

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE: STP-0003-00(783) Coweta County
P.I. No.: 0003783
SR 16/Wells Street @ CR 157/Broad ST &
Luther Bailey Road
Safety/Intersection Improvements

OFFICE: Traffic Operations
Atlanta, Georgia
DATE: December 11, 2001

FROM: Phillip M. Allen, State Traffic Safety and 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 the realignment of SR 16 to provide eastbound and westbound left turn lanes. CR 157/Broad Street/Luther Bailey Road will also be realigned to provide left turn lanes as well as a northbound right turn lane. A stop and go traffic signal is 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:KPW:KMS

Attachments

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

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

COWETA COUNTY

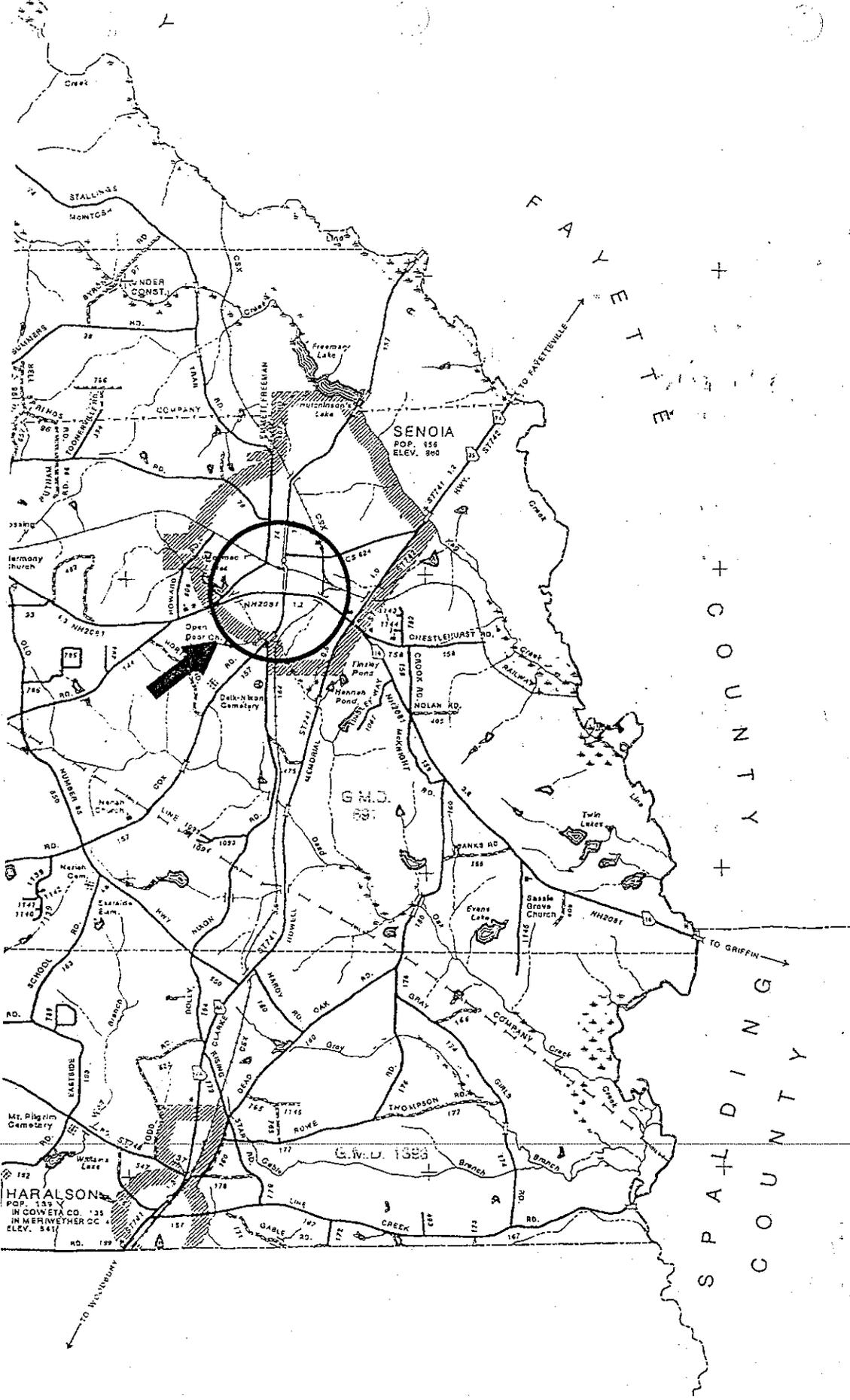
FEDERAL ROUTE NO:
STATE ROUTE NO: 16
GADOT P.I. NO:

STP-0003-00(783)

SEE ATTACHED
LOCATION SKETCH

Date of Report: Sept. 14, 2001

RECOMMENDED:	<u>10/9/01</u>	DATE	<u>Phillip M. Allen</u>	STATE TRAFFIC SAFETY AND DESIGN ENGINEER
RECOMMENDED:	<u>10/12/01</u>	DATE	<u>Tom Penner</u>	DISTRICT ENGINEER
RECOMMENDED:	<u>11/1/01</u>	DATE	<u>John L. Daulton</u>	CHIEF ENGINEER
APPROVED:	<u>11-1-01</u>	DATE	<u>Tom Colvin</u>	COMMISSIONER



NOTE:

PROJECT CONCEPT REPORT

P.I. No.: 0003783

Project No.: STP-0003-00(783)

Coweta County

Route No.: S.R. 16 / Wells Street

C.R. 157 / Broad Street & Luther Bailey Road

Location: The intersection of S.R. 16 at C.R. 157 is located in the City of Senoia in Coweta County.

