

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

**OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE**

FILE P.I. # 0009405 **OFFICE** Design Policy & Support
CSSTP-0009-00(405)
GDOT District 1 - Gainesville
Barrow County **DATE** 2/17/2011
SR 8/Atlanta Hwy. @ CR 97/ Ed Hogan Rd.

FROM  Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT APPROVED CONCEPT REPORT

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Bobby Hilliard, State Program Delivery Engineer
Cindy VanDyke, State Transportation Planning Administrator
Angela Robinson, Financial Management Administrator
Glenn Bowman, State Environmental Administrator
Kathy Zahul, State Traffic Engineer
Georgene Geary, State Materials & Research Engineer
Ron Wishon, State Project Review Engineer
Jeff Baker, State Utilities Engineer
Ken Thompson, Statewide Location Bureau Chief
Todd McDuffie, District Engineer
Robert Mahoney, District Preconstruction Engineer
Allen Ferguson, District Utilities Engineer
Laura Dixon, District Environmentalist
BOARD MEMBER - 7th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: CSSTP-0009-00(405)

Barrow County

P. I. Number: 0009405

Federal Route Number: N/A

State Route Number: 8

SR 8/Atlanta Hwy @ CR 97/Ed Hogan Rd
(See following page for Vicinity Map)

Submitted for approval:

DATE _____

Shrujal H. Amin, Moreland Altobelli Associates, Inc.

Design Consultant Name & Firm Name

DATE _____

Barrow County

Local Government

DATE 9/30/10

Office Head (Project Manager's Office)

DATE 9/30/10

Project Manager

Recommendation for approval:

DATE 11/10/2010

GENETHA RICE-SINGLETON*

Program Control Administrator

DATE 11/22/2010

GLENN BOWMAN*

State Environmental Administrator

DATE 11/15/2010

KATHY ZAHUL*

State Traffic Engineer

DATE 11/8/2010

RON WISHON*

Project Review Engineer

DATE 11/17/2010

LEE COKINS FOR JEFF BAKER*

State Utilities Engineer

DATE 11/12/2010

TODD MCDUFFIE*

District Engineer/District Utilities Engineer

DATE _____

State Transportation Financial Management Administrator

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

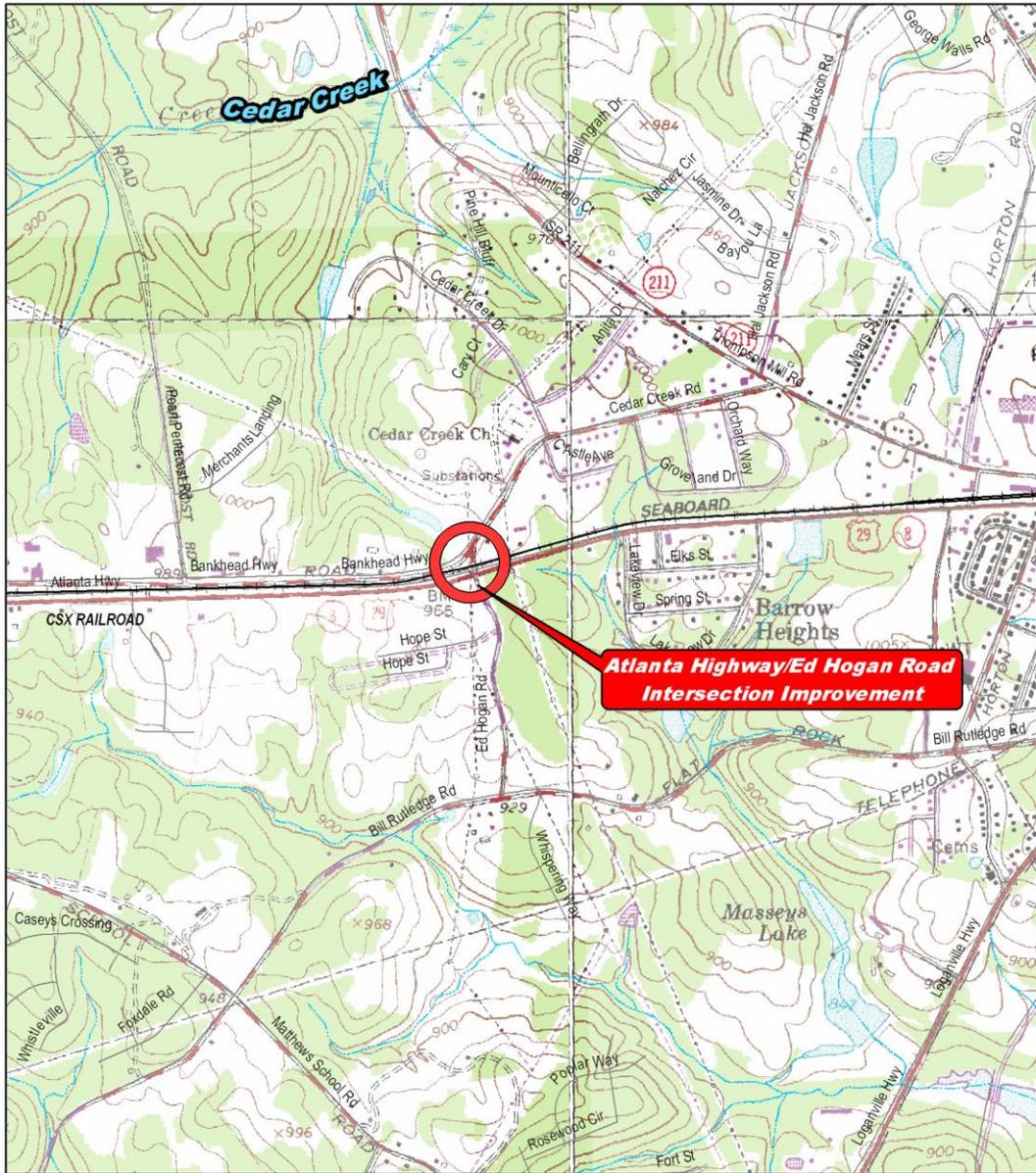
DATE 11/12/10

Joseph J. Alexander

State Transportation Planning Administrator

* - RECOMMENDATION ON FILE

PROJECT LOCATION MAP



SOURCE: BARROW COUNTY GIS & USGS TOPO QUADS WINDER NORTH AND BOLD SPRINGS

10-14-09

	<p>Project Location Map</p> <p> Projects</p> <p>0 1,500 3,000 Feet</p>	<p>Atlanta Highway/Ed Hogan Intersection Improvement</p> <p>Barrow County, Georgia</p>	
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Need and Purpose:

The need and purpose of this proposed project is to provide an additional access point across the railroad at the intersection of Ed Hogan Road at SR 8 in order to accommodate existing and projected traffic. There is also a need to reduce the potential for collisions that is currently exhibited at neighboring rail crossings.

Planning Background and Project History

This project is listed in the short-range fiscal years 2008-2013 Transportation Improvement Plan (TIP) as number BA-001.

Existing and Projected Traffic Volumes

Traffic volumes were predicted based upon two factors: background traffic growth and redistributed traffic after the new railroad crossing at Ed Hogan Road is opened. The details of the traffic projection are presented in the Traffic Projection Summary Memorandum attached.

	Existing 2009	Base Year 2012	Design Year 2032
SR 8(Atlanta Hwy)	<u>15,700</u>	<u>15,800</u>	<u>28,540</u>
Bankhead Hwy / Cedar Creek Road	<u>5,000</u>	<u>8,400</u>	<u>15,160</u>
Ed Hogan Road	<u>2,000</u>	<u>2,100</u>	<u>3,160</u>

Summary of Intersection Capacity Analysis Results

Intersection	Existing (2009)				Build (2012)				Design (2032)			
	AM		PM		AM		PM		AM		PM	
SR 8 (Atlanta Hwy) at Ed Hogan Road	North - bound	South - bound	North - bound	South - bound	North - bound	South - bound	North - bound	South - bound	North - bound	South - bound	North - bound	South - bound
LOS	C	n/a	C	n/a	E	C	E	C	F	F	F	F
Delay (sec)	18.9	n/a	19.0	n/a	45.8	21.0	41.7	21.2	*	*	*	*

* Two-way stop controlled intersections that exceed the methodology of the highway capacity manual are rated as LOS F with an undefined delay.

The intersection capacity analysis shows that in the build year, the two-way stop controlled intersection will operate at a level of service (LOS) C for the southbound approach to SR 8 in the AM and PM peak hours. The northbound LOS will be E in both the AM and PM peak hours.

