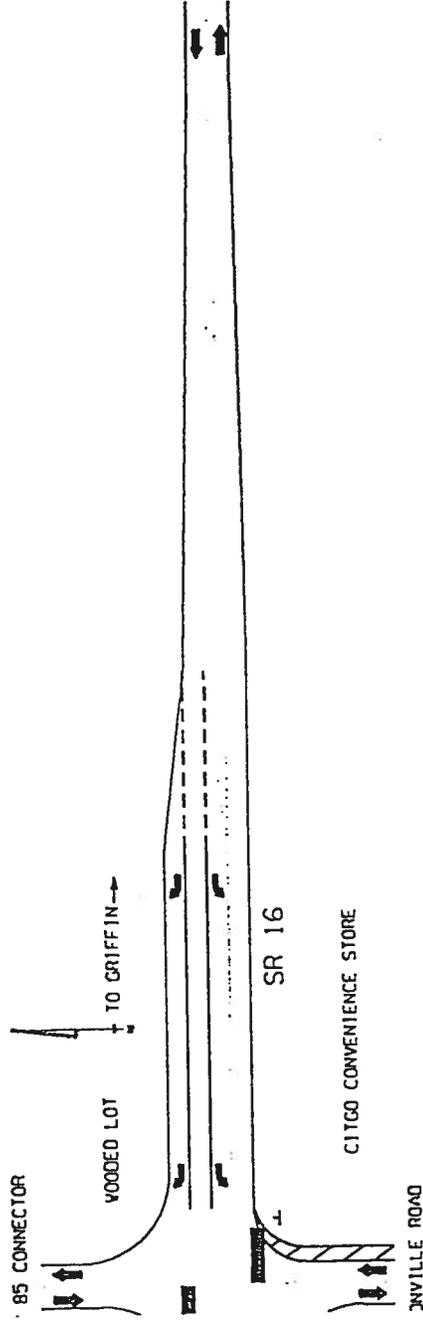
6/12/01
Date

State Traffic Operations Engineer

Date

Division Director

Date



TRANSPORTATION PLAN SHEET
 GEORGETOWN DEPARTMENT OF TRANSPORTATION
 GEORGETOWN DESIGN DIVISION
 ST. MARY'S COUNTY
 SR 16 & DUNVILLE ROAD/OLD
 SR 16 CONNECTOR MP 0.47

OLD SR 85 CONNECTOR

OPEN

EXISTING TIMBER POLE (TYP) O

WOODED LOT

SR 16

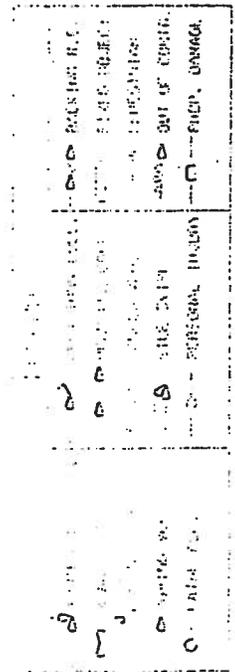
TO GRIFFIN →

SR 16

WOODED LOT

CITGO CONVENIENCE STORE

HOLLONVILLE ROAD



NO.	DATE	FILE	ACQUIRE DATE	NO.
1	06/23/98	15154	1-497-98	1
2	07/06/98	18105	1-544-98	0
3	06/14/99	18100	1-437-99	0
4	03/31/00	15138	1-250-2000	0
5	03/31/00	16157	1-252-2000	1
6	01/20/01	20110	01-59-2001	2

INTERSECTION PLAN SHEET

SR 16 AND HOLLONVILLE ROAD

0,47

State Route 16
Hollonville Road
TRAFFIC SIGNAL WARRANT EVALUATION

INTRODUCTION

This review is based on the methodology presented in the Manual on Uniform Traffic Control Devices (MUTCD), 1978, as amended by the Federal Highway Administration. Please refer to part 4C of that manual.

The intersection under study has the following characteristics:

The 85th percentile speed on the main street is [55] MPH.

Existing traffic control is . . . SIDE STREET STOP.

Daily traffic volume of [7,171] was counted on

THURSDAY, MAY 16, 1901.

Estimated annual traffic volume is [2,617,415] vehicles.

1. INTERSECTING TRAFFIC VOLUMES

The installation of a traffic signal may be necessary to control an intersection with large volumes of conflicting traffic. The required traffic volumes must be present for at least 8 hours of an average weekday. The minimum volumes vary according to the number of lanes on the intersecting streets, the speed of traffic on the main street, and the community size.