Description: The realignment of S.R. 16 to provide eastbound and westbound left-turn lanes. C.R. 157 (Broad St./Luther Bailey Road) will also be realigned to provide left-turn lanes as well as a northbound right-turn lane. A stop and go traffic signal is also proposed

<u>Traffic – Current ADT:</u>	S.R. 16	-----	9,000 (1999 ADT)
	C.R. 157	-----	4,200 (1999 ADT)

Existing Typical: SR 16: 2 – 20 ft. travel lanes, one in each direction.

C.R. 157 (Broad St.): 2 – 12 ft. travel lanes in each direction with a 16 ft. grass median and parking area.

C.R. 157 (Luther Bailey Rd.): 2 – 12 ft. travel lanes in each direction.

<u>Existing Right of Way:</u>	S.R. 16	-----	100' (Estimated)
	C.R. 157	-----	80' (Estimated)

Existing Traffic Control: C.R. 157 is controlled with stop bars and stop signs at the intersection.

Existing Major Structures: None

Statement of Need & Purpose: The intersection of S.R. 16 and C.R. 157 is located at the bottom of a hill, where motorists tend to ignore the 35 mph speed limit. Several school buses use this intersection. The accident history for 1999 shows two right angle collisions and one rear end collision. In addition, warrants 1, 8, 9, 10, and 11 were met in the traffic signal warrant evaluation. The addition of left-turn lanes for all approaches, right-turn lanes for the side street approaches, realignment of Luther Bailey Road and installation of a traffic signal should reduce the number of accidents at this intersection. To improve the safety and orderly progression of traffic through the intersection, these improvements are recommended.

Bicycle & Pedestrian Considerations: Due to the presence of the stores and bank at the intersection, pedestrian crosswalks and pedestrian signals are proposed on all approaches.

Length: 0.32 mile

Termini:	S.R. 16	C.R. 157
From M.P.	27.41	4.77
To M.P.:	27.55	4.95

PDP Class: Minor Existing

Functional Class: S.R. 16 ----- Rural Principal Arterial
C.R. 157 ----- Rural Minor Collector

Max Degree of Curve: +/- 0 Degrees

Max Grades: +/-3.0 %

Design Speed: S.R. 16 ----- 35 mph
C.R. 157 ----- 25 mph

Proposed Typical Section: SR 16: 2-14 ft. travel lanes, one in each direction with 1-12 ft. left-turn lane.

C.R. 157 (Broad St): 2 – 12 ft. travel lanes, one in each direction with 1-12 ft. left-turn lane and 1-12 ft. right-turn lane.

C.R. 157 (Luther Bailey Rd.): 2 – 12 ft. travel lanes, one in each direction with 1-12 ft. left-turn lane and 1-12 ft. right-turn lane with a 4 ft. paved shoulder in the southbound direction.

Proposed major structures: None.

Type Access: By Permit.

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

Right-of-Way Requirement: The City of Senoia shall be responsible for the acquisition of all Required Right of Way for this project.

Utilities: The City of Senoia shall be responsible for all Utility adjustments.

Estimated Cost:

<u>Item</u>	<u>Total Amount</u>
Right-of-way	\$ 37,600 (By City LGPA)
Utilities	\$ 85,000 (By City LGPA)
Estimated LGPA Total	\$122,600
Construction	\$ 108,586
Traffic Signal	\$ 75,000
Railroad Equipment	\$ 0
E & C 10 %	\$ 18,359
Total Construction	\$ 201,945