Signal Warrants

A traffic engineering study will be completed to determine if a signal is warranted. If the intersection is signalized the following table summarizes the predicted levels of service.

Intersection	Existing (2009)		Build (2012)		Design (2032)	
	AM	PM	AM	PM	AM	PM
SR 8 (Atlanta Hwy) at Ed Hogan Road	Signalized Condition					
LOS	n/a	n/a	A	A	C	C
Delay (sec)	n/a	n/a	9.4	8.0	32.4	20.5

Under a signalized condition, the intersection will operate at LOS A in the AM and PM peak hours of the build year. In the design year it will operate at LOS C.

Crash Data

The table below illustrates that SR 8 (Atlanta Hwy) is exceeding the statewide average for the number of collisions and injury collisions for similar facilities (Rural Major Collectors). The project may reduce crash frequency and severity on SR 8 by diverting traffic to other routes and creating a less congested area compared to the no build.

SR 8 (Atlanta Hwy)		Crashes	Injury Crashes	Crash Rate*	Statewide Crash Rate	Injury Crash Rate*	Statewide Injury Crash Rate
	2006	88	26	612	203	181	73
	2007	74	18	514	203	125	72
	2008	46	13	320	194	90	68
CR 28 (Cedar Creek Road)							
	2006	4	1	166	156	42	54
	2007	3	1	66	168	42	57
	2008	4	1	90	141	43	46

*Rates are measured in crashes or injury crashes per 100 million vehicle miles.

Yellow highlighted cells mark where the crash rate exceeds the statewide average for similar facilities

There are also concerns at the existing railroad crossing that Ed Hogan Road is being designed to supplement. There is a significant elevation differential between SR 8 (Atlanta Highway), the railroad and CR 28 (Bankhead Highway / Cedar Creek Road) at the crossing immediately west of Ed Hogan Road. The differential causes some tractor-trailer combination trucks to ground their trailers as they traverse the steep up and then down grade across the tracks.

The proposed project may reduce potential collisions at this crossing by providing an alternate location with more appropriate grades for tractor-trailer combination trucks.

Collision Statistics at CR 38 (Railroad Crossing west of Proposed Project)					
Year	Angle	Not A Collision With A Motor Vehicle	Rear End	Sideswipe - Same Direction	Grand Total
2006	1		1	1	3
2007	2	1	4		7
2008	2		2		4
Grand Total	5	1	7	1	14

Collision Statistics by Direction of At-Fault Vehicle at CR 38 (Railroad Crossing west of Proposed Project)					
Year	Direction of At-Fault Vehicle	Angle	Rear End	Sideswipe - Same Direction	Grand Total
2006	South	1		1	2
2006	Total	1		1	2
2007	North		1		1
	South	1	3		4
2007	Total	1	4		5
2008	North	1			1
	South	1	1		2
2008	Total	2	1		3
Grand Total		4	5	1	10

Description of the proposed project:

The proposed project would consist of adding a right turn lane in the westbound direction on SR 8 and in the northbound direction of Ed Hogan Road. The project would include the realignment of the intersection Bankhead Hwy and Cedar Creek Road with dedicated right and left turn lanes turning onto Bankhead Hwy from Cedar Creek Road. In addition, Ed Hogan Road would be extended across the CSX Railroad (creating a new at grade rail crossing) to Cedar Creek Road creating a new intersection at SR 8 and Ed Hogan Road. Right and left turn lanes are proposed on Ed Hogan in both directions. SR 8 would be resurfaced and a new right turn lane would be proposed in the westbound direction.

Is the project located in a PM 2.5 Non-attainment area? X Yes No

Is the project located in an Ozone Non-attainment area? X Yes No

This project involves roadway operational upgrades and does not add capacity. The ARC TIP reference states that this project is exempt from Air Quality Analysis.

Logical Termini

The logical southern terminus of this project would occur at the intersection of SR 8 and Ed Hogan Road. The improvement to this intersection will include resurfacing and the extension Ed Hogan Road to the intersection of Cedar Creek Road and Bankhead Highway. This extension will provide additional passage over the CSX railroad tracks and will allow commuters another access route to Cedar Creek Road or Bankhead Road.