Number of hours required traffic present = 1
Warrant 1 is NOT SATISFIED.

2. INTERRUPTION OF CONTINUOUS TRAFFIC

On major streets with high traffic volume, it may be necessary to use traffic signal control to provide an adequate number of gaps in traffic to allow vehicles to enter from a side street. The application of this warrant is identical to that of warrant 1, above.

Number of hours required traffic present = 0
Warrant 2 is NOT SATISFIED.

3. CROSSING PEDESTRIAN TRAFFIC

This warrant is similar to warrant 2, but is intended to identify locations where additional gaps are needed to provide safe pedestrian crossing of a major street. A signal installed solely for pedestrians should use a fully actuated controller and, if in a signal system, be coordinated with that system. A signal installed only under this warrant shall include pedestrian signals. When installed at a midblock location, additional restrictions may apply (See section 4C-5).

Number of hours required traffic present = 0
Warrant 3 is NOT APPLICABLE.

4. SCHOOL CROSSING

An established school crossing may require signal protection if an engineering study reveals that there is less than one gap per minute during the period of crossing usage. The restrictions on signals installed under this warrant are similar to those of warrant 3.

WARRANT 4 IS NOT APPLICABLE.

5. SIGNAL PROGRESSION

A traffic signal may occasionally be used to maintain vehicle grouping in a coordinated system. Such a signal should not be within 1,000 FT of adjacent signalized intersections in the system.

Warrant 5 is NOT APPLICABLE.

6. ACCIDENT PREVENTION

Many traffic signals are installed on the premise of reducing accidents; however, it must be recognized that signals may actually increase some types of accidents. The result is often contrary to the intended goal. Four conditions must be met before a signal is installed solely to reduce accidents:

- (1) There has been five or more accidents of types preventable by traffic signals in the last 12 months;
- (2) at least one volume requirement of warrant 8 must be satisfied;
- (3) traffic progression would not be seriously disrupted, and
- (4) less restrictive solutions have been tried and enforced with unsatisfactory results.

A signal installed solely under this warrant should be traffic actuated.

Total number of accidents = 3
Number of preventable accidents = 2
Accident rate is 1.14 per million vehicles
Number of warrant 8 volume requirements met = 0
Parts 1 and 2 are NOT SATISFIED.

7. TRAFFIC SYSTEM OPERATION

Traffic signal control may be used to encourage concentration and organization of vehicles on the major street network. Such a signal may be installed at the intersection of two major routes as defined by section 4C-9 of the MUTCD, with a total volume of 800 vehicles during the typical peak weekday hour, or for five (5) weekend hours.

Warrant 7 is NOT APPLICABLE.

8. COMBINATION OF WARRANTS

In exceptional cases, signal control may be justified where no single warrant is satisfied, but where at least two of warrants 1, 2, or 3 are met when the required volumes are reduced to 80% of normal. Adequate trial of other measures which cause less delay and inconvenience must be tried and enforced first.

Number of warrants satisfied at the 80% level = 0
Volume requirements for warrant 8 are NOT SATISFIED.

9. FOUR HOUR VOLUME WARRANT

This warrant was approved as an amendment to the MUTCD on December 31, 1984. This warrant is similar to warrant 1, except that the required traffic volumes must be present for at least four hours of an average weekday. The traffic volumes required are based on curves (Figures 4-3 & 4-4) shown in the MUTCD.

Warrant 9 is NOT SATISFIED.

10. PEAK HOUR DELAY

This warrant was approved as an amendment to the MUTCD on December 31, 1984. This warrant is intended for application where traffic conditions will cause undue delay to traffic entering or crossing the main street. The peak hour delay warrant is satisfied when the following conditions exist for one hour (any four consecutive 15-minute periods) of an average day:

- (1) The total delay by the traffic on a side street controlled by a stop sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle-hours for a two-lane approach;
- (2) the volume on the side street equals or exceeds 100 VPH for one moving lane of traffic and 150 VPH for two moving lanes;
- (3) the total traffic volume serviced during 1 hour equals or exceeds 800 VPH for an intersection with four (or more) approaches or 650 VPH for three approaches.

Part 2 - SATISFIED
Part 3 - NOT SATISFIED

11. PEAK HOUR VOLUME

This warrant was approved as an amendment to the MUTCD on December 31, 1984. This warrant applies to traffic entering from the minor street which encounters undue delay crossing the main street. This warrant is satisfied when the main street and side street traffic volumes satisfy the curves (Figures 4-5 and 4-6) shown in the MUTCD.

