ORIGINAL TO GENERAL FILES

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-066-1(36) Bibb County
P. I. No. 333055

OFFICE Preconstruction

DATE September 5, 2000

FROM C. Wayne Hutto, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

SUBJECT **PROJECT CONCEPT REPORT APPROVAL**

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

Tom Turner
David Mulling
Harvey Keepler
Jerry Hobbs
Herman Griffin
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Marta Rosen
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Jimmy Chambers (ATTN: Ted Cashin)
Joe Palladi
Glenn Durrence

D.O.T. 66

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE STP-066-1(36) Bibb County
P.I. No. 333055

OFFICE Preconstruction

DATE August 22, 2000

FROM Thomas L. Turner, P.E., Director of Preconstruction

TO J. Tom Coleman, Jr., Commissioner

SUBJECT PROJECT CONCEPT REPORT

This project is the widening and reconstruction of Weaver Road/CR 165 from SR 87/Ocmulgee East Boulevard to 715'± west of White Elk Springs Road. This project will also include improvements on SR 87 from Joe Tamplin Boulevard to Weaver Road. The total length of all project segments is 1.80 miles. Within the project corridor, SR 87 is a four lane divided rural major arterial and Weaver Road is a two lane rural minor collector facility providing access to and from I-16 to industrial, commercial, and residential destinations in the region, specifically the Ocmulgee East Industrial Park. The growth of nearby Macon and the establishment of the industrial park have strained the existing SR 87 and Weaver Road corridor beyond its capacity. Every major intersection within the project corridor is operating at Level-of-Service (LOS) "F" during the a.m. and p.m. peak hours for the year 2000. With the proposed improvements, the results of the analysis show that all of the key intersections will operate at LOS "D" or greater for the 2025 design year. Traffic estimates are as follows:

ROUTE	VPD 2000	VPD 2025
SR 87(Ocmulgee East Blvd)	43,1000	59,100
CR 165(Weaver Road)	33,500	36,600

The proposed construction will widen Weaver Road/CR 165 to four, 12' lanes, two in each direction, with curb and gutter, 20' raised median, and 5' sidewalks on both sides. State Route 87 will require the addition of auxiliary lanes from I-16 to Servitex Drive. An urban section will be used from Servitex Drive to Weaver Road, including 60' pavement section northbound, 48' pavement section southbound, 32' raised median, and 12' shoulders. Additional intersection and roadway improvements along the project corridor consist of widening the railroad overpass on southbound SR 87 to provide a right-turn lane onto the I-16 westbound on-ramp; resurfacing and restriping the I-16 eastbound off-ramp to provide two left turn lanes onto SR 87; installing new traffic signals at SR 87 and the GEICO/YKK driveways; installing roadway lighting along SR 87 from the I-16 eastbound off-ramp to the Bernd Elementary School north of Lanier Heights Road/CR 167 and high mast lighting at the I-16 interchange. Traffic will be maintained during construction.

STP-066-1(36) Bibb
August 22, 2000

This project is Phase 1B of a two phase project that includes additional intersection improvements to the I-16/SR 87 ramp and Joe Tamplin Industrial Boulevard intersections and the intersection of Adkins Place and Servitex Driveway (SR 87 improvements - Phase 1A).

Environmental concerns include requiring a Categorical Exclusion be prepared; a public information meeting will be held; time saving procedures are not appropriate.

The estimated costs for this project are:

	PROPOSED	APPROVED	PROG DATE	LET DATE
Construction (includes E&C and inflation)	$5,098,000	$3,274,000	2001	01-03
Right-of-Way & Utilities*	Local	Local		

*to be done by contract

The proposed improvements will improve safety and reduce congestion throughout the project corridor. This project is in the STIP. I recommend this project concept be approved.

TLT:JDQ/cj

Attachment

CONCUR _____
Frank L. Danchetz, P.E., Chief Engineer

APPROVE _____
J. Tom Coleman, Jr., Commissioner

Department of Transportation
State of Georgia

PROJECT CONCEPT REPORT

IMPROVEMENTS TO S.R. 87 & WEAVER ROAD
Phase IB

Project STP-066-1(36) Bibb County
Georgia DOT P.I. Number: 333055
U.S. Route Number: 23, 129
State Route Number: SR 87

RECOMMENDATION FOR APPROVAL: Date of Report: April 12, 2000

DATE PROJECT MANAGER

This project is contained in the Regional Transportation Plan (RTP) and/or in the Statewide Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTP and/or the STIP

DATE STATE TRANSPORTATION PLANNING ADMINISTRATOR

DATE STATE TRANSPORTATION PROGRAMMING ENGINEER

DATE ENVIRONMENTAL/LOCATION ENGINEER

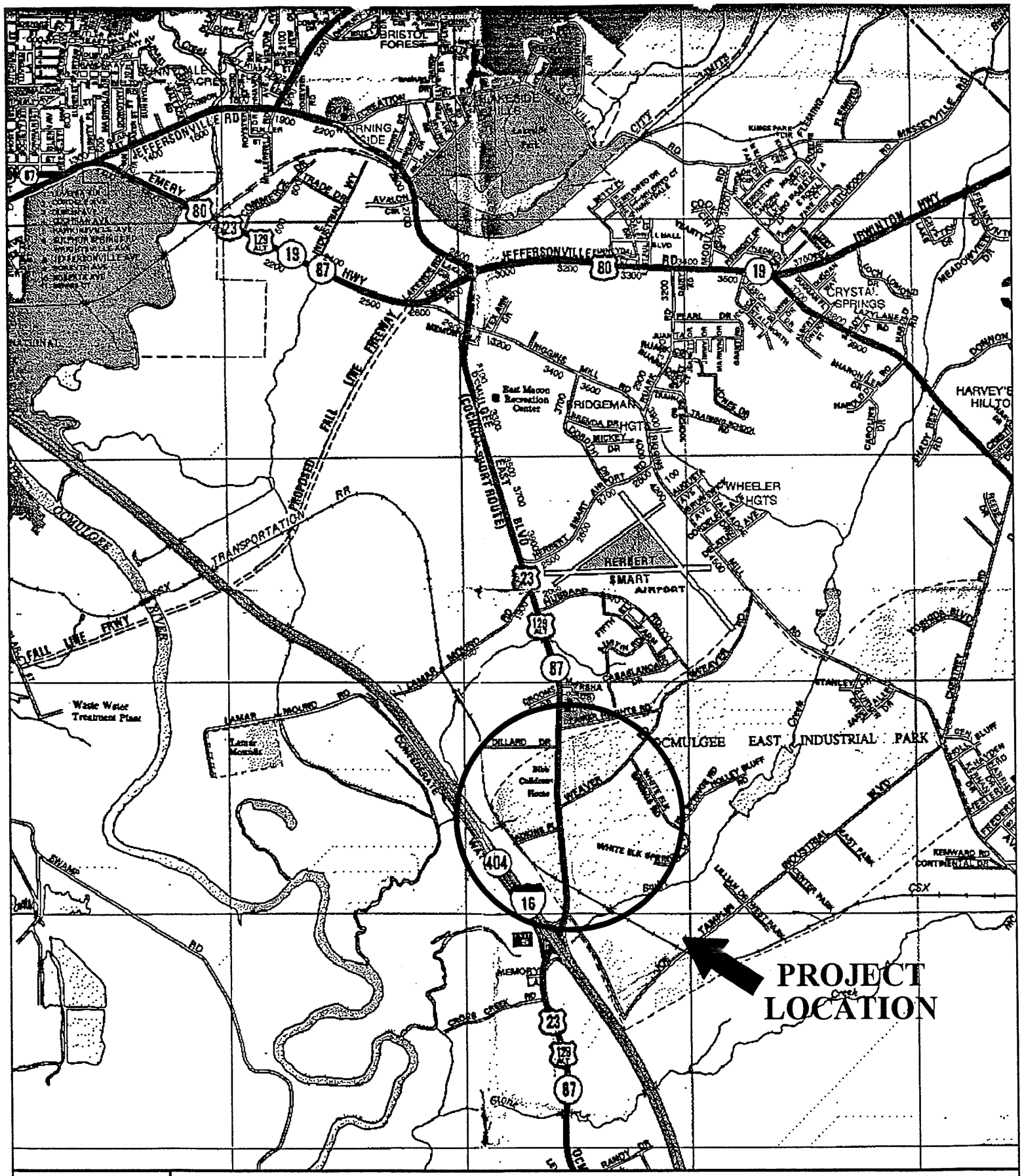
DATE STATE TRAFFIC OPERATIONS ENGINEER

DATE DISTRICT ENGINEER

DATE PROJECT REVIEW ENGINEER

8/6/00 Joseph P Pollard
DATE STATE URBAN DESIGN ENGINEER

DATE STATE BRIDGE AND STRUCTURAL ENGINEER



NOT TO SCALE

IMPROVEMENTS TO S.R. 87 & WEAVER ROAD - PHASE 1B
LOCATION MAP

PROJECT CONCEPT REPORT

GEORGIA DOT P.I. NO.: 333055

PROJECT NUMBER: STP-066-1(36)

LOCATION & DESCRIPTION: Project STP-066-1(36) is located approximately ½ mile north of the I-16/S.R. 87 interchange southeast of the city of Macon in Bibb County. The project consists of the widening and reconstruction of Weaver Road (CR 165) from S.R. 87 (Ocmulgee East Boulevard) to approximately 715 feet west of White Elk Springs Road (CR 463) from a 2-lane rural roadway to a 4-lane divided urban roadway with curb and gutter. Improvements to local intersections and approaches on S.R. 87 are included as a result of the Weaver Road widening. Additional intersection and roadway improvements occur along the project corridor and consist of widening the railroad overpass on southbound S.R. 87 to provide a right-turn lane onto the I-16 westbound on-ramp; resurfacing and re-striping the I-16 eastbound off-ramp to provide two left-turn lanes onto SR 87; installing new traffic signals at S.R. 87 and the GEICO/YKK driveways; and installing roadway lighting along S.R. 87 from the I-16 eastbound off-ramp to the Bernd Elementary School, north of Lanier Heights Road (CR 167) and high mast lighting at the I-16 Interchange. The total length of all project segments is approximately 1.80 miles (see Location Map on next page).

TRAFFIC (AADT) - BUILD YEAR (2000):

S.R. 87 (Ocmulgee East Blvd.) -	43,100 vpd
C.R. 165 (Weaver Road) -	33,500 vpd

TRAFFIC (AADT) - DESIGN YEAR (2025):

S.R. 87 (Ocmulgee East Blvd.) -	59,100 vpd
C.R. 165 (Weaver Road) -	36,600 vpd

PROJECT TERMINI:	From M.P.	To M.P.	Length:
S.R. 87 (Ocmulgee East Boulevard)-	3.29	4.35	(1.06 mi.)
C.R. 165 (Weaver Road) -	0.00	0.37	(0.37 mi.)

FUNCTIONAL CLASS:

S.R. 87 (Ocmulgee East Boulevard)-	FAP Rural Principal Arterial
C.R. 165 (Weaver Road) -	FAU Urban Collector Street

PDP CLASS: Major Full Oversight ( ) CA ( ) Exempt (X)

NEED AND PURPOSE STATEMENT

The proposed improvements contained in this concept serve two primary purposes. The first purpose, of this project, is to improve the operational efficiency of all intersections in the project corridor. The second purpose is to improve traffic safety by dividing Weaver Road, to separate on-coming traffic, and to promote the orderly flow of traffic by providing median breaks at the major intersections and driveway entrance points through the project corridor.