The logical northern terminus of the proposed Ed Hogan Road at SR 8 would occur at the intersection of Bankhead Highway and Ed Hogan Road/Cedar Creek Road. Bankhead Hwy will be realigned closer to a 90 degree angle to help with better sight distance.

The project is in the Atlanta Regional Commission (ARC) conforming Transportation Plan and TIP. It is identified in the FY 2008-2013 TIP as Project Reference Numbers BA-001, described as an intersection improvement.

PDP Classification: Major Minor X

Federal Oversight: Full Oversight (), Exempt(X), State Funded (), or Other ()

Functional Classification:

- SR 8(Atlanta Hwy) - Rural Major Collector
- Bankhead Highway – Rural Local Road
- Ed Hogan Road - Urban Local Road
- Cedar Creek Road - Rural Local Road

U. S. Route Number(s): 29 **State Route Number(s):** 8

Traffic (AADT):

	Existing 2009	Base Year 2012	Design Year 2032
SR 8(Atlanta Hwy Nw)	<u>15,700</u>	<u>15,800</u>	<u>28,540</u>
Bankhead Hwy / Cedar Creek Road	<u>5,000</u>	<u>8,400</u>	<u>15,160</u>
Ed Hogan Road	<u>2,000</u>	<u>2,100</u>	<u>3,160</u>

Existing design features:

- Typical Sections:
 - SR 8 (Atlanta Highway) – Two 12’ lanes in each direction with left-turn lane at the intersection of SR 8 and Ed Hogan road.
 - Bankhead Highway – Two 11’ lanes in each direction.
 - Ed Hogan Road – Two 10’ lanes in each direction.
 - Cedar Creek Road - Two 10’ lanes in each direction.

- Posted speed:
 - Ed Hogan Road – 35 mph
 - Bankhead Highway – 35 mph
 - SR 8 (Atlanta Highway) – 40 mph
 - Cedar Creek Road – 35 mph
- Maximum super-elevation rate for curve: 6.00%
- Maximum grade
 - SR 8 8%
 - Bankhead Highway 8%
 - Ed Hogan Road 8%
 - Cedar Creek Road 7%
- Width of right-of-way:
 - SR 8 – varies 35 to 45 ft.
 - Bankhead Highway – varies 25 to 30 ft.
 - Ed Hogan Road – varies 30 to 35 ft.
 - Cedar Creek Road - varies 30 to 35 ft.
- Major structures: None
- Major intersections and interchanges along the project: The closest major signalized intersection is located east of the project, approximately 1.1 mile at the intersection of SR 211 and Horton Street.
- Existing Length of project on Ed Hogan Road: 0.058 mile

Proposed Design Features:

- Proposed Typical Sections:
 - SR 8 (Atlanta Highway) – One 12' lane in each direction with left-turn lanes at the intersection of Ed Hogan road and a right decel lane for north bound traffic.
 - Bankhead Highway – One 12' lane in each direction.
 - Ed Hogan Road/Cedar Creek Road – One 12' lane in each direction with left-turn and right decel lanes in both directions at the intersection of SR 8.
- Proposed Design Speed:
 - SR 8 – 40 mph
 - Bankhead Hwy – 35 mph
 - Ed Hogan Road – 40 mph
 - Cedar Creek Road – 40 mph
- Proposed Maximum grade
 - SR 8 8%
 - Bankhead Highway 8%
 - Ed Hogan Road 8%
 - Cedar Creek Road 7%
- Maximum grade allowable
 - SR 8 8%
 - Bankhead Highway 8%
 - Ed Hogan Road 8%
 - Cedar Creek Road 7%
- Proposed Maximum grade driveway: 10 %
- Proposed Minimum radius:

- SR 8: 3000' Minimum allowable radius: 485'
- Bankhead Hwy: 420'/410' Minimum allowable radius: 340'
- Ed Hogan Road/Cedar Creek Road: 525' Minimum allowable radius: 485'
- Maximum superelevation rate:: 6.00%
- Proposed Maximum superelevation: 6.00%
- Right of way:
 - Width of R/W (SR 8) 54 ft. – 69 ft. varies (typ)
 - Width of R/W (Bankhead Hwy) 52 ft. – 60 ft. varies(typ)
 - Width of R/W (Ed Hogan Road) 50 ft. – 84 ft. varies(typ)
 - Width of R/W (Cedar Creek Drive) 40 ft. – 84 ft. varies(typ)
 - Easements: Temporary (X), Permanent (X), Utility (), Other ().
 - Type of access control: Full (), Partial (), By Permit (X), Other ().
 - Number of parcels: 6 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Major Structures: None
- Major intersections and interchanges: The closest major signalized intersection is located east of the project, approximately 1.1 mile at the intersection of SR 211 and Horton Street.
- Traffic control during construction: Traffic control will be utilized to maintain traffic during construction. Some temporary lane closures may be required during stage construction where grade changes are significant.
- Transportation Management Plan Anticipate: Yes() No(X)
- Design Exceptions for controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
HORIZONTAL ALIGNMENT:	()	()	(X)
LANE WIDTH:	()	()	(X)
SHOULDER WIDTH:	()	()	(X)
VERTICAL GRADES:	()	()	(X)
CROSS SLOPES:	()	()	(X)
STOPPING SIGHT DISTANCE:	()	()	(X)
SUPERELEVATION RATES:	()	()	(X)
VERICAL ALIGNMENT	()	()	(X)
SPEED DESIGN:	()	()	(X)
VERTICAL CLEARANCE:	()	()	(X)
BRIDGE WIDTH:	()	()	(X)
BRIDGE STRUCTURAL CAPACITY:	()	()	(X)
LATERAL OFFSET TO OBSTRUCTION:	()	()	(X)
- Design Variances: None
- Environmental concerns:
 - Wetlands – There is one wetland area that will be affected. A Nationwide 404 Permit will be obtained for this impact.
 - Historic properties - CSX Railroad
 - There are no impacts anticipated to any hazardous waste or archeological sites. There are no cemeteries near this project.
- Anticipated Level of environmental analysis:

- Are Time Savings Procedures appropriate? Yes (X) No ()
- Categorical exclusion anticipated (X)
- Environmental Assessment/Finding of No Significant Impact (FONSI) ()
- Environmental Impact Statement (EIS) ()
- Utility involvements: There are both overhead and underground utilities located within the project limits. These include Georgia Power, Bellsouth, and Barrow County Water and Sewer.
- VE Study Required Yes () No (X)
- Benefit/Cost Ratio 22.60

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST*	MITIGATION
BY WHOM	Barrow County	Barrow County	Barrow County	GDOT/Barrow County	Barrow County
\$ AMOUNT	\$110,000.00	\$270,000	\$500,000	\$1,442,620.52	\$22,000

*CST Cost includes: Construction, Engineering and Inspection, Fuel Cost Adjustment, and Asphalt Cement Cost Adjustment.

Project Activities Responsibilities:

- Design: Barrow County
- Right-of-Way Acquisition: Barrow County
- Right-of-Way Funding: Barrow County
- Relocation of Utilities: Barrow County
- Letting to contract: Barrow County
- Supervision of construction: GDOT/ Barrow County
- Providing material pits: Contractor (if required)
- Providing detours: Contractor (if required)
- Environmental Studies/Documents/Permits: Barrow County
- Environmental Mitigation: Barrow County
- Design & Coordination for Railroad: Barrow County

Coordination

- Concept Kickoff: An initial meeting was held on August 7, 2009. See attached minutes of meeting.
- Concept Kickoff: A full concept team meeting was held on July 28, 2010. See the attached minutes of meeting.
- P. A. R.: A Practical Alternatives Report (P.A.R.) is not expected for this project.
- FEMA, USCG, and/or TVA. – Not applicable.
- Public involvement: A Public Information Open House (PIOH) will be scheduled.
- Other projects in the area:
 - GDOT Project 0007830, CSSTP-0007-00(830) – SR 211 from Gwinnett County line to SR 11/Athens Street – Widening, and Reconstruction/Rehabilitation.
 - GDOT Project 0007695, CSSTP-0007-00(695) – SR 211 @ CS 696/Horton Street – Operational Improvement and Reconstruction/Rehabilitation.
 - GDOT Project 0007696, CSSTP-0007-00(696) – SR 211 @ CS 754/Mcneal Road – Operational Improvement and Reconstruction/Rehabilitation.