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: None

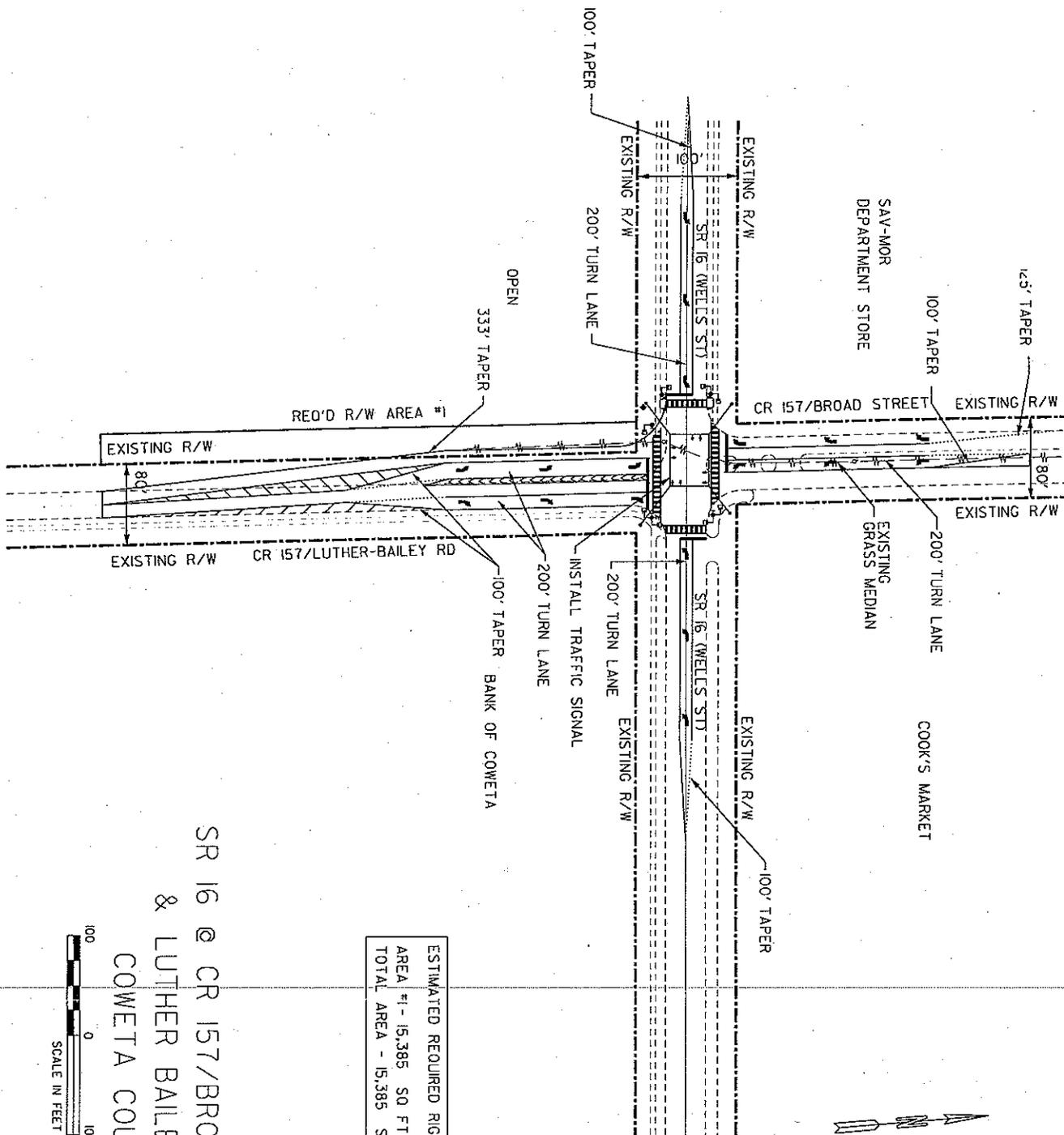
Comments:

Attachments: None

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



Michael R. Holt, P.E.



ESTIMATED REQUIRED RIGHT OF WAY
 AREA #1 - 15,385 SQ FT
 TOTAL AREA - 15,385 SQ FT

SR 16 @ CR 157/BROAD STREET
 & LUTHER BAILEY ROAD
 COWETA COUNTY



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE **Coweta County** OFFICE Thomaston
GWD DATE July 29, 2000
FROM Glenn W. Durrence, P.E., District Engineer
TO Marion Waters, Stat Traffic Operations Engineer
Attention: Melinda Boothe
SUBJECT **State Rotue 16 @ Broad Street/Luther Bailey Road, Signal Study**

Attached is a completed signal study. The City will be sent a Traffic Signal Request form to be executed. It is the recommendation of this office to program a project to accomplish the interssection improvements including the signalization.

If you have any questions, please contact Keith Rohling of this office at 706-646-6557.

KBR
Attachements

CLASS 5 - 45' TIMBER POLE - TYPICAL
(GEORGIA POWER)

PARKING

GRASS ISLAND

SAV. MOR DEPARTMENT
STORE

COOK'S MARKET

BROAD ST.

4" RAISED CONCRETE ISLAND

SR 16 (WELLS ST.)

DO NOT ENTER

-1%

-3%

SR 16 (WELLS ST.)

GRASS

CURB CUTBACK

TOPIC (TYP)