Within the project corridor, S.R. 87 is a four-lane divided rural major arterial and Weaver Road is a two-lane rural minor collector facility, providing access to and from I-16 to industrial, commercial, and residential destinations in the region, specifically the Ocmulgee East Industrial Park. The proposed project is required to upgrade the existing transportation infrastructure in response to the recent development of the industrial park.

Traffic Safety And Capacity Concerns

The I-16/S.R. 87 interchange and surrounding roadway network was originally designed to meet the requirements of a residential and agricultural area; however, growth of nearby Macon and the establishment of the industrial park have strained the existing S.R. 87 and Weaver road corridor beyond its design capacity. Turning Movement Counts (TMCs) report that heavy trucks account for over 10% of total traffic in the AM peak hour, leaving many of the existing intersections with insufficient turning radii, storage capacity, and traffic control to handle these high truck-vehicle ratios. Upon the opening of the GEICO Call Center in the spring of 2000, the intersection of S.R. 87 and Weaver Road is projected to receive 5,395 and 4,810 vehicles in the AM and PM peak hours. The current intersection configuration causes vehicles to extend back into through lanes and/or attempt difficult left-turn maneuvers. The predominant types of accidents that are occurring at this intersection are "right-angle" and "rear-end" collisions. These types of accidents are preventable with the installation of a traffic signal and construction of left-turn lanes. A three year summary of accidents at the S.R. 87 and Weaver Road intersection is shown in Appendix B.

Logical Project Termini

Traffic demands along S.R. 87 north of I-16 to Lanier Heights Road, and Weaver Road between S.R. 87 and White Elk Springs Road, have grown rapidly as a result of the Ocmulgee East Industrial Park, which includes major corporations such as Brown & Williamson Tobacco,

GEICO, YKK, Textprint, and Servitex. Currently, the industrial park employs over 7,500 people, with an additional 2,500 employees as a result of the GEICO Call Center opening in spring of 2000. The south area of the park is currently under development to add 5,000 additional employees, bringing the total number of employees served by the industrial park to 15,000 by the 2025 design year. The logical western terminus for the proposed Weaver Road widening is at the intersection with S.R. 87. This intersection currently serves as the terminus for Weaver Road, with S.R. 87 accommodating the majority of traffic to and from Weaver Road. The 2000 AADT on Weaver Road east of the intersection is estimated to be 33,500 vehicles upon the completion and opening of the GEICO expansion, increasing 8% to 36,600 vehicles for the 2025 design year (see Appendix C, Figure C-4; Existing and Design Year AADT). The 2000 AADT on S.R. 87 north of the intersection is estimated to be 18,600 vehicles, with a projected increase of 37% to 29,800 vehicles for the 2025 design year. The 2000 AADT on S.R. 87 south of the intersection is estimated to be 43,100 vehicles, with a projected increase of 27% to 59,100 vehicles for the 2025 design year.

The logical eastern terminus for the proposed widening of Weaver Road is approximately 275 feet east of the easternmost driveway of the GEICO expansion (715' west of the White Elk Springs Road intersection). From here the road would taper back to its existing typical section, dropping an east bound lane at the Textprint Driveway. Bringing the reconstructed roadway thru the GEICO driveway would enable the proposed roadway to handle the expected additional traffic created by the GEICO expansion. The 2000 AADT on Weaver Road east of the driveway is estimated to be 12,600 vehicles, with a projected increase of 16% to 15,900 vehicles for the 2025 design year. The last major destination point along Weaver Road for traffic generated by the industrial park to and from I-16 are the driveways for Textprint and Brown & Williamson. However, since both of these industries are currently at their peak employment (expecting to reduce their work force) and having differing work shift changes, the logical eastern terminus for the project was chosen as the GEICO driveway.

The subsequent traffic analysis, including LOS projections for design year traffic conditions will substantiate the need, purpose, independent utility, and logical termini of the recommended improvements. The results of the LOS analysis for the build and design year traffic volumes at the major intersections encountered along the project corridor can be found in Appendix C. By widening and dividing Weaver Road with a 20-foot raised median, and improving local intersections throughout the project corridor, the proposed improvements will improve safety concerns and reduce congestion throughout the project corridor.

This project is phase 1B of a two-phase project that includes additional intersection improvements to the I-16/S.R. 87 ramp and Joe Tamplin Industrial Boulevard intersections and the intersection of Adkins Place and Servitex Driveway (S.R. 87 Improvements - Phase 1A). This project is included in the Macon Area Transportation Study (MATS) 2015 Plan, as well as the State Transportation Improvement Program (STIP) as Project #333055, STP-066-1(36). Another project has been proposed for the I-16/ SR 87 interchange which will including the addition of a secondary split-diamond interchange approximately 2000 feet east of the existing interchange, and the extension of Joe Tamplin Industrial Boulevard (S.R. 87 Improvements - Phase 2). This larger project is under study to handle the predicted traffic needs of the entire Ocmulgee East Industrial Park and the surrounding area through the design year. The improvements listed in phased 1A and 1B will be included in the project under study. Additional modifications to the I-16/SR 87 interchange and the widening of SR 87; as well as construction of a split-diamond interchange approximately 0.4 miles south of the existing interchange with the Joe Tamplin Industrial Boulevard Extension, are necessary to accommodate the projected traffic volumes of the 2025 design year.

EXISTING CONDITIONS

TYPICAL SECTION:

S.R. 87: Four 12-foot lanes divided by a 40-foot depressed median; with rural shoulders.

Weaver Road: Two 12-foot lanes of asphaltic concrete pavement; with rural shoulders.

RIGHT-OF-WAY WIDTH:

S.R. 87 -	220 - 280 ft.
Weaver Road -	100 ft.

POSTED SPEED	MAX DEG. OF CURVE	MAXGRADE
S.R. 87 - 45 mph	3°	+/-6%
Weaver Road - 35 mph	4.5^{o}	+/-2%

EXISTING TRAFFIC CONTROL AT MAJOR INTERSECTIONS:

S.R. 87 @ Weaver Road / GEICO Entrance -	Traffic signal
Weaver Road @ White Elk Springs Road -	Side street stop-sign control

MAJOR STRUCTURES:

Two 40 ft. x 180 ft. railroad bridges on S.R. 87 (one in northbound direction, one in southbound direction) approximately 750 ft. north of the I-16 WB Ramp.

TYPE ACCESS: Controlled by State and County Permit

PROPOSED IMPROVEMENTS

TYPICAL SECTION: (Refer to Appendix A; Typical Section Diagrams)

S.R. 87: SR 87 will require the addition of auxiliary lanes from I-16 to Servitex Drive . An urban section will be used from Servitex Drive to Weaver Road, including 60 ft pavement section Northbound, 48 ft pavement section Southbound, 32 foot raised median, and 12 ft shoulders [This widening will accommodate a future six-lane project currently under study.]

Weaver Road: Four 12 ft lanes (two in each direction) with curb and gutter, 20 ft. raised median and 5 ft sidewalks on both sides.

RIGHT-OF-WAY WIDTH:

S.R. 87 -	220 - 280 ft.
Weaver Road -	100 ft.

DESIGN SPEED	MAX DEG. OF CURVE	MAX GRADE
S.R. 87 - 45 mph	3°	+/-6%
Weaver Road - 35 mph	4.5°	+/-2%

PROPOSED TRAFFIC CONTROL AT MAJOR INTERSECTIONS:

S.R. 87 @ Weaver Road / GEICO Entrance -	Upgrade Traffic Signal
S.R. 87 @ YKK / GEICO Entrance -	New Traffic Signal
Weaver Road @ GEICO Driveway -	New Traffic Signal
S.R. 87 @ Servitex Dr. -	Upgrade Traffic Signal
S.R. 87 @ Joe Tamplin / I-16 Westbound Ramp-	Upgrade Traffic Signal
S.R. 87 @ I-16 Eastbound Off-Ramp -	Upgrade Traffic Signal

PROPOSED MAJOR STRUCTURES:

Southbound S.R. 87 railroad bridge - Widen bridge by 40 ft. to accommodate right-turn lane and future widening of SR 87.

TYPE ACCESS: Controlled by State and County Permit

TRAFFIC CONTROL DURING CONSTRUCTION:

1. Traffic on roadways to be maintained during construction.
2. A staged construction detour is planned during the railroad bridge widening.

ALTERNATIVES CONSIDERED:
1. No Build
2. Proposed Project

DESIGN EXCEPTIONS TO BE REQUIRED:

CONTROLLING CRITERIA	UNDETERMINED	YES	NO
HORIZONTAL ALIGNMENT	( )	( )	(X)
ROADWAY WIDTH	( )	( )	(X)
SHOULDER WIDTH	( )	( )	(X)
VERTICAL GRADES	( )	( )	(X)
CROSS SLOPES	( )	( )	(X)
STOPPING SIGHT DISTANCE	( )	( )	(X)
SUPERELEVATION RATES	( )	( )	(X)
HORIZONTAL CLEARANCE	( )	( )	(X)
SPEED DESIGN	( )	( )	(X)
VERTICAL CLEARANCE	( )	( )	(X)
BRIDGE WIDTH	( )	( )	(X)
BRIDGE STRUCTURAL CAPACITY	( )	( )	(X)

DISPLACEMENTS: None

COORDINATION

LEVEL OF ENVIRONMENTAL ANALYSIS: Categorical Exclusion.

PERMITS REQUIRED: None anticipated.

CONCEPT TEAM MEETING DATE: November 10, 1999

PUBLIC INVOLVEMENT: Public information meeting to be held.

TIME SAVING PROCEDURES APPROPRIATE: No time saving procedures are appropriate.

LOCAL GOVERNMENT COMMITMENTS: An LGPA will be prepared for required ROW costs and reimbursable utilities.