- GDOT Project M003191, SF000-M003-00(191) – Barrow Co SR 8 Lakeview Drive Left turn lane – Turn Lanes and Maintenance.
- GDOT Project M003963, CSSTPM00300963 – SR 8 from CR 67/Ethridge Road to Russell Cemetery Road – Resurface & Maintenance.
- GDOT Project 0008979, CSSTEE-0008-00(979) – SR 11/SR 53 FM CS 666/Porter St to CS 681/CS 731/Stephens St – Te-Bike/Ped Facility.
- GDOT Project M004054, CSSTPM00400054 – SR 11 from SR 8 to Jackson County Line – Resurface & Maintenance.
- GDOT Project 0007831, CSSTP-0007-00(831) – SR 324 from Gwinnett County Line to SR 8 – Widening.
- GDOT Project 0001816, STP00-0001-00(816) - CR 326/6th Street Grade Separation @ CDX RR – Railroad Crossing
- GDOT Project 0007356, CSSTP-0007-00(356) - SR 8 @ SR 324 & @ CR 326 & @ CR 327 & @ CR 328 – Signals
- GDOT Project 0006327, CSSTP-0006-00(327) – West Winder Bypass- New Construction.
- Other Coordination
 - Railroads: CSX Railroad

Scheduling – Responsible Parties’ Estimate

- | | | |
|--|-------------------------|------------------------|
| ● Time to complete the environmental process: | Begin: <u>8/1/2010</u> | End: <u>12/15/2011</u> |
| ● Time to complete preliminary construction plans: | Begin: <u>8/1/2010</u> | End: <u>11/1/2011</u> |
| ● Time to complete right-of-way plans: | Begin: <u>12/1/2011</u> | End: <u>6/1/2012</u> |
| ● Time to complete the Section 404 Permit: | Begin: <u>12/1/2011</u> | End: <u>4/1/2012</u> |
| ● Time to complete final construction plans: | Begin: <u>6/1/2012</u> | End: <u>11/1/2012</u> |
| ● Time to complete to purchase right-of-way: | Begin: <u>6/1/2012</u> | End: <u>3/1/2013</u> |

Other alternates considered:

No-Build Alternative

The no-build alternative is an alternative in which Barrow County would take no action to improve the intersection. Traffic congestion and operational problems would continue and the intersections would be inadequate to handle the future (year 2032) traffic volumes.

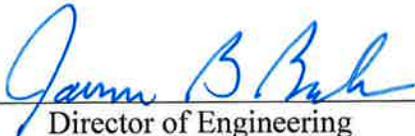
Comments: None.

Attachments:

1. Detailed Cost Estimates:
 - a. Construction including Engineering and Inspection
 - b. Complete Fuel & Asphalt Price Adjustment Forms
 - c. Right-of-Way
 - d. Utility Cost Estimate
 - e. Benefit/Cost Ratio Formula Sheet
 - f. Mitigation Costs Worksheet
2. Typical sections
3. Concept Sketch
4. Traffic Flow Diagram

Project Concept Report page 10
Project Number: CSSTP-009-00(405)
P.I. Number: 0009405
County: Barrow

5. Meeting Minutes
6. Railroad Coordination Letters

Concur: 
Director of Engineering

Approved: 
Chief Engineer

Date 2/16/2011

Estimate Report for file "Ed Hogan @ SR 8"

Section GRADING AND DRAINAGE					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
210-0100	1	LS	50000.0	GRADING COMPLETE -	50000.0
550-1180	100	LF	38.29	STORM DRAIN PIPE, 18 IN, H 1-10	3829.0
550-1240	155	LF	45.52	STORM DRAIN PIPE, 24 IN, H 1-10	7055.6
550-1300	75	LF	59.55	STORM DRAIN PIPE, 30 IN, H 1-10	4466.25
550-1361	120	LF	62.84	STORM DRAIN PIPE, 36 IN, H 10-15	7540.8
550-2180	75	LF	33.24	SIDE DRAIN PIPE, 18 IN, H 1-10	2493.0
550-3418	6	EA	562.15	SAFETY END SECTION 18 IN, SIDE DRAIN, 4:1 SLOPE	3372.89
550-4218	2	EA	551.07	FLARED END SECTION 18 IN, STORM DRAIN	1102.14
550-4224	4	EA	643.26	FLARED END SECTION 24 IN, STORM DRAIN	2573.04
550-4230	2	EA	761.29	FLARED END SECTION 30 IN, STORM DRAIN	1522.58
550-4236	2	EA	1055.83	FLARED END SECTION 36 IN, STORM DRAIN	2111.66
668-2100	5	EA	2360.78	DROP INLET, GP 1	11803.90
Section Sub Total:					\$97,870.87