SIDEWALK

+1%

OPEN

BANK OF COWETA

CONCEPT DIAGRAM

INTERSECTION DIAGRAM

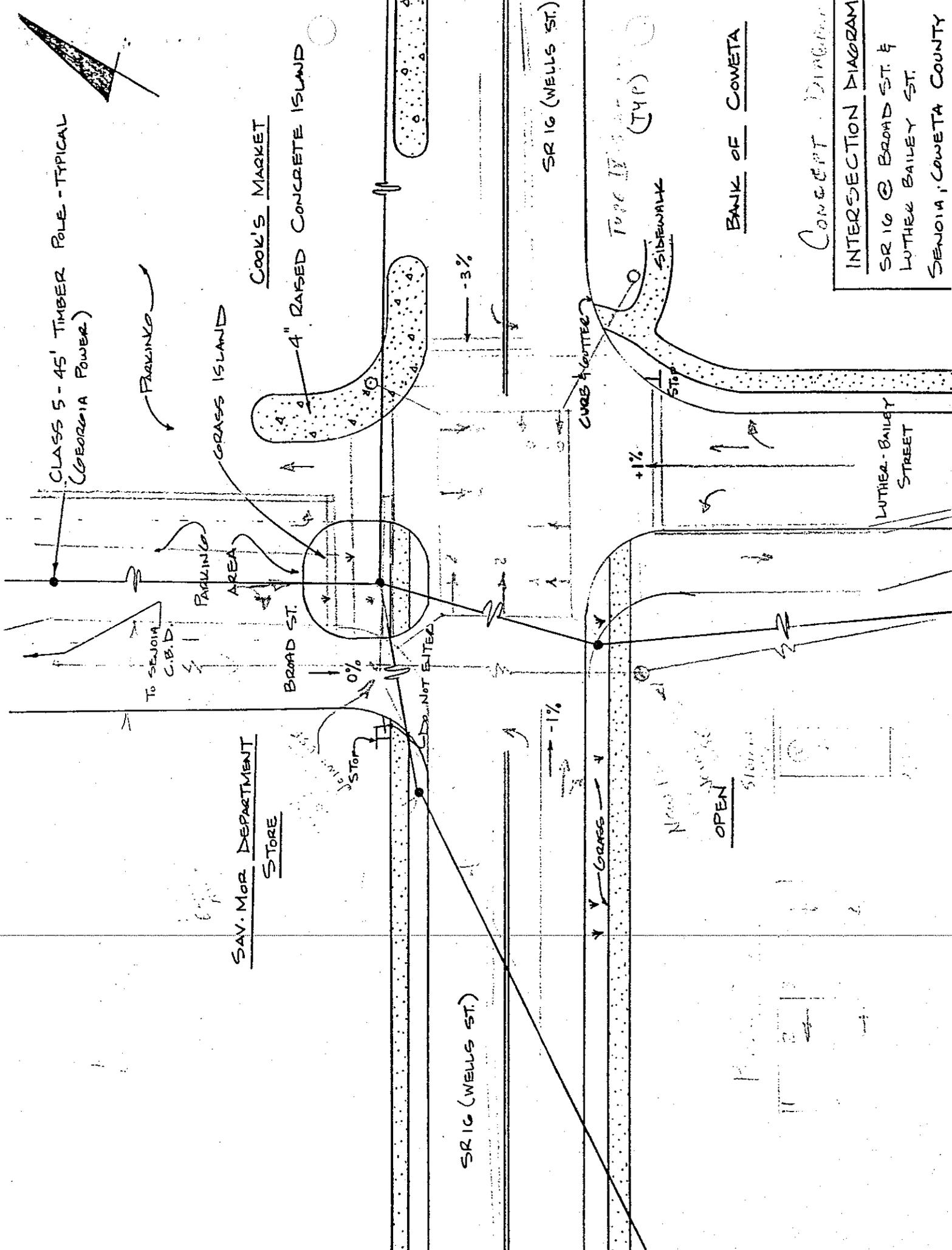
SR 16 @ BROAD ST. &

LUTHER BAILEY ST.

SENOIA, COWETA COUNTY

LUTHER BAILEY STREET

Need to make
OPEN





House of Representatives

JOHN P. YATES
REPRESENTATIVE, DISTRICT 106
961 BIRDIE ROAD
GRIFFIN, GEORGIA 30223
(770) 412-7166 (O)
(770) 227-1474 (H)

LEGISLATIVE OFFICE BUILDING, ROOM 411
ATLANTA, GEORGIA 30334
(404) 656-0126

February 26, 2000

STANDING
COMMITTEES:

LEGISLATIVE & CONGRESSIONAL
REAPPORTIONMENT
MOTOR VEHICLES
APPROPRIATIONS

Georgia Department of Transportation
Third District
715 Andrews Drive
Thomaston, Ga. 30286-3409

Attention: Mr. Keith Rohling, P. E.

Dear Mr. Rohling:

This letter has reference to the February 1, 2000 letter to you from the Honorable Joan P. Trammell, Mayor City of Senoia concerning her request for a traffic study at the intersection of GA 16 and Broad Street in Senoia.

This letter is in support of her request. As you know, I have traveled this route for the ten years that I have been a State Representative, crossing this intersection many times. There is a particular danger there, due to some extent because the intersection is at the bottom of a hill, where the tendency of motorists is to ignore the 35 MPH speed limit. Then of course, since I first started serving Coweta, the county population has increased from about 58,000 to the current estimated 90,000. This has had a telling effect on the area and this intersection.

As always, the fact that several school busses use this intersection is important. The school population of the county has grown from 10,000 to 16,000 during the above mentioned period. During the last several years, there have been a number of suggestions received from members of the business community as well as citizens to install a traffic light there.

I will appreciate any help that you can give the Mayor, Council and Director of Public Works as they attempt to solve this very important problem.

Sincerely yours,

John Yates

cc: Mayor Joan P. Trammell

Header sheet: Event counts

ntCount-670 COWETA COUNTY SITE 7002 (SR 16 W/O LUTHER BAILEY ST)

DATASETS: (1 in this report)

Site: [2201] GDOT MA.E

ChannelA: 0 - Unused or unknown. WeightA: Added to totals. (1)

ChannelB: 0 - Unused or unknown. WeightB: Excluded from totals. (0)

Survey Duration: 09:51 Thu 09 Mar 2000 to 10:05 Fri 10 Mar 2000

File: D:\030500\220110MAR2000.EC0 (Plus)

PROFILE: - Factory default profile

Method: Count axles divided by two.