OTHER PROJECTS IN THE AREA:

STP-066-1(36), P.I. # 333050 - S.R. 87 (Ocmulgee East Boulevard) Improvements; Phase 1A

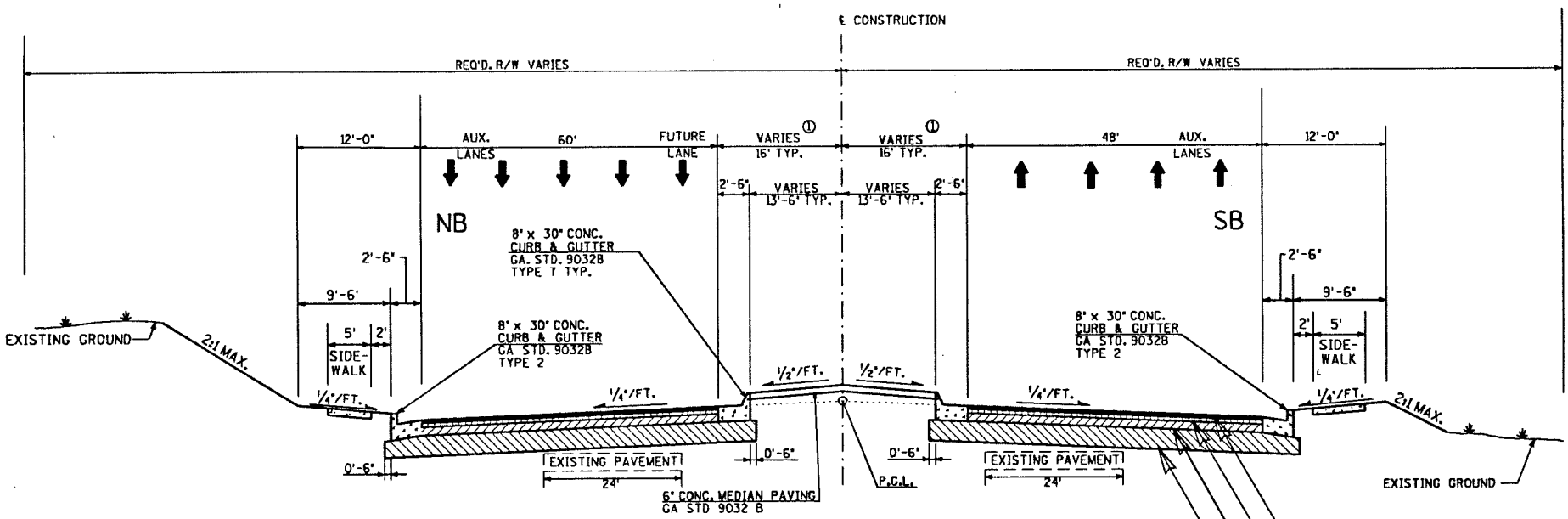
PROJECT COST SUMMARY

Item	Total Amount
R/W	LGPA (Local)
Construction	$4,052,920
Inflation (3 yrs. @ 5%)	$638,841
E & C 10%	$405,292
Total Project Costs	$5,097,053
Utilities	LGPA (Local)

APPENDICES:

A. TYPICAL SECTION DIAGRAMS (Figures A-1 and A-2)
B. SUMMARY OF ACCIDENTS
C. TRAFFIC ANALYSIS & TRAFFIC FLOW DIAGRAMS (Figures C-1 through C-4)
D. SUMMARY OF PROJECT COSTS
E. PROJECT CONCEPT LAYOUT
F. MINUTES OF NOVEMBER 10, 1999 CONCEPT MEETING

RECONSTRUCTED S.R. 87

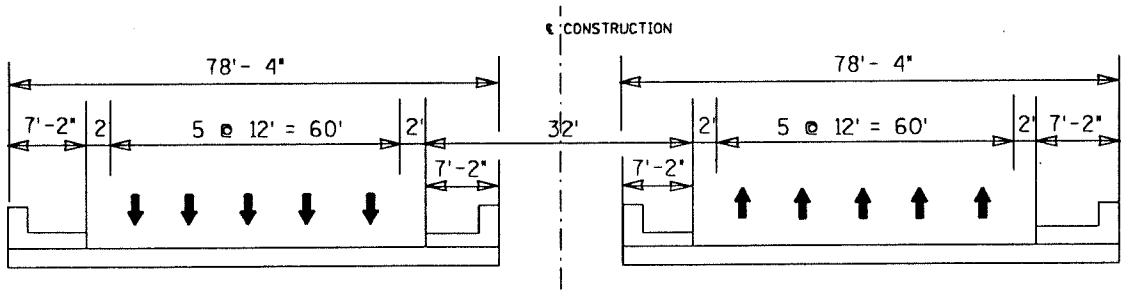


NORMAL SECTION

CUT SECTION

FILL SECTION

S.R. 87 RAILROAD BRIDGE



REQUIRED PAVEMENT

Ⓐ ASPHALTIC CONC. 12.5mm SUPERPAVE (165 lbs/SY)
Ⓑ ASPHALTIC CONC. 19mm SUPERPAVE (220 lbs/SY)
Ⓒ ASPHALTIC CONC. 25mm SUPERPAVE (440 lbs/SY)
Ⓓ GRADED AGGREGATE BASE (10")

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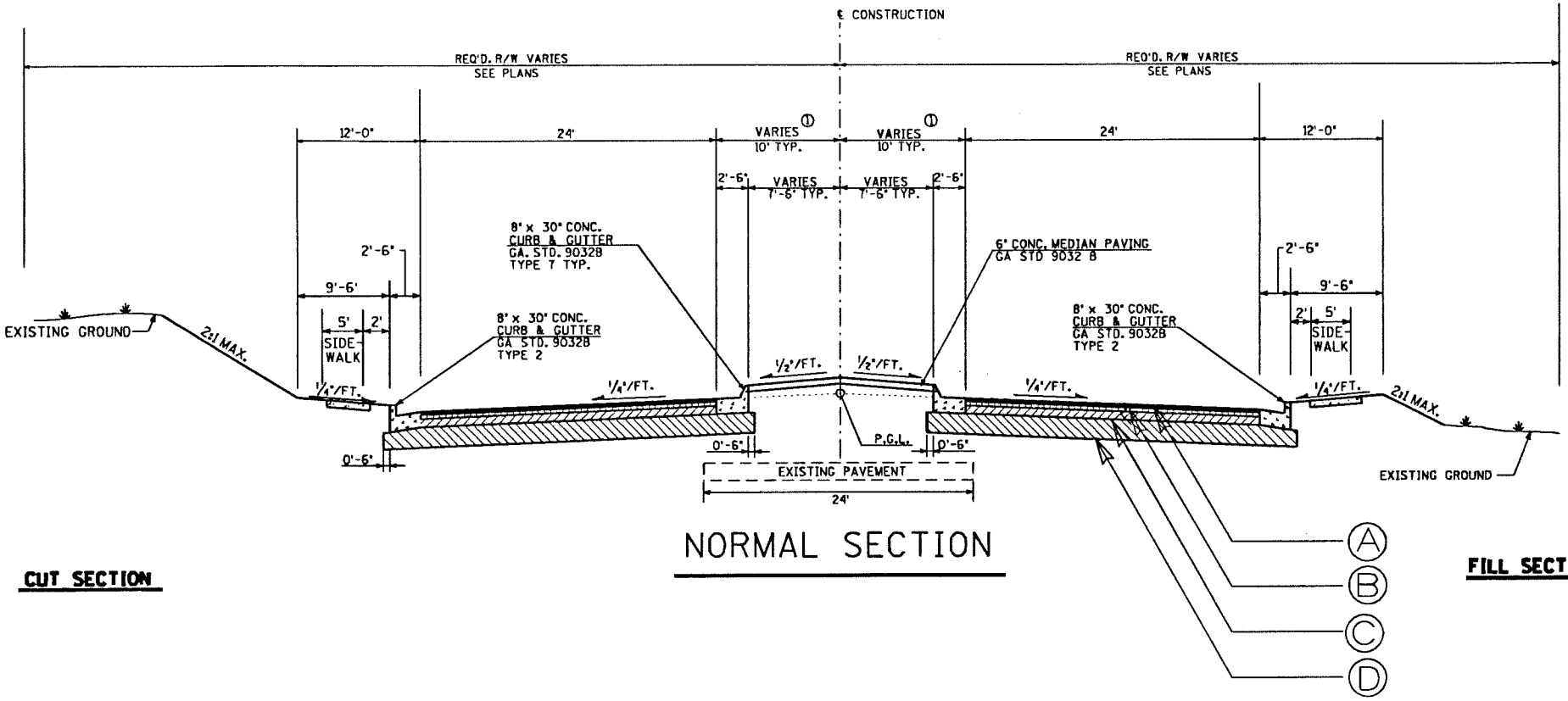
S.R. 87 - TYPICAL SECTIONS

FIGURE A-1

RECONSTRUCTED WEAVER ROAD



NORMAL SECTION

CUT SECTION

FILL SECTION

REQUIRED PAVEMENT

Ⓐ ASPHALTIC CONC. 12.5mm SUPERPAVE (165 lbs/SY)
Ⓑ ASPHALTIC CONC. 19mm SUPERPAVE (220 lbs/SY)
Ⓒ ASPHALTIC CONC. 25mm SUPERPAVE (440 lbs/SY)
Ⓓ GRADED AGGREGATE BASE (10")

NOT TO SCALE

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WEAVER ROAD
TYPICAL SECTION

FIGURE
A-2

APPENDIX B

Summary of Accidents

S.R. 87 from I-16 EB Off-Ramp to Weaver Road (0.72 mile)							
Year	Annual Average Daily Traffic	Number of Accidents	Number of Injuries	Calculated Accident Rate	Calculated Injury Rate	Statewide Average Accident Rate	Statewide Average Injury Rate
1995	10,415	32	22	1,169	804	441	222
1996	12,125	31	24	973	753	450	219
1997	11,517	21	12	694	396	433	203

Compiled accident reports were furnished by the Georgia Department of Public Safety, Accident Reporting Unit. Accident rates were calculated in units of number of accidents per 100 million vehicle-miles. Calculated accident rates for accident data on S.R. 87 were compared to statewide averages for a principal arterial roadway which is the classification of S.R. 87 (Ocmulgee East Boulevard).

The results of the accident comparison indicates that S.R. 87 has an accident rate that is 1.6 times greater than the statewide average, and an injury rate that is greater than 1.9 times the statewide average. Improvement of the intersections along S.R. 87 will improve the safety of the roadway.