Warrant 11 IS NOT SATISFIED.

TABLE 1
 TWENTY-FOUR HOUR VEHICULAR TRAFFIC EVALUATION
 WARRANTS 1, 2 AND 8

HOUR OF DAY	MAIN ST. VOLUME	SIDE ST. VOLUME	WARRANT 1	WARRANT 2	WARRANT 8 PART 1	WARRANT 8 PART 2
12 AM	48	0				
1 AM	23	1				
2 AM	13	4				
3 AM	28	3				
4 AM	31	11				
5 AM	80	42				SIDE
6 AM	294	133	SIDE	SIDE	BOTH	SIDE
7 AM	518	120	BOTH	SIDE	BOTH	BOTH
8 AM	377	67	MAIN	SIDE	MAIN	SIDE
9 AM	282	45			MAIN	SIDE
10 AM	282	49			MAIN	SIDE
11 AM	323	23			MAIN	
12 PM	293	27			MAIN	
1 PM	291	36			MAIN	
2 PM	447	53	MAIN	SIDE	MAIN	BOTH
3 PM	491	44	MAIN		MAIN	BOTH
4 PM	611	42	MAIN	MAIN	MAIN	BOTH
5 PM	550	44	MAIN	MAIN	MAIN	BOTH
6 PM	362	39	MAIN		MAIN	
7 PM	239	32				
8 PM	158	16				
9 PM	108	8				
10 PM	85	15				
11 PM	59	6				
REQUIRED VOLUMES: MAIN STREET			350	525	280	420
SIDE STREET			105	53	64	42

NOTE: SIDE STREET VOLUMES SHOWN ARE FOR EACH HOUR'S PEAK APPROACH.

State Route 16
Hollonville Road

HOUR OF DAY	**** MAIN STREET ****		****	**** SIDE STREET ****		INTER- SECTION VOLUME	
	TOTAL VOLUME	PEAK DIRECTN	BIAS PRCNT	TOTAL VOLUME	PEAK DIRECTN		PEAK VOLUME
12 AM	48	east	65	0	EVEN	0	48
1 AM	23	east	74	2	EVEN	1	25
2 AM	13	west	54	4	north	4	17
3 AM	28	west	54	4	north	3	32
4 AM	31	west	61	11	north	11	42
5 AM	80	west	60	46	north	42	126
6 AM	294	west	56	139	north	133	433
7 AM	518	west	50	142	north	120	660
8 AM	377	east	55	85	north	67	462
9 AM	282	west	51	62	north	45	344
10 AM	282	west	51	70	north	49	352
11 AM	323	west	54	36	north	23	359
12 PM	293	west	51	35	north	27	328
1 PM	291	west	51	53	north	36	344
2 PM	447	west	53	82	north	53	529
3 PM	491	east	52	73	north	44	564
4 PM	611	east	55	72	north	42	683
5 PM	550	east	55	83	north	44	633
6 PM	362	east	59	74	north	39	436
7 PM	239	east	51	45	north	32	284
8 PM	158	east	52	22	north	16	180
9 PM	108	west	54	14	south	8	122
10 PM	85	west	56	17	north	15	102
11 PM	59	east	54	7	north	6	66

TOTAL INTERSECTION VOLUME IS 7,171

MAIN STREET TOTAL VOLUME IS 5,993
 eastBOUND APPROACH IS 3,055 (51 %)
 westBOUND APPROACH IS 2,938 (49 %)

SIDE STREET TOTAL VOLUME IS 1,178
 northBOUND APPROACH IS 858 (73 %)
 southBOUND APPROACH IS 320 (27 %)

REPORT PRODUCED SATURDAY, MAY 18, 1901.

COUNTS TAKEN ON THURSDAY, MAY 16, 1901.

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: Spalding County
SR 16 @ Hollonville Rd.

OFFICE: ATLANTA - TMC

DATE: June 18, 2001

FROM: M. G. Waters, III, P.E., State Traffic Operations Engineer

TO: Glenn W. Durrence, P.E., District Engineer, Thomaston
ATTN: Keith Rohling, P.E., District Traffic Engineer

SUBJECT: Stop and Go Signal - Not Recommended

I am attaching a signed copy of the Traffic Engineering Report for the subject location showing our concurrence with your recommendation not to signalize the intersection at this time, but that geometric improvements to this intersection would be beneficial.

If you should have any questions concerning this matter, please feel free to contact this office.

MGW:MRB
Attachment