Analysis from 10:00 Thu 09 Mar 2000 to 10:00 Fri 10 Mar 2000

Units - Non-Metric (ft, mi, f/s, mph, lb, ton)

24 HOUR TOTAL = 3835

Thu 09 Mar 2000 - Total=2695(incomplete), 15 minute drops,

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	-	-	-	-	-	-	-	-	-	176	208	238	222	229	270	326	274	270	172	124	72	68	46	
-	-	-	-	-	-	-	-	-	-	54	49	55	50	56	47	96	78	70	52	38	28	27	12	8
-	-	-	-	-	-	-	-	-	-	46	58	62	55	74	72	66	64	92	51	35	20	20	16	6
-	-	-	-	-	-	-	-	-	-	44	52	71	62	43	77	90	73	68	37	28	16	9	8	9
-	-	-	-	-	-	-	-	-	0	32	49	50	55	56	74	74	59	40	32	23	8	12	10	3

PM PkHr 15:45 to 16:45 (n=326), PM PHF=0.85

Fri 10 Mar 2000 - Total=1140(incomplete), 15 minute drops,

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
6	13	13	9	37	59	192	370	327	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8	2	1	1	3	10	27	78	82	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	3	5	3	11	8	45	91	90	12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	5	2	5	7	22	55	114	76	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3	5	0	16	19	65	87	79	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

THERE WAS A ACCIDENT AT 9:00 THAT ALTERED TRAFFIC FOR APROX. 45 MIN.



Department of Transportation
State of Georgia
Thomaston District Office

Traffic Engineering Report

Thomaston District Three

July 29, 2000

LOCATION: State Route 16 at Broad Street and Luther Bailey Road

CITY/COUNTY: Senoia, Coweta County

REQUESTED BY: City of Senoia

27.48

REASON FOR INVESTIGATION: To determine need for a stop and go traffic signal.

FINDINGS

TOPOGRAPHY: State Route 16 is a two-lane asphalt roadway with a double yellow centerline oriented east and west at this intersection. This is a major arterial route connecting Griffin and Newnan. At the intersection, the grade of SR 16 enters the intersection from the east on a -3% grade and from the west on a -1% grade. The sight distance looking to the west is + 500'. The sight distance looking to the east is +650'. Luther Bailey Road is a 24-ft. asphaltic concrete collector distributor road that enters the intersection from the South on a +1% grade. Broad Street approaches the intersection from the north on a flat grade. There is a convenience store on the northeast corner of the intersection. There is a department store on the northwest corner of the intersection. There is a bank on the southeast corner of the intersection. The southwest corner of the intersection is unimproved. See condition diagram.

EXISTING TRAFFIC CONTROL: The intersection is presently controlled with a stop condition on Broad Street and Luther Bailey Road.

Traffic Engineering Study
State Route 16 at Broad Street and Luther Bailey Road
July 29, 2000

VEHICLE VOLUME: 24 hour hourly counts total SR 16 - 8552
Luther Bailey Road - 1564
Broad Street - 2693
See attached counts.

VEHICULAR SPEEDS: The posted speed limit on State Route 16 is 35 MPH. The 85th percentile speed was not measured, however vehicle paces estimated the speeds about 40 MPH.

PEDESTRIAN MOVEMENTS: No pedestrians were observed; however with the two stores and the bank on the corners, it is anticipated that pedestrians do exist.

PARKING: No vehicles were observed parking in this area with the exception of Broad Street in the median. See condition diagram.

ACCIDENT HISTORY: The accident history for 1999 shows two right angle collisions and one rear end collision. This is consistent with the data found in the October 28, 1996 study.

WARRANT ANALYSIS: See attached warrant analysis.

A Delay Study was not conducted however, site visit observations indicated that there is sufficient delay to meet the delay warrant. Both left and right turn movements were delayed on average 3 to 4 minutes per vehicle. The delay specified in the MUTCD for a side street approach is 4 vehicle hours.

OTHER INFORMATION

This intersection has been the subject of a study several times in the past. The results of the July 31, 1985 study indicated that the roadway should be aligned by placing both directions of travel on the east side of the median on Broad Street and widening to get 24 feet of travel way. The city never made any commitment to this improvement. Most recently a study was completed on October 28, 1996. The recommendation of this study was to restripe the intersection to provide left turn lanes on SR 16. This has not been accomplished. The intersection serves the downtown section of Senoia. There is on signal in the area located at State Route 16 and State Route 74/85. The intersection is located 3220 feet east of the intersection. There are Coweta County School system busses that pas through the intersection from Broad Street a minimum of 25 trips per day.

Traffic Engineering Study
State Route 16 at Broad Street and Luther Bailey Road
July 29, 2000

CONCLUSIONS

It can be concluded from the information gathered that the intersection would benefit from stop and go signal control. The intersection with a stop and go signal would be more efficient provided left turn lanes are installed on all approaches to the intersection and the side street approaches to the intersection were aligned, (see attached concept sketch). Coordination with the adjacent signals would not be beneficial to the roadway system.

RECOMMENDATIONS

It is recommended that the City of Senoia be issued a permit for the installation and operation of a stop and go signal at the subject intersection. This permit should be contingent upon the installation of the recommended turn lanes.