APPENDIX C

Traffic Analysis & Traffic Flow Diagrams

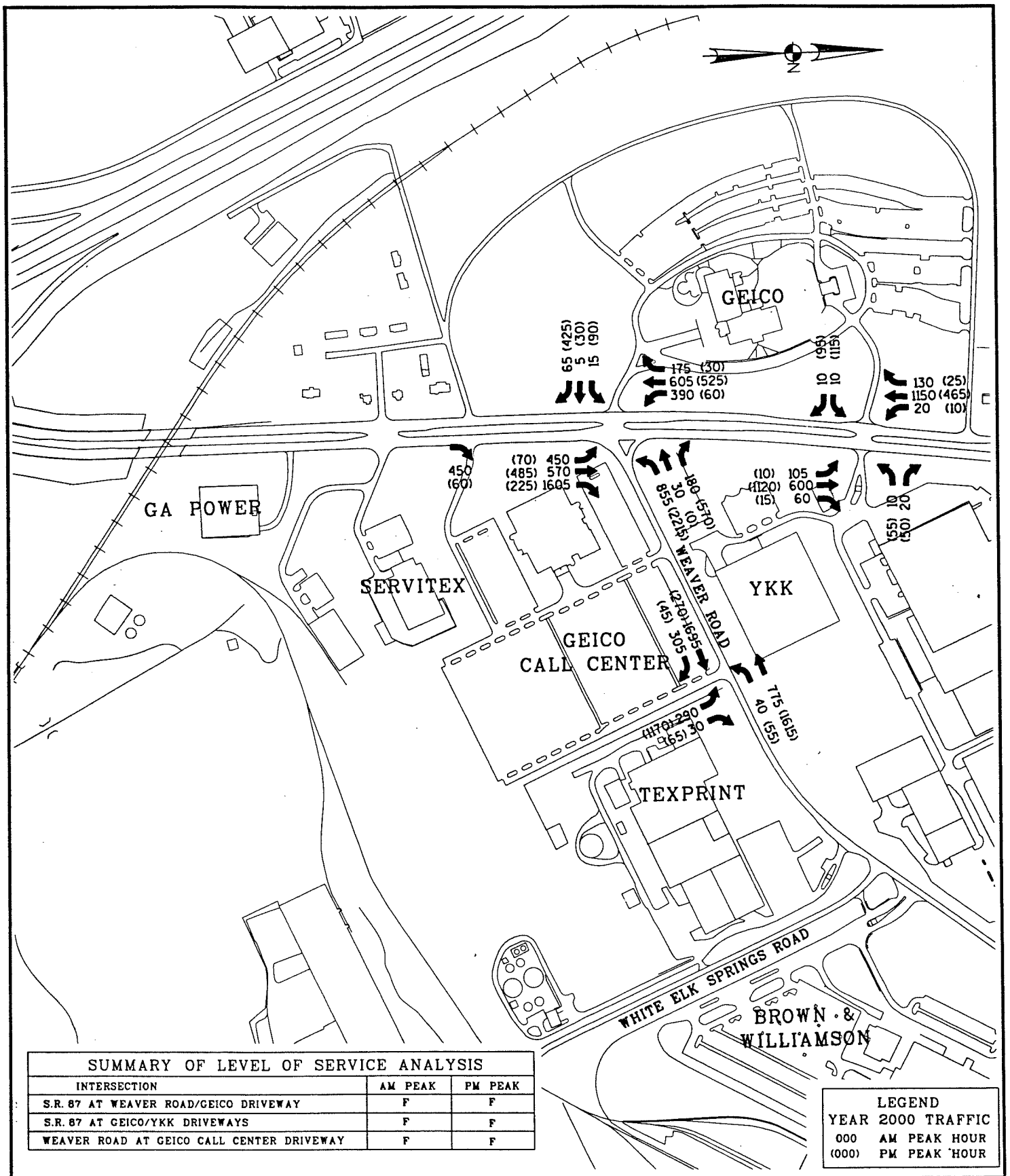
Intersection capacity analyses were performed on each of the key intersections within the study area for the AM and PM peak hours. These analyses were performed for existing conditions, with the opening of the GEICO expansion in the spring of 2000; and the 2025 design year conditions, assuming full build-out of the park.

The methods used are those described in the 1994 Highway Capacity Manual. Intersection capacity is expressed in terms of level of service (LOS), which is a measure of the amount of delay and congestion experienced by motorists as they pass through an intersection. LOS is designated by the letters "A" through "F". LOS A represents free-flowing conditions with very little delay and LOS F indicates forced flow, extreme congestion and long delays. A summary of the results are shown in the table below.

Summary of Intersection Capacity Analysis						
INTERSECTION	NO BUILD				BUILD	
	2000		2025		2025	
	AM	PM	AM	PM	AM	PM
S.R. 87 @ Weaver Rd. / GEICO Driveway	F	F	F	F	D	D
S.R. 87 @ YKK / GEICO Driveway	F*	F*	F*	F*	B	C
Weaver Rd. @ GEICO Call Center Driveway	F	F	F	F	B	D

* Indicates stop-sign controlled intersection LOS.

Every major intersection within the project corridor is operating at LOS F during the AM and PM peak hours for the year 2000. With the proposed project improvements, the results of the analysis show that all of the key intersections will operate at LOS D or greater for the 2025 design year. The widening of Weaver Road from a two-lane to a four-lane divided roadway with median breaks at major intersections will dramatically improve the safety and capacity of the roadway.



SUMMARY OF LEVEL OF SERVICE ANALYSIS		
INTERSECTION	AM PEAK	PM PEAK
S.R. 87 AT WEAVER ROAD/GEICO DRIVEWAY	F	F
S.R. 87 AT GEICO/YKK DRIVEWAYS	F	F
WEAVER ROAD AT GEICO CALL CENTER DRIVEWAY	F	F

LEGEND	
YEAR 2000 TRAFFIC	
000	AM PEAK HOUR
(000)	PM PEAK HOUR

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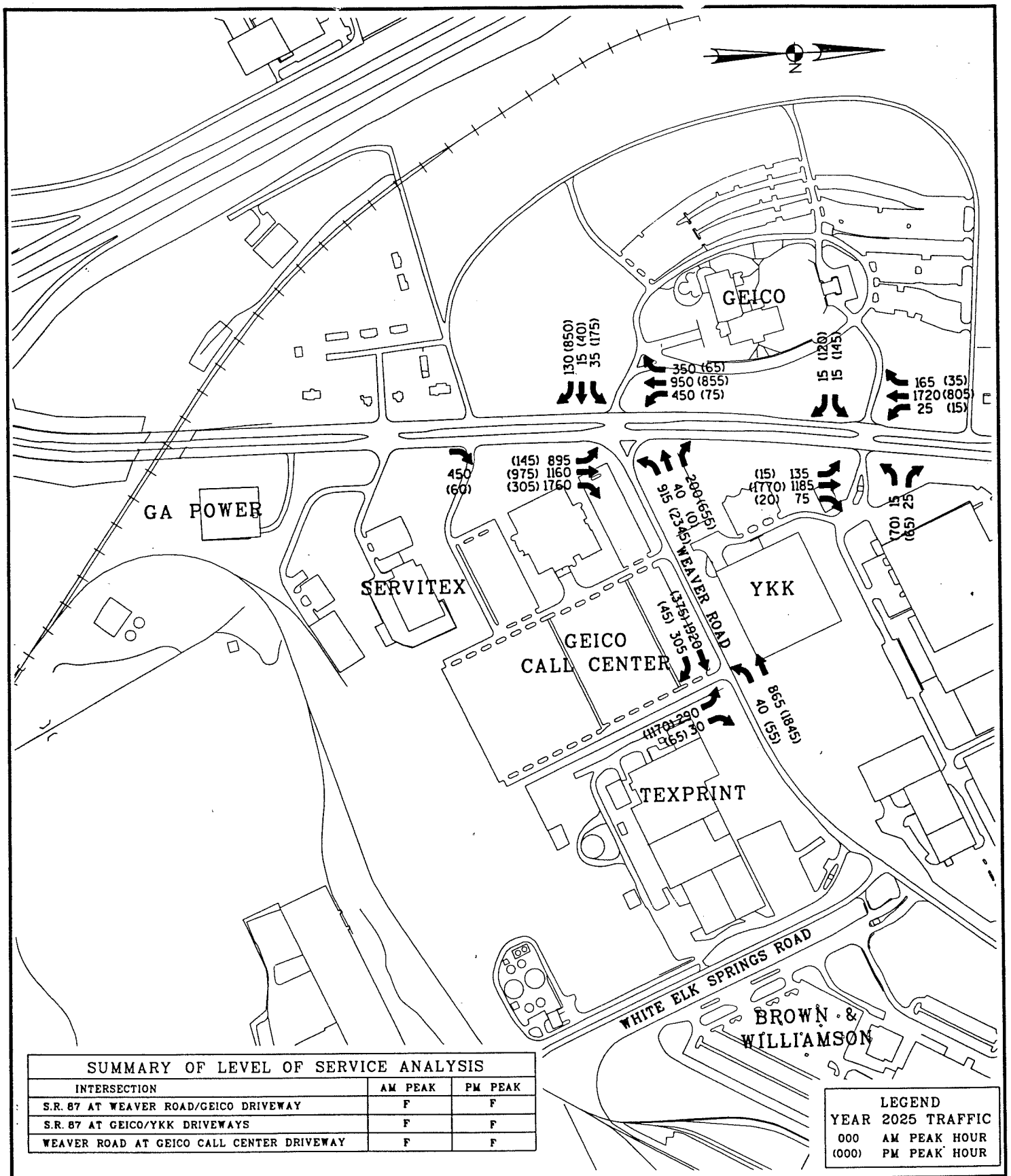
S.R. 87 & WEAVER ROAD IMPROVEMENT - PHASE 1B
YEAR 2000 PEAK HOUR TRAFFIC
EXISTING TRAFFIC PLUS GEICO CALL CENTER

FIGURE C-1



SUMMARY OF LEVEL OF SERVICE ANALYSIS		
INTERSECTION	AM PEAK	PM PEAK
S.R. 87 AT WEAVER ROAD/GEICO DRIVEWAY	F	F
S.R. 87 AT GEICO/YKK DRIVEWAYS	F	F
WEAVER ROAD AT GEICO CALL CENTER DRIVEWAY	F	F

LEGEND
YEAR 2025 TRAFFIC
000 AM PEAK HOUR
(000) PM PEAK HOUR

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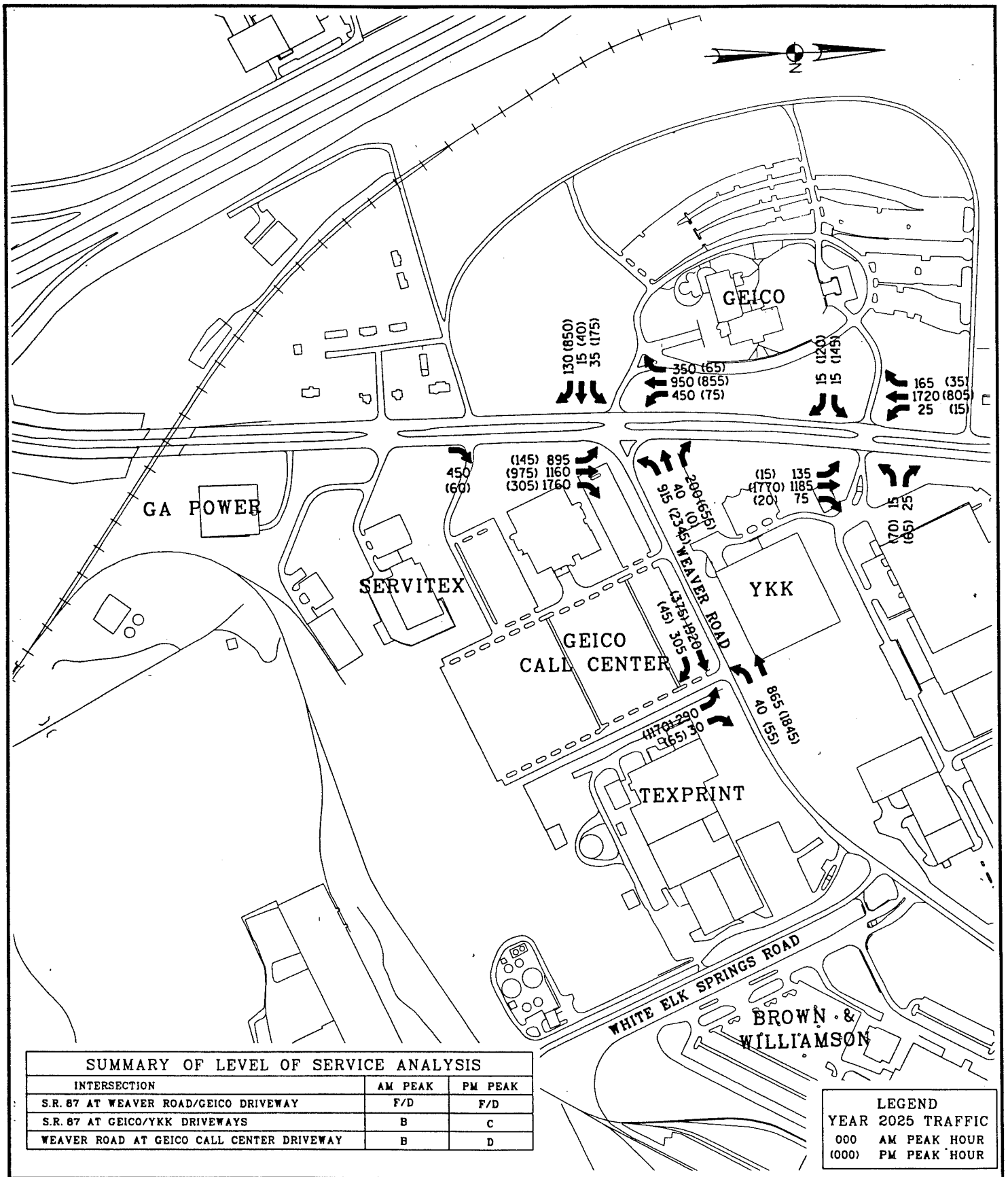
S.R. 87 & WEAVER ROAD IMPROVEMENT - PHASE 1B
YEAR 2025 PEAK HOUR TRAFFIC
NO BUILD ALTERNATIVE