Section EROSION CONTROL					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	2	AC	375.19	TEMPORARY GRASSING	750.38
163-0240	60	TN	142.78	MULCH	8566.8
163-0300	7	EA	1220.17	CONSTRUCTION EXIT	8541.19
163-0503	8	EA	454.35	CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3	3634.8
163-0523	12	EA	144.07	CONSTRUCT AND REMOVE TEMPORARY DITCH CHECKS - TYPE C SILT FENCE	1728.84
163-0550	8	EA	208.95	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	1671.6
165-0010	2700	LF	0.73	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	1971.0
165-0030	1350	LF	0.66	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	891.0
165-0041	432	LF	1.87	MAINTENANCE OF CHECK DAMS - ALL TYPES	807.84
165-0087	8	EA	113.48	MAINTENANCE OF SILT CONTROL GATE, TP 3	907.84
165-0101	7	EA	500.48	MAINTENANCE OF CONSTRUCTION EXIT	3503.36
165-0105	5	EA	85.71	MAINTENANCE OF INLET SEDIMENT TRAP	428.54
167-1000	2	EA	559.68	WATER QUALITY MONITORING AND SAMPLING	1119.36
167-1500	6	MO	746.02	WATER QUALITY INSPECTIONS	4476.12
171-0010	5400	LF	2.38	TEMPORARY SILT FENCE, TYPE A	12852.0
171-0030	2700	LF	3.67	TEMPORARY SILT FENCE, TYPE C	9909.0
603-2181	400	SY	35.36	STN DUMPED RIP RAP, TP 3, 18 IN	14144.0
603-7000	400	SY	4.35	PLASTIC FILTER FABRIC	1739.99
700-6910	4	AC	672.29	PERMANENT GRASSING	2689.16
700-7000	12	TN	55.58	AGRICULTURAL LIME	666.96
700-7010	10	GL	19.03	LIQUID LIME	190.3
700-8000	4	TN	402.52	FERTILIZER MIXED GRADE	1610.08
700-8100	200	LB	2.31	FERTILIZER NITROGEN CONTENT	462.0
710-9000	2000	SY	2.5	PERMANENT SOIL REINFORCING MAT	5000.0
Section Sub Total:					\$88,262.18

Section TRAFFIC CONTROL AND MOBILIZATION					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	50000.0	TRAFFIC CONTROL -	50000.0
Section Sub Total:					\$50,000.00

Section Railroad					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
999-9999	1	Lump Sum	250000.0	Railroad Crossing	250000.0
Section Sub Total:					\$250,000.00

Section BASE&PAVING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	406	TN	17.04	GR AGGR BASE CRS, INCL MATL	6918.24
402-1802	5	TN	75.94	RECYCLED ASPH CONC PATCHING, INCL BITUM MATL & H LIME	379.7
402-1812	205	TN	69.44	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	14235.19
402-3121	1218	TN	60.11	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	73213.98
402-3130	1687	TN	64.0	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	107968.0
402-3190	3374	TN	68.26	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	230309.24
413-1000	550	GL	2.15	BITUM TACK COAT	1182.5
432-5010	4843	SY	1.24	MILL ASPH CONC PVMT, VARIABLE DEPTH	6005.32
446-1100	3550	LF	5.2	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	18460.0
500-9999	81	CY	158.95	CLASS B CONC, BASE OR PVMT WIDENING	12874.94
Section Sub Total:					\$471,547.13

Section SIGNING AND MARKING

Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1033	70	SF	20.25	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	1417.5
636-2070	25	LF	8.71	GALV STEEL POSTS, TP 7	217.75
636-2080	95	LF	11.81	GALV STEEL POSTS, TP 8	1121.95
653-0120	8	EA	75.17	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	601.36
653-1501	4300	LF	0.46	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	1978.0
653-1502	4900	LF	0.46	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2254.0
653-1704	100	LF	3.46	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	346.0
653-1804	2385	LF	1.68	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	4006.79
653-3501	210	GLF	0.32	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	67.2
653-3502	480	GLF	0.24	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, YELLOW	115.19
653-6006	240	SY	2.68	THERMOPLASTIC TRAF STRIPING, YELLOW	643.2
654-1001	50	EA	3.05	RAISED PVMT MARKERS TP 1	152.5
654-1003	25	EA	3.26	RAISED PVMT MARKERS TP 3	81.5
Section Sub Total:					\$13,002.96