Kurt B. Kelly
District Traffic Operations Engineer

7-29-00
Date

Alan W. Purvine *OK*
District Engineer

7-31-00
Date

State Traffic Operations Engineer

Date

Division Director

Date

Amey

City Of Senoia

P.O. Box 310
Senoia, GA 30276
TEL. 770-599-3679
FAX 770-599-0855

February 1, 2000

Mr. Keith Rohling, P.E.
District Traffic Operations Engineer
Department of Transportation
715 Andrews Drive
Thomaston, Georgia 30286-3409

RE: Traffic light at the intersection of GA 16 and Broad Street

Dear Mr. Rohling:

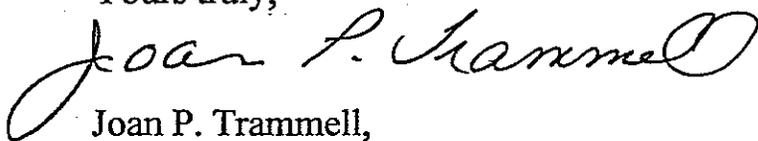
At the January 18th City Council Meeting, the Mayor/Council voted to submit a formal request to the Department of Transportation to evaluate the installation of a traffic light at the intersection of GA 16 and Broad Street here in Senoia. We have requested this in the past and have been made aware of the requirements for traffic control devices on major roads. Since then we have continued to have problems with traffic accidents and near misses on an ongoing basis. Although these are concerns to us, the most important concern is the number of school buses which are now crossing this intersection on a daily basis.

The additional information that you requested from Mr. Leonard Thompson, the City of Senoia's Public Works Director, has been included along with this letter. If you have other questions or requested information please feel free to contact either myself or Mr. Thompson.

Page Two
Traffic Control Device
February 1, 2000

Thank you for any consideration which your department can give to this request

Yours truly,



Joan P. Trammell,
Mayor
City of Senoia

Cc: Council members, City of Senoia
Representative John Yates
Leonard Thompson, Director of Public Works



CLASS 5 - 45' TIMBER POLE - TYPICAL
(GEORGIA POWER)

PARKING

GRASS ISLAND

SAV. MOR. DEPARTMENT
STORE

COOK'S MARKET

4" RAISED CONCRETE ISLAND

BROAD ST.

STOP

DO NOT ENTER

SR 16 (WELLS ST.)

-3%

-1%

SR 16 (WELLS ST.)