FIGURE C-2



SUMMARY OF LEVEL OF SERVICE ANALYSIS		
INTERSECTION	AM PEAK	PM PEAK
S.R. 87 AT WEAVER ROAD/GEICO DRIVEWAY	F/D	F/D
S.R. 87 AT GEICO/YKK DRIVEWAYS	B	C
WEAVER ROAD AT GEICO CALL CENTER DRIVEWAY	B	D

LEGEND
YEAR 2025 TRAFFIC
000 AM PEAK HOUR
(000) PM PEAK HOUR

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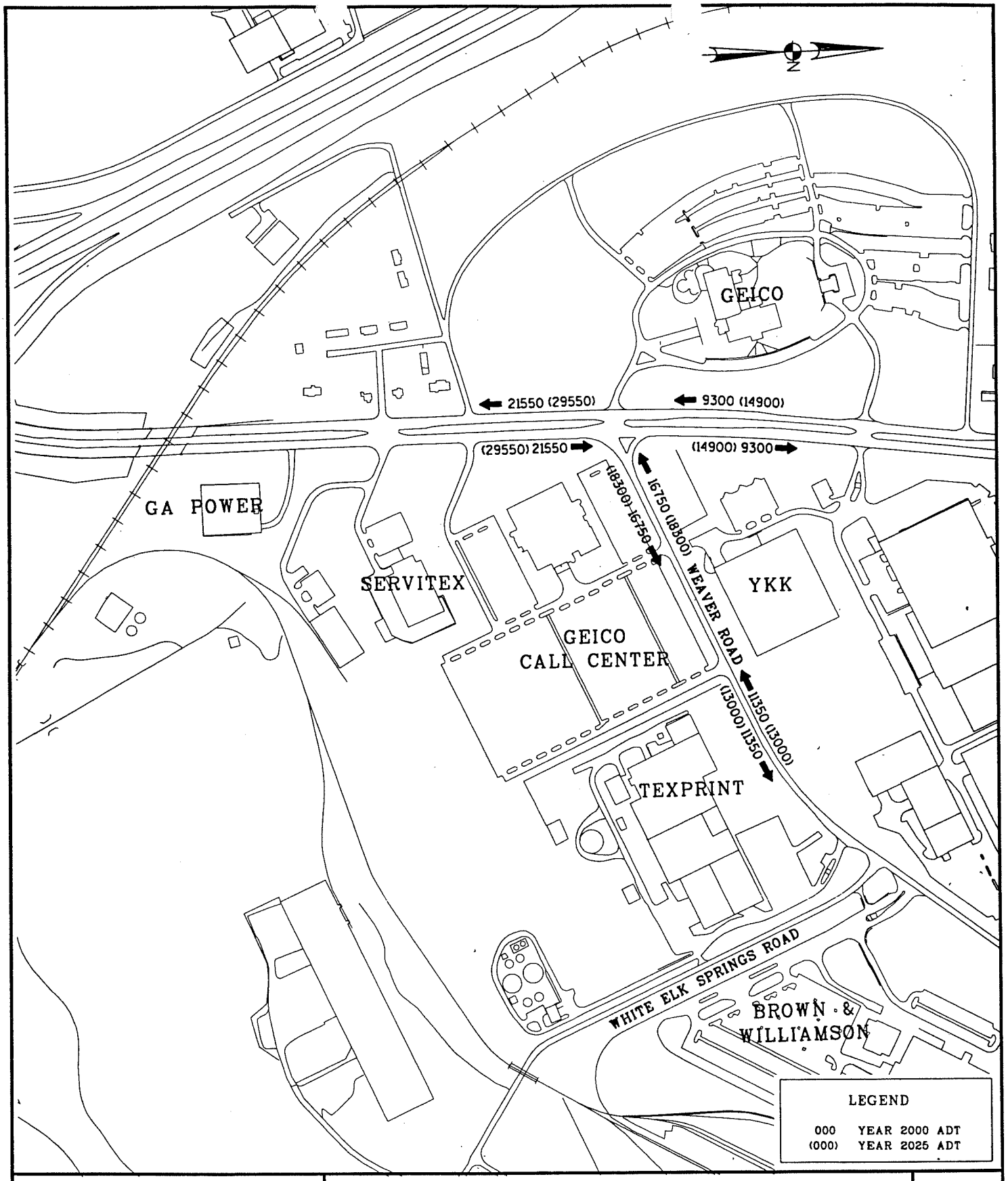
S.R. 87 & WEAVER ROAD IMPROVEMENT - PHASE 1B
YEAR 2025 PEAK HOUR TRAFFIC
BUILD ALTERNATIVE

FIGURE C-3



Moreland Altobelli Associates, Inc.

S.R. 87 & WEAVER ROAD IMPROVEMENT - PHASE 1B
AVERAGE DAILY TRAFFIC
YEAR 2000/YEAR 2025 BUILD ALTERNATIVE

FIGURE C-4

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER RE/GEICO ENT (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCWEGEAM.HC9
Area Type: Other 2-15-99 2000-AM
Comment: EXISTING TRAFFIC PLUS GEICO CALL CENTER (2000 AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	> 1	<		> 1		1	1	2	1	1	2	<
Volumes	15	5	65	855	30	180	450	570	1605	390	605	175
Lane Width	12.0			12.0		12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			15			150			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left		*			NB	Left	*			
	Thru		*				Thru		*		
	Right		*				Right	*	*		
	Peds						Peds				
WB	Left	*	*			SB	Left	*			
	Thru	*	*				Thru		*		
	Right	*	*				Right		*		
	Peds						Peds				
NB	Right	*				EB	Right				
SB	Right					WB	Right	*			
Green		20.0A	25.0A			Green		35.0A	35.0P		
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0		

Cycle Length: 135 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	116	581	0.766	0.200	55.6	E	55.6	E
WB	LT	601	1560	1.551	0.385	*	*	*	*
	R	1079	1583	0.160	0.681	5.8	B		
NB	L	485	1770	0.977	0.274	63.0	F	*	*
	T	1021	3725	0.617	0.274	33.4	D		
	R	1196	1583	1.280	0.756	*	*		
SB	L	485	1770	0.847	0.274	44.4	E	42.6	E
	TR	987	3600	0.874	0.274	41.8	E		

Intersection Delay = * (sec/veh) Intersection LOS = *

(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTEF CTION SUMMARY Version 2 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER RE/GEICO ENT (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCWEGEPM.HC9
Area Type: Other 8-30-99 2000-PM
Comment: EXISTING TRAFFIC PLUS GEICO CALL CENTER (2000 PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 1	<		> 1	1	1	2	1	1	2	<
Volumes	90	30	425	2215	1	570	70	485	225	60	525	30
Lane Width		12.0			12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			15			150			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left		*			NB	Left	*			
	Thru		*				Thru		*		
	Right		*				Right	*	*		
	Peds						Peds				
WB	Left	*	*			SB	Left	*			
	Thru	*	*				Thru		*		
	Right	*	*				Right		*		
	Peds						Peds				
NB	Right	*				EB	Right				
SB	Right					WB	Right	*			
Green		55.0A	20.0A			Green		5.0A	35.0P		
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0		

Cycle Length: 135 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	44	269	%13.094	0.163	*	*	*	*
WB	LT	764	1258	3.053	0.607	*	*	*	*
	R	1079	1583	0.541	0.681	8.7	B		
NB	L	92	1770	0.806	0.052	73.8	F	33.1	D
	T	1021	3725	0.526	0.274	32.0	D		
	R	1255	1583	0.063	0.793	2.3	A		
SB	L	92	1770	0.686	0.052	60.3	F	35.7	D
	TR	1014	3698	0.606	0.274	33.2	D		

Intersection Delay = * (sec/veh) Intersection LOS = *
(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

Center For Microcomputers In Transportation
HCS: Unsignalized Intersection Release 2.1 Page 1
****

File Name OCYKKAM.HC0
Streets: (N-S) Ocmulgee East Blvd. (E-W) GEICO/YKK DRIVEWAY
Major Street Direction.... EW
Length of Time Analyzed... 60 (min)
Analyst..... MAAI
Date of Analysis..... 10/8/99
Other Information..... 2000 EXISTING CONDITIONS (AM PEAK)

Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0>	0<	0	0>	0<	0	1	2<	0	1	2<	0
Stop/Yield			N			N						
Volumes	10		10	10		20	105	600	60	20	1150	130
PHF	.95		.95	.95		.95	.95	.95	.95	.95	.95	.95
Grade		0			0			0			0	
MC's (%)	0		0	0		0	0	0	0	0	0	0
SU/RV's (%)	0		0	0		0	0	0	0	0	0	0
CV's (%)	0		0	0		0	0	0	0	0	0	0
PCE's	1.1		1.1	1.1		1.1	1.1	1.1	1.1	1.1	1.1	1.1

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

****

File Name OCYKKPM.HC0
Streets: (N-S) Ocmulgee East Blvd. (E-W) GEICO/YKK DRIVEWAY
Major Street Direction.... EW
Length of Time Analyzed... 60 (min)
Analyst..... MAAI
Date of Analysis..... 10/8/99
Other Information..... 000 EXISTING CONDITIONS (PM PEAK)

Two-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0>	0<	0	0>	0<	0	1	2<	0	1	2<	0
Stop/Yield			N			N						
Volumes	115		95	55		50	10	1120	15	10	465	25
PHF	.95		.95	.95		.95	.95	.95	.95	.95	.95	.95
Grade		0			0			0			0	
MC's (%)	0		0	0		0	0	0	0	0	0	0
SU/RV's (%)	0		0	0		0	0	0	0	0	0	0
CV's (%)	0		0	0		0	0	0	0	0	0	0
PCE's	1.1		1.1	1.1		1.1	1.1	1.1	1.1	1.1	1.1	1.1