CURB & GUTTER

+1%

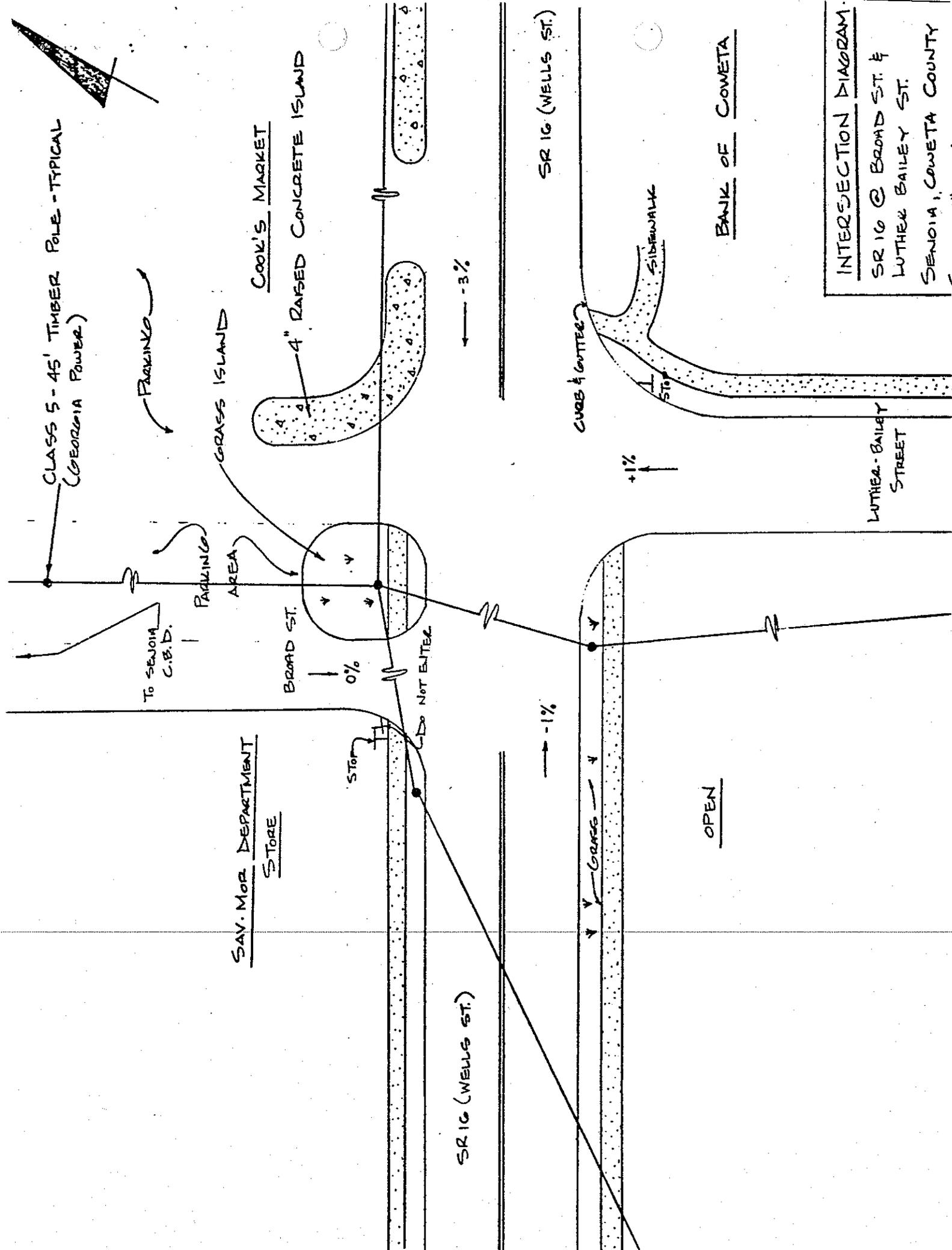
SIDEWALK

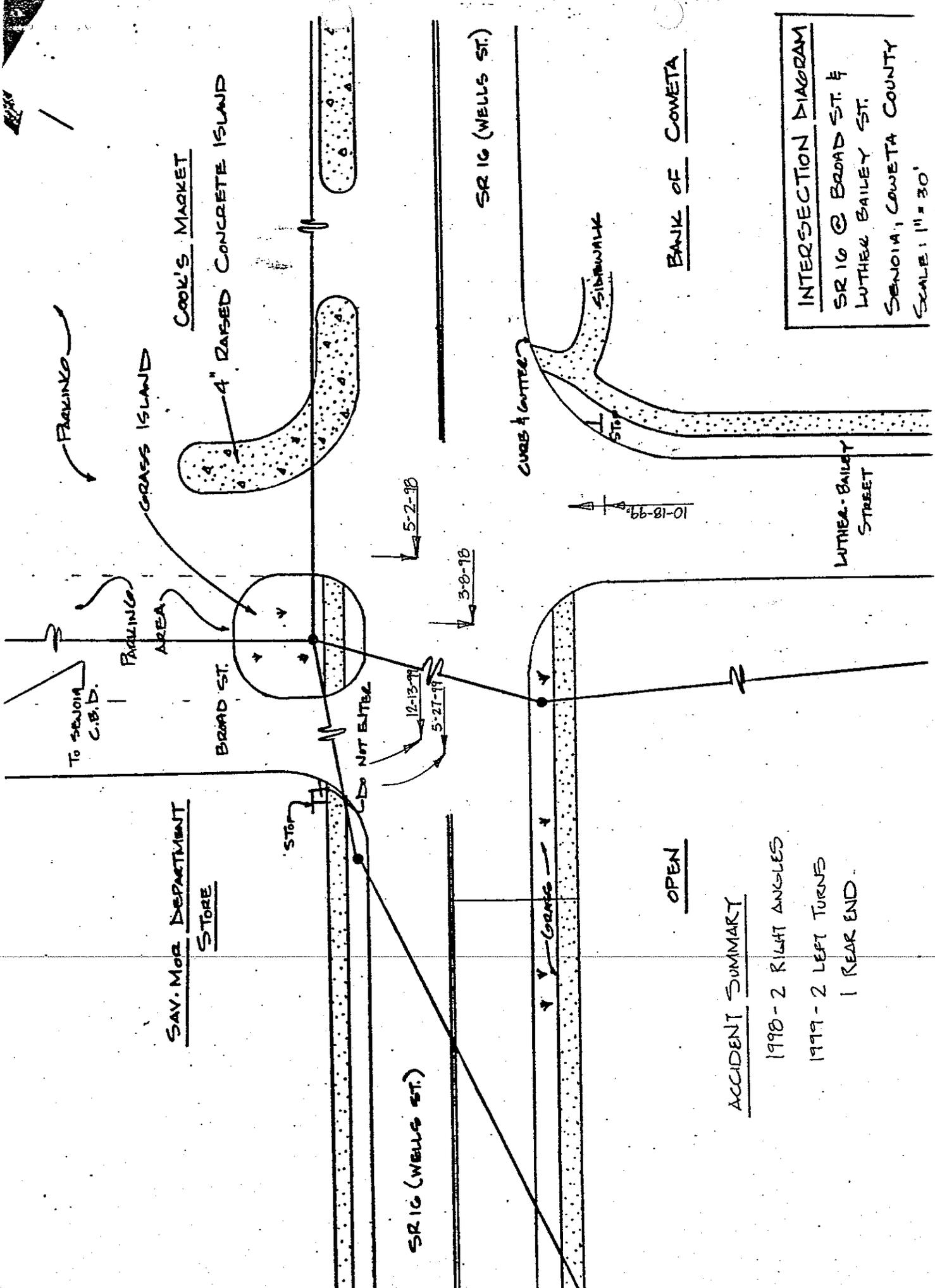
OPEN

BANK OF COWETA

LUTHER BAILEY STREET

INTERSECTION DIAGRAM
SR 16 @ BROAD ST. &
LUTHER BAILEY ST.
SENOIA, COWETA COUNTY





INTERSECTION DIAGRAM
 SR 16 @ BROAD ST. &
 LUTHER BAILEY ST.
 SENOIA, COWETA COUNTY
 SCALE: 1" = 30'

ACCIDENT SUMMARY
 1998 - 2 RIGHT ANGLES
 1999 - 2 LEFT TURNS
 1 REAR END

OPEN

SAY. MOB. DEPARTMENT
STORE

SR 16 (WELLS ST.)