Adjustment Factors

Vehicle Maneuver	Critical Gap (tg)	Follow-up Time (tf)
Left Turn Major Road	5.50	2.10
Right Turn Minor Road	5.50	2.60
Through Traffic Minor Road	6.50	3.30
Left Turn Minor Road	7.00	3.40

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.1 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIAM.HC9
Area Type: Other 8-30-99 2000-AM
Comment: EXISTING TRAFFIC PLUS GEICO CALL CENTER (2000 AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		1	<		> 1		1		1			
Volumes		1695	305	40	775		290		30			
Lane Width		12.0			12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left					NB	Left	*			
	Thru	*					Thru				
	Right	*					Right	*			
	Peds						Peds				
WB	Left	*				SB	Left				
	Thru	*					Thru				
	Right						Right				
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		80.0A				Green		20.0A			
Yellow/AR		5.0				Yellow/AR		5.0			

Cycle Length: 110 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1221	1638	1.724	0.745	*	*	*	*
WB	LT	989	1327	0.867	0.745	12.4	B	12.4	B
NB	L	354	1770	0.862	0.200	40.7	E	39.0	D
	R	317	1583	0.101	0.200	23.2	C		

Intersection Delay = * (sec/veh) Intersection LOS = *

(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.. 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIPM.HC9
Area Type: Other 8-30-99 2000-PM
Comment: EXISTING TRAFFIC PLUS GEICO CALL CENTER (2000 PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		1	<		> 1		1		1			
Volumes		270	45	55	1615		1170		65			
Lane Width		12.0			12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination	1	2	3	4	5	6	7	8
EB Left					NB Left	*		
Thru	*				Thru			
Right	*				Right	*		
Peds					Peds			
WB Left	*				SB Left			
Thru	*				Thru			
Right					Right			
Peds					Peds			
NB Right					EB Right			
SB Right					WB Right			
Green	60.0A				Green	60.0A		
Yellow/AR	5.0				Yellow/AR	5.0		

Cycle Length: 130 secs Phase combination order: #1 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	783	1641	0.423	0.477	14.6	B	14.6	B
WB	LT	848	1779	2.072	0.477	*	*	*	*
NB	L	844	1770	1.459	0.477	*	*	*	*
	R	755	1583	0.090	0.477	12.0	B		

Intersection Delay = * (sec/veh) Intersection LOS = *

(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4 10-08-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD/GEICO (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCWEGEAM.HC9
Area Type: Other 8-30-99 2025-AM
Comment: FUTURE NO BUILD (2025 AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 1	<		> 1	1	1	2	1	1	2	<
Volumes	35	15	130	915	40	200	895	1160	1760	450	950	350
Lane Width		12.0			12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4			5	6	7	8
EB Left		*			NB	Left	*			
Thru		*				Thru		*		
Right		*				Right		*		
Peds						Peds				
WB Left	*	*			SB	Left	*			
Thru	*	*				Thru		*		
Right	*	*				Right		*		
Peds						Peds				
NB Right	*	*			EB	Right				
SB Right					WB	Right	*	*		
Green	15.0A	20.0A			Green		40.0A	45.0P		
Yellow/AR	5.0	5.0			Yellow/AR		5.0	5.0		

Cycle Length: 140 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	36	229	5.280	0.157	*	*	*	*
WB	LT	454	1512	2.216	0.300	*	*	*	*
	R	1549	1583	0.136	0.979	0.0	A		
NB	L	531	1770	1.774	0.300	*	*	*	*
	T	1251	3725	1.025	0.336	61.2	F		
	R	1006	1583	1.841	0.636	*	*		
SB	L	531	1770	0.893	0.300	47.8	E	*	*
	TR	1200	3575	1.196	0.336	*	*		

Intersection Delay = * (sec/veh) Intersection LOS = *
(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTEF CTION SUMMARY Version 2 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD/GEICO (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCWEGEPM.HC9
Area Type: Other 8-30-99 2025-PM
Comment: FUTURE NO BUILD (2025 PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		> 1	<		> 1	1	1	2	1	1	2	<
Volumes	175	40	850	2345	1	655	145	975	305	75	855	65
Lane Width		12.0			12.0	12.0	12.0	12.0	12.0	12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left		*			NB	Left	*			
	Thru		*				Thru		*		
	Right		*				Right		*		
	Peds						Peds				
WB	Left	*	*			SB	Left	*			
	Thru	*	*				Thru		*		
	Right	*	*				Right		*		
	Peds						Peds				
NB	Right	*	*			EB	Right				
SB	Right					WB	Right	*	*		
Green		45.0A	20.0A			Green		10.0A	45.0P		
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0		

Cycle Length: 140 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LTR	42	268	%26.618	0.157	*	*	*	*
WB	LT	401	780	6.155	0.514	*	*	*	*
	R	1549	1583	0.445	0.979	0.2	A		
NB	L	152	1770	1.008	0.086	107.5	F	37.0	D
	T	1251	3725	0.861	0.336	37.5	D		
	R	1346	1583	0.239	0.850	1.5	A		
SB	L	152	1770	0.521	0.086	49.1	E	36.6	D
	TR	1237	3686	0.821	0.336	35.6	D		

Intersection Delay = * (sec/veh) Intersection LOS = *
(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIAM.HC9
Area Type: Other 8-30-99 2025-AM
Comment: FUTURE NO BUILD (2025 AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		1	<		>	1	1		1			
Volumes		1920	305	40	865		290		30			
Lane Width		12.0			12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left	*			
Thru	*	*			Thru				
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left				
Thru		*			Thru				
Right					Right				
Peds					Peds				
NB Right	*	*			EB Right				
SB Right					WB Right				
Green	30.0A	70.0A			Green	25.0A			
Yellow/AR	5.0	5.0			Yellow/AR	5.0			

Cycle Length: 140 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1254	1641	1.867	0.764	*	*	*	*
WB	LT	741	1441	1.286	0.514	*	*	*	*
NB	L	341	1770	0.893	0.193	52.7	E	47.7	E
	R	1549	1583	0.021	0.979	0.0	A		

Intersection Delay = * (sec/veh) Intersection LOS = *

(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTEF 'CTION SUMMARY Version 2 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIPM.HC9
Area Type: Other 8-30-99 2025-PM
Comment: FUTURE NO BUILD (2025 PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		1	<		> 1		1		1			
Volumes		375	45	55	1845		1170		65			
Lane Width		12.0			12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left					NB Left	*			
Thru	*	*			Thru				
Right	*	*			Right	*			
Peds					Peds				
WB Left		*			SB Left				
Thru		*			Thru				
Right					Right				
Peds					Peds				
NB Right	*	*			EB Right				
SB Right					WB Right				
Green	10.0A	75.0A			Green	40.0A			
Yellow/AR	5.0	5.0			Yellow/AR	5.0			

Cycle Length: 140 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	TR	1084	1649	0.408	0.657	7.4	B	7.4	B
WB	LT	922	1677	2.168	0.550	*	*	*	*
NB	L	531	1770	2.320	0.300	*	*	*	*
	R	1549	1583	0.044	0.979	0.0	A		

Intersection Delay = * (sec/veh) Intersection LOS = *
(g/C)*(V/c) is greater than one. Calculation of D1 is infeasable.

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4a 05-23-2000
Moreland Altobelli Associates Inc.

Streets: (E-W) WEAVER ROAD/GEICO (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: AMBDWE87.HC9
Area Type: Other 5-23-0 AM PEAK
Comment: 2025 BUILD CONDITIONS (AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	2	3	1	<	2	3	2	2	3	1
Volumes	35	15	130	915	40	200	895	1160	1760	450	950	350
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			0			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	*				NB	Left	*	*		
	Thru	*					Thru		*	*	
	Right	*					Right		*	*	
	Peds						Peds				
WB	Left		*			SB	Left	*			
	Thru		*				Thru			*	
	Right		*				Right			*	
	Peds						Peds				
NB	Right		*			EB	Right	*			
SB	Right	*				WB	Right				
Green		10.0A	37.0A			Green		23.0A	10.0A	35.0A	
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0	5.0	

Cycle Length: 140 secs Phase combination order: #1 #2 #5 #6 #7

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	152	1770	0.244	0.086	38.8	D	29.0	D
	T	160	1863	0.100	0.086	38.1	D		
	R	837	3167	0.185	0.264	25.7	D		
WB	L	1479	5309	0.671	0.279	29.8	D	29.6	D
	TR	454	1631	0.557	0.279	29.0	D		
NB	L	1011	3539	0.959	0.286	46.0	E	34.1	D
	T	2076	5588	0.647	0.371	24.0	C		
	R	2059	3167	1.017	0.650	35.1	D		
SB	L	632	3539	0.772	0.179	39.5	D	32.5	D
	T	1477	5588	0.745	0.264	31.9	D		
	R	588	1583	0.626	0.371	24.8	C		

Intersection Delay = 32.9 sec/veh Intersection LOS = D
Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.897

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.1 05-23-2000
Moreland Altobelli Associates Inc.

Streets: (E-W) WEAVER ROAD/GEICO (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: PMBDWE87.HC9
Area Type: Other 5-23-0 PM PEAK
Comment: 2025 BUILD CONDITIONS (PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	1	1	2	3	1	<	2	3	2	2	3	1
Volumes	175	40	850	2345	1	655	145	975	305	75	855	65
Lane Width	12.0	12.0	12.0	12.0	12.0		12.0	12.0	12.0	12.0	12.0	12.0
RTOR Vols			300			0			0			0
Lost Time	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	*				NB	Left	*			
	Thru	*					Thru		*		
	Right	*					Right		*		
	Peds						Peds				
WB	Left		*			SB	Left	*			
	Thru		*				Thru		*		
	Right		*				Right		*		
	Peds						Peds				
NB	Right		*			EB	Right	*			
SB	Right	*				WB	Right				
Green		16.0A	60.0A			Green		7.0A	25.0A		
Yellow/AR		5.0	5.0			Yellow/AR		5.0	5.0		

Cycle Length: 128 secs Phase combination order: #1 #2 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	L	249	1770	0.739	0.141	41.6	E	50.7	E
	T	262	1863	0.160	0.141	31.3	D		
	R	668	3167	0.979	0.211	54.6	E		
WB	L	2572	5309	0.989	0.484	32.5	D	31.8	D
	TR	767	1583	0.900	0.484	29.2	D		
NB	L	249	3539	0.635	0.070	41.0	E	35.6	D
	T	1179	5588	0.958	0.211	44.9	E		
	R	2202	3167	0.165	0.695	4.3	A		
SB	L	249	3539	0.326	0.070	36.9	D	34.3	D
	T	1179	5588	0.840	0.211	35.2	D		
	R	594	1583	0.115	0.375	16.9	C		

Intersection Delay = 35.5 sec/veh Intersection LOS = D
Lost Time/Cycle, L = 12.0 sec Critical v/c(x) = 0.979

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4 10-08-1999
Center For Microcomputers In Transportation

Streets: (E-W) GEICO/YKK DRIVEWAY (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCYKKGAM.HC9
Area Type: Other 9-2-99 2025-AM
Comment: 2025 DESIGN HOUR TRAFFIC (AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		>	<		>	<	1	2	<	1	2	<
Volumes	15		15	15		25	135	1185	75	25	1720	165
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00		3.00	3.00		3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination	1	2	3	4		5	6	7	8
EB Left	*				NB Left	*			
Thru					Thru		*		
Right	*				Right		*		
Peds					Peds				
WB Left	*				SB Left	*			
Thru					Thru		*		
Right	*				Right		*		
Peds					Peds				
NB Right					EB Right				
SB Right					WB Right				
Green	10.0A				Green	10.0A	60.0P		
Yellow/AR	5.0				Yellow/AR	5.0	5.0		

Cycle Length: 95 secs Phase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LR	195	1543	0.164	0.126	28.2	D	28.2	D
WB	LR	192	1522	0.218	0.126	28.4	D	28.4	D
NB	L	224	1770	0.635	0.126	34.0	D	9.7	B
	TR	2410	3692	0.578	0.653	7.3	B		
SB	L	224	1770	0.116	0.126	28.0	D	12.9	B
	TR	2400	3677	0.868	0.653	12.7	B		

Intersection Delay = 11.9 sec/veh Intersection LOS = B
Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.745

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.4 10-08-1999
Center For Microcomputers In Transportation

Streets: (E-W) GEICO/YKK DRIVEWAY (N-S) OCMULGEE E IND BLVD
Analyst: MAAI File Name: OCYKKGPM.HC9
Area Type: Other 9-2-99 2025-PM
Comment: 2025 DESIGN HOUR TRAFFIC (PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		>	<		>	<	1	2	<	1	2	<
Volumes	145		120	70		65	15	1770	20	15	805	35
Lane Width		12.0			12.0		12.0	12.0		12.0	12.0	
RTOR Vols			0			0			0			0
Lost Time	3.00		3.00	3.00		3.00	3.00	3.00	3.00	3.00	3.00	3.00

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left	*				NB	Left	*			
	Thru						Thru		*		
	Right	*					Right		*		
	Peds						Peds				
WB	Left	*				SB	Left	*			
	Thru						Thru		*		
	Right	*					Right		*		
	Peds						Peds				
NB	Right					EB	Right				
SB	Right					WB	Right				
Green		18.0A				Green		10.0A	62.0P		
Yellow/AR		5.0				Yellow/AR		5.0	5.0		

Cycle Length: 105 secs Phase combination order: #1 #5 #6

Intersection Performance Summary

	Lane Group: Mvmts	Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	LR	296	1552	0.944	0.190	59.1	E	59.1	E
WB	LR	295	1547	0.482	0.190	29.8	D	29.8	D
NB	L	202	1770	0.079	0.114	31.6	D	16.0	C
	TR	2267	3719	0.873	0.610	15.9	C		
SB	L	202	1770	0.079	0.114	31.6	D	8.6	B
	TR	2256	3702	0.411	0.610	8.2	B		

Intersection Delay = 18.1 sec/veh Intersection LOS = C
Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.788

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.. 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIAM.HC9
Area Type: Other 8-30-99 2025-AM
Comment: 2025 BUILD CONDITIONS (AM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		2	1	1	2		2		1			
Volumes		1920	305	40	865		290		30			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left					NB	Left	*			
	Thru		*				Thru				
	Right		*				Right	*			
	Peds						Peds				
WB	Left	*	*			SB	Left				
	Thru	*	*				Thru				
	Right						Right				
	Peds						Peds				
NB	Right	*				EB	Right	*			
SB	Right					WB	Right				
Green		10.0A	60.0A			Green		15.0A			
Yellow/AR		5.0	5.0			Yellow/AR		5.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	T	2310	3725	0.919	0.620	15.6	C	13.7	B
	R	1298	1583	0.247	0.820	1.3	A		
WB	L	287	1770	0.146	0.270	12.0	B	2.7	A
	T	2868	3725	0.334	0.770	2.3	A		
NB	L	602	3539	0.522	0.170	25.1	D	24.2	C
	R	507	1583	0.063	0.320	15.2	C		

Intersection Delay = 11.8 sec/veh Intersection LOS = B
Lost Time/Cycle, L = 9.0 sec Critical v/c(x) = 0.750

HCM: SIGNALIZED INTERSECTION SUMMARY Version 2.. 08-30-1999
Center For Microcomputers In Transportation

Streets: (E-W) WEAVER ROAD (N-S) GEICO ANNEX ENTRANCE
Analyst: MAAI File Name: WERGEIPM.HC9
Area Type: Other 8-30-99 2025-PM
Comment: 2025 BUILD CONDITIONS (PM PEAK)

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes		2	1	1	2		2		1			
Volumes		375	45	55	1845		1170		65			
Lane Width		12.0	12.0	12.0	12.0		12.0		12.0			
RTOR Vols			0			0			0			
Lost Time		3.00	3.00	3.00	3.00		3.00		3.00			

Signal Operations

Phase Combination		1	2	3	4			5	6	7	8
EB	Left					NB	Left	*			
	Thru		*				Thru				
	Right		*				Right	*			
	Peds						Peds				
WB	Left	*	*			SB	Left				
	Thru	*	*				Thru				
	Right						Right				
	Peds						Peds				
NB	Right	*				EB	Right	*			
SB	Right					WB	Right				
Green		36.0A	12.0A			Green		37.0A			
Yellow/AR		5.0	5.0			Yellow/AR		5.0			

Cycle Length: 100 secs Phase combination order: #1 #2 #5

Intersection Performance Summary

	Lane Mvmts	Group: Cap	Adj Sat Flow	v/c Ratio	g/C Ratio	Delay	LOS	Approach: Delay	LOS
EB	T	522	3725	0.796	0.140	32.7	D	30.0	D
	R	886	1583	0.053	0.560	6.4	B		
WB	L	747	1770	0.078	0.790	7.2	B	28.2	D
	T	2049	3725	0.995	0.550	28.8	D		
NB	L	1380	3539	0.919	0.390	26.1	D	24.8	C
	R	1266	1583	0.054	0.800	1.4	A		

Intersection Delay = 27.2 sec/veh Intersection LOS = D
Lost Time/Cycle, L = 6.0 sec Critical v/c(x) = 0.964

APPENDIX D
STP-066-1(36) Bibb County
PI 333055
Project Cost Summary

A.	Right of Way			**LGPA**
B.	Reimbursable Utilities			**LGPA**
C.	Major Structures			
	1. Bridge (Railroad)	7,200 SF @	$85.00	$612,000
			Subtotal	**$612,000**
D.	Grading and Earthwork			
	1. Borrow	118,875 CY @	$7.00	$832,125
	2. Excavation	11,200 CY @	$3.00	$33,600
			Subtotal	**$865,725**
E.	Drainage			
	1. Pipe			
	18 "	2,122 LF @	$25.00	$53,050
	24 "	1,000 LF @	$35.00	$35,000
	30 "	80 LF @	$40.00	$3,200
	FES 18 "	2 ea @	$400.00	$800
	FES 30 "	4 ea @	$565.00	$2,260
	FES 36 "	1 ea @	$690.00	$690
	SES 18"	6 ea @	$500.00	$3,000
	2. Catch Basin	7 ea @	$1,500.00	$10,500
	3. Drop Inlets	14 ea @	$1,500.00	$21,000
	4. Riprap	20 SY @	$30.00	$600
	4. Miscellaneous Drainage		Lump Sum	$20,000
			Subtotal	**$150,100**
F.	Base & Paving			
	1. Graded Aggregate Base	26,077 TN @	$18.50	$482,425
	2. Asphalt Concrete 12.5 mm 165#/SY (1-1/2")	2,713 TN @	$50.00	$135,650
	3. Asphalt Concrete 19.0 mm Superpave 220#/SY (2")	4,517 TN @	$32.00	$144,544
	4. Asphalt Concrete 25 mm Superpave 440#/SY (4")	8,030 TN @	$32.00	$256,960
	5. Bitum Tack Coat	6,756 GL @	$1.00	$6,756
			Subtotal	**$1,026,335**

G.	Concrete Work			
	1. Median Paving	7,980 SY @	$25.00	$199,500
	2. Driveway - 8"	470 SY @	$30.00	$14,100
	3. Driveway - 6"	222 LF @	$25.00	$5,550
	4. Curb & Gutter, TP 7	14,948 LF @	$12.00	$179,376
			Subtotal	**$219,150**
H.	Signing, Striping, and Lighting			
	1. Signs		Lump Sum	$15,000
	2. Signals	6 ea @	$80,000.00	$480,000
	3. Striping		Lump Sum	$25,000
	4. Lighting		Lump Sum	$330,000
			Subtotal	**$850,000**
I.	Guardrail			
	1. Guardrail, Type T	900 LF @	$38.40	$34,560
	2. Remove Existing	900 LF @	$2.00	$1,800
	3. Bridge End Ties	2 ea @	$525.00	$1,050
	4. Anchors TP 12	2 ea @	$100.00	$200
	5. Anchors TP 1	2 ea @	$500.00	$1,000
			Subtotal	**$38,610**
J.	Traffic Control & Mobilization			
	1. Traffic Control		Lump Sum	$90,000
	2. Mobilization		Lump Sum	$35,000
			Subtotal	**$125,000**
K.	Landscaping			
	1. Clearing & Grubbing		Lump Sum	$21,000
	2. Grassing		Lump Sum	$31,000
	3. Erosion Control		Lump Sum	$65,000
			Subtotal	**$96,000**
L.	Miscellaneous Items			
	1. Field Office TP 3	1 ea @	$30,000.00	$30,000
	2. Misc. Construction Items		Lump Sum	$40,000
			Subtotal	**$70,000**