SR 16 (WELLS ST.)

LUTHER-BAILEY STREET

BANK OF COWETA

CURB & GUTTER
 SIDEWALK
 STOP

10-18-99

5-2-98

3-8-98

12-13-97

5-27-97

CD NOT ENTER

STOP

BROAD ST.

PARKING
 AREA

GRASS ISLAND

COOK'S MARKET

4" RAISED CONCRETE ISLAND

PARKING

TO SENOIA C.B.D.

State Route 16
Luther-Bailey/Broad Street
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 [35] MPH.

Existing traffic control is . . . SIDE STREET STOP.

Daily traffic volume of [12,809] was counted on

THURSDAY, MARCH 8, 1900.

Estimated annual traffic volume is [4,675,285] 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 the main street, and the community size.

Number of hours required traffic present = 13

Warrant 1 is 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 = 6

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 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 .64 per million vehicles
Number of warrant 8 volume requirements met = 2
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 = 2
Volume requirements for warrant 8 are 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 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.

Warrant - 10

Part 1 - Delay to be determined by traffic engineer.

Part 2 - SATISFIED
Part 3 - 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 SATISFIED.

State Route 16
Luther-Bailey/Broad Street
Senoia Approaches

HOUR OF DAY	**** MAIN STREET ****			BIAS PRCNT	**** SIDE STREET ****			INTER- SECTION VOLUME
	TOTAL VOLUME	PEAK DIRECTN			TOTAL VOLUME	PEAK DIRECTN	PEAK VOLUME	
12 AM	64	west		59	57	south	52	121
1 AM	24	east		54	9	south	8	33
2 AM	27	west		52	7	south	7	34
3 AM	22	west		59	11	north	6	33
4 AM	71	east		52	13	south	8	84
5 AM	126	west		53	67	north	50	193
6 AM	370	east		52	180	north	133	550
7 AM	746	west		50	389	north	227	1135
8 AM	648	east		50	280	south	148	928
9 AM	343	west		73	233	south	127	576
10 AM	432	west		59	228	south	146	660
11 AM	458	west		55	236	south	158	694
12 PM	496	west		52	220	south	135	716
1 PM	470	west		53	236	south	163	706
2 PM	524	west		56	221	south	140	745
3 PM	614	west		56	253	south	178	867
4 PM	710	west		54	326	south	263	1036
5 PM	677	west		60	352	south	276	1029
6 PM	601	west		55	374	south	229	975
7 PM	388	west		56	201	south	144	589
8 PM	281	west		56	184	south	149	465
9 PM	208	west		65	111	south	84	319
10 PM	146	west		53	49	south	33	195
11 PM	106	west		57	20	south	14	126

TOTAL INTERSECTION VOLUME IS 12,809

MAIN STREET TOTAL VOLUME IS 8,552
 eastBOUND APPROACH IS 3,835 (45 %)
 westBOUND APPROACH IS 4,717 (55 %)

SIDE STREET TOTAL VOLUME IS 4,257
 northBOUND APPROACH IS 1,564 (37 %)
 southBOUND APPROACH IS 2,693 (63 %)

REPORT PRODUCED THURSDAY, MARCH 22, 1900.

COUNTS TAKEN ON THURSDAY, MARCH 8, 1900.

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	PART 2
12 AM	64	52				SIDE
1 AM	24	8				
2 AM	27	7				
3 AM	22	6				
4 AM	71	8				
5 AM	126	50				SIDE
6 AM	370	133	BOTH	SIDE	BOTH	SIDE
7 AM	746	227	BOTH	BOTH	BOTH	BOTH
8 AM	648	148	BOTH	BOTH	BOTH	BOTH
9 AM	343	127	SIDE	SIDE	BOTH	SIDE
10 AM	432	146	BOTH	SIDE	BOTH	BOTH
11 AM	458	158	BOTH	SIDE	BOTH	BOTH
12 PM	496	135	BOTH	SIDE	BOTH	BOTH
1 PM	470	163	BOTH	SIDE	BOTH	BOTH
2 PM	524	140	BOTH	SIDE	BOTH	BOTH
3 PM	614	178	BOTH	BOTH	BOTH	BOTH
4 PM	710	263	BOTH	BOTH	BOTH	BOTH
5 PM	677	276	BOTH	BOTH	BOTH	BOTH
6 PM	601	229	BOTH	BOTH	BOTH	BOTH
7 PM	388	144	BOTH	SIDE	BOTH	SIDE
8 PM	281	149	SIDE	SIDE	BOTH	SIDE
9 PM	208	84		SIDE	SIDE	SIDE
10 PM	146	33				
11 PM	106	14				
REQUIRED VOLUMES: MAIN STREET			350	525	280	420
SIDE STREET			105	53	84	42

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