SUMMARY OF PROJECT COSTS

Non-Construction Costs

A.	Right of Way	None
B.	Reimbursable Utilities	LGPA
	Total Non-Construction Cost	**None**

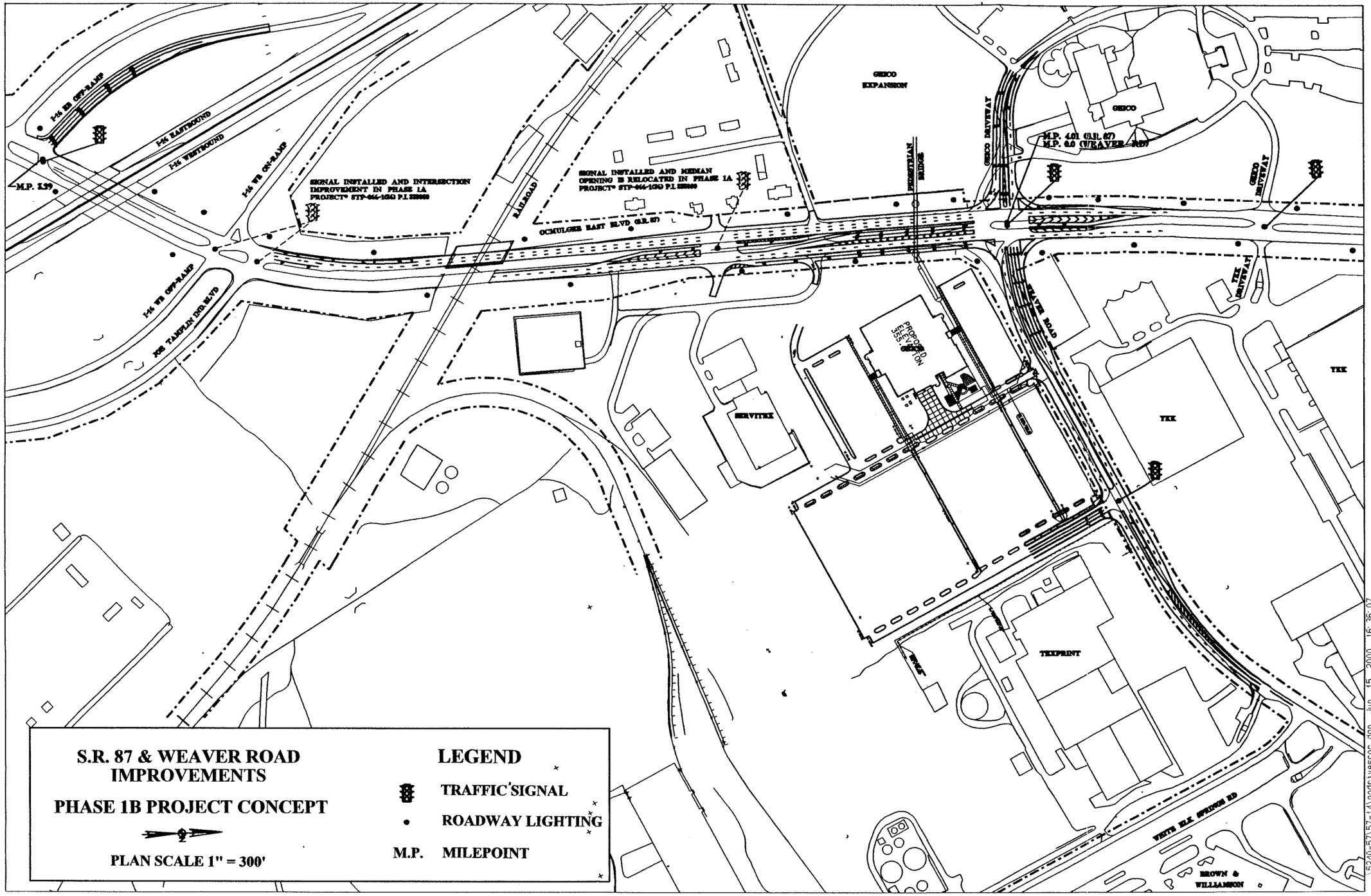
Construction Costs

C.	Major Structures	$612,000
D.	Grading and Earthwork	$865,725
E.	Drainage	$150,100
F.	Base and Paving	$1,026,335
G.	Concrete Work	$219,150
H.	Sign, Stripe & Light	$850,000
I.	Guardrail	$38,610
J.	Traffic Control	$125,000
K.	Landscaping	$96,000
L.	Miscellaneous Construction Items	$70,000
	Construction Cost Subtotal	$4,052,920
	Three years of inflation @ 5%	$638,841
	Engineering & Construction; 10%	$405,292
	Total Construction Cost	**$5,097,053**
	Total Project Cost	**$5,097,053**

APPENDIX E

Project Concept Layout

The attached drawing shows pavement width sufficient to accommodate the number of lanes required by the 2025 Build HCS analysis; however, a through lane in each direction on SR 87 and a southbound left turn lane on SR 87 are shown "striped out". The 2025 traffic volumes require the use of these lanes, but the 2000 traffic volumes do not.


I-46 EB OFF-RAMP
I-46 EASTBOUND
I-46 WESTBOUND
I-46 WB ON-RAMP
I-46 WB OFF-RAMP
JOE TAMPLIN INDS BLVD
M.P. 1.39
SIGNAL INSTALLED AND INTERSECTION IMPROVEMENT IN PHASE 1A PROJECT# STP-046-1(36) P.I. 22[illegible]
RAILROAD
OCMULGEE EAST BLVD (S.R. 87)
SIGNAL INSTALLED AND MEDIAN OPENING B RELOCATED IN PHASE 1A PROJECT# STP-046-1(36) P.I. 22[illegible]
GEICO EXPANSION
PEDESTRIAN BRIDGE
GEICO DRIVEWAY
GEICO
M.P. 4.81 (S.R. 87)
M.P. 6.0 (WEAVER RD)
GEICO DRIVEWAY
THE DRIVEWAY
WEAVER ROAD
PROPOSED SIGNALIZATION
SERVITEX
YKK
YKK
TEXPRINT
WHITE OAK SPRINGS RD
BROWN & WILLIAMSON
S.R. 87 & WEAVER ROAD IMPROVEMENTS
PHASE 1B PROJECT CONCEPT
PLAN SCALE 1" = 300'
LEGEND
TRAFFIC SIGNAL
ROADWAY LIGHTING
M.P. MILEPOINT
\5240-57\57-14\nodrivescor.dgn Jun. 15, 2000 16:36:07

Minutes of Concept Meeting
STP-066-1(36), Bibb County, P. I. No. 333055
Weaver Road Widening and Improvements to SR 87; Phase IB
November 10, 1999

Meeting convened at 9:00 a.m. in the GDOT Urban Design Conference Room, downtown office.

Angela Alexander, GDOT Project Manager, opened the meeting and had everyone introduce Themselves. She indicated that this project is the second of a three part project: Phase IA presently under consideration, this project (IB); and lastly, Phase II, consisting of an interchange modification (drawings were shown) at the I-16/SR87 (Ocmulgee East Boulevard) Interchange.

Joe Johnson, of Moreland Altobelli Associates Inc. Macon Office, presented the need and purpose of the project and general concept. He indicated that the cost listed in the concept report was wrong - the correct cost is $6,573,532.00. He added that a public information meeting was to be scheduled. He then asked for questions from him or other MAAI staff present.

Ms. Alexander asked what will happen (assuming Phase IB is built) if Phase II is not programmed in the TIP. MAAI responded that the level of service (LOS) at various intersections will improve; however, the SR 87/Weaver Road intersection will remain at LOS D or worse and the capacity of SR 87 will have been reached. [It was explained that Phases IA and IB were programmed projects in the Tip, but that Phase II was not, as of the latest Planning meeting.]

Ms. Alexander asked what Phase IA included. Signal installation and reconfiguration of Joe Tamplin/I-16 WB off-ramp intersection; signal installation and median cuts at Servitex Dr./Atkins Pl. intersection.

GDOT staff commented that the pedestrian bridge project over SR 87 was not awarded due to cost.

Ms. Alexander asked why the need for the truck turn-around at White Elk Springs Road, bringing up other issues involved with the safety and operational efficiency of the proposed configuration of that intersection in connection with the Brown & Williamson and Textprint facilities, as well as their location with respect to White Elk Springs Road. She raised a concern that the "right-turn movement from White Elk Springs Rd. to Weaver Rd. feeds into the entrance of Brown & Williamson".

Joe Palladi, State Urban Design Engineer, agreed with this concern, adding that all truck traffic needs to access Weaver Road directly from White Elk Springs Road, that truck traffic during AM and PM peak hours would conflict with vehicular traffic accessing Weaver Road creating unsafe conditions.

MAAI staff responded that the businesses did not think it was in their best interest to relocate their guardhouses and entrance gates to from White Elk Springs Road. Mr. Palladi stated that safe access to Weaver Road must be maintained independent of who is purchasing the right-of-way, and that U-turns are needed at the median break intersection of White Elk Springs Road and Weaver Road.

Mr. Palladi suggested that Phase IB include widening the railroad and to set up an embankment and clear zone for the bridge now, so that it will settle into the future footprint of the interchange

modification project. He then asked about the status of the IMR. MAAI staff said that the GDOT Office of Planning had not yet assigned it to the RTP/TIP. The Planning office stated that they were awaiting additional traffic data.

General GDOT comments:

-Warrants for all signals need to be documented, and conduit for all signals needs to be provided to interconnect them.

- FHWA will make this project exempt (for the I-16 EB off-ramp modifications).

Office of Environment/Location, District Office, Utilities, Programming: No specific comments.

MEETING/CONFERENCE RECORD OF ATTENDEES

PURPOSE: Concept Team Meeting

LOCATION: Urban Design Conference Room

DATE: Nov. 10, 1999 HOUR: 9:00

MODERATOR: A. T. Alexander

	NAME	ORGANIZATION	TELEPHONE NO.
1.	Angela J. Alexander	GDOT-Urban Des.	(404) 656-5444.
2.	KENNETH H. SHEETS	BIBB COUNTY	(912) 749-6660
3.	Kathe Mullins	DOT - Programming	(404) 651-7043
4.	Ken Estes DOT	Traffic Operations	(404) 635-8127
5.	TIM SMITH	GDOT - TRAFFIC OPERATIONS	404-635-8126
6.	Van Etheridge	MAAI - Macon - Bibb Rd. Program	912-755-0000
7.	SHERI WILLIAMSON	MAAI - Macon - Bibb Rd. Program	912-755-0000
8.	Todd Hill	MAAI - Chamblee	770 455 9375
9.	Robert Whitesides	MAAI - Chamblee	(770) 455-9375
10.	Karla Poshedly	MAAI - Chamblee	770-455-9375
11.	Joe Johnson	MAAI - Macon	912-755-0000
12.	WALTER BOYD	FHWA	404 562-3657
13.	David Mulling	GDOT - Eng. Serv.	404-656-6845
14.	Joe Palladi	GDOT - Urban Des	404-656-5436
15.	Ben Buchan	GDOT - Urban Des	404-656-5444
16.			
17.			
18.			
19.			
20.			

REMARKS:

FILE

Palladi, Joe

From: Walter Boyd [WBOYD@ga.fhwa.dot.gov]
Sent: Friday, November 12, 1999 11:07 AM
o: david.mulling@dot.state.ga.us
Cc: joe.palladi@dot.state.ga.us; MWOODWARD@ga.fhwa.dot.gov
Subject: STP-066-1(36) SR 87 Bibb Co.
P.I. NO. 333055

David,

On 11/10/99, we attended the Concept Meeting for this project. Since the amount of work on the Interstate is limited to just a minor amount of paving on one Interstate ramp, I would like to make this project exempt from FHWA oversight. Please get this taken care of in your system.

Thanks, Walter

Department of Transportation
State of Georgia

PROJECT CONCEPT REPORT

IMPROVEMENTS TO S.R. 87 & WEAVER ROAD
Phase IB

Project STP-066-1(36) Bibb County
Georgia DOT P.I. Number: 333055
U.S. Route Number: 23, 129
State Route Number: SR 87

RECOMMENDATION FOR APPROVAL: Date of Report: April 12, 2000

DATE PROJECT MANAGER

This project is contained in the Regional Transportation Plan (RTP) and/or in the Statewide Transportation Improvement Program (STIP). The concept as presented herein and submitted for approval is consistent with that which is included in the RTP and/or the STIP

DATE STATE TRANSPORTATION PLANNING ADMINISTRATOR

DATE STATE TRANSPORTATION PROGRAMMING ENGINEER

DATE ENVIRONMENTAL/LOCATION ENGINEER

DATE STATE TRAFFIC OPERATIONS ENGINEER

8/14/00
DATE DISTRICT ENGINEER

DATE PROJECT REVIEW ENGINEER

8/6/00
DATE STATE URBAN DESIGN ENGINEER

DATE STATE BRIDGE AND STRUCTURAL ENGINEER