Section TRAFFIC SIGNALS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
615-1200	280	LF	9.8	DIRECTIONAL BORE - 6"	2744.0
615-1200	660	LF	9.8	DIRECTIONAL BORE - 3"	6468.00
639-3004	2	EA	13142.03	STEEL STRAIN POLE, TP IV	26284.06
647-1000	1	LS	56813.0	TRAFFIC SIGNAL INSTALLATION NO - no. 1	56813.0
647-3000	4	EA	2564.14	INTERNALLY ILLUMINATED STREET SIGN	10256.56
647-3100	1	EA	893.41	INTERNALLY ILLUMINATED STREET NAME SIGN CONTROL ASSEMBLY	893.41
682-6233	1780	LF	2.41	CONDUIT, NONMETL, TP 3, 2 IN	4289.8
938-1100	4	EA	5706.79	INTERSECTION VIDEO DETECTION SYSTEM ASSEMBLY, TYPE A	22827.16
938-1200	1	EA	393.15	PROGRAMMING MONITOR, TYPE A	393.15
938-1210	1	EA	455.53	OUTPUT EXPANSION MODULE, TYPE A	455.53
938-8000	1	LS	1884.92	TESTING	1884.92
938-8500	1	LS	2381.21	TRAINING	2381.21
Section Sub Total:					\$135,690.80

Total Estimated Cost: \$1,106,373.94

Subtotal Construction Cost	\$1,106,373.94
E&I Rate 5.0 %	\$55,318.70
Inflation Rate 0.0 % @ 1 Years	\$0.00
	<hr/>
Total Construction Cost	\$1,161,692.64

A
A4

P.I. Number 9405

County Barrow

Date 6/22/2010

Project Number CSSTP-0009-00 (405)

**Special Provision, Section 109-Measurement and Payment
FUEL PRICE ADJUSTMENT (ENGLISH 125% MAX)**

ENTER FPL DIESEL	3.018
ENTER FPM DIESEL	6.791

ENTER FPL UNLEADED	2.804
ENTER FPM UNLEADED	6.309

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

INCREASE ADJUSTMENT
125.00%

INCREASE ADJUSTMENT
125.00%

ROADWAY ITEMS	QUANTITY	DIESEL FACTOR	GALLONS DIESEL	UNLEADED FACTOR	GALLONS UNLEADED	REMARKS
Excavations paid as specified by Sections 205 (CUBIC YARD)		0.29		0.15		
Excavations paid as specified by Sections 206 (CUBIC YARD)		0.29		0.15		
GAB paid as specified by the ton under Section 310 (TON)	406.000	0.29	117.74	0.24	97.44	
Hot Mix Asphalt paid as specified by the ton under Sections 400 (TON)		2.90		0.71		
Hot Mix Asphalt paid as specified by the ton under Sections 402 (TON)	6489.000	2.90	18818.10	0.71	4607.19	
PCC Pavement paid as specified by the square yard under Section 430 (SY)		0.25		0.20		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Bridge Excavation (CY) Section 211				8.00		1.50		
Class __ Concrete (CY) Section 500	81.00	158.95	12.8750	8.00	103.00	1.50	19.31	
Class __ Concrete (CY) Section 500				8.00		1.50		
Class __ Concrete (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Superstru Con Class __ (CY) Section 500				8.00		1.50		
Concrete Handrail (LF) Section 500				8.00		1.50		
Concrete Barrier (LF) Section 500				8.00		1.50		

BRIDGE ITEMS	Quantity	Unit Price	QF/1000	Diesel Factor	Gallons Diesel	Unleaded Factor	Gallons Unleaded	REMARKS
Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
Stru Steel <u>Plan Quantity</u> (LB) Section 501				8.00		1.50		
PSC Beams _____ (LF) Section 507				8.00		1.50		
PSC Beams _____ (LF) Section 507				8.00		1.50		
PSC Beams _____ (LF) Section 507				8.00		1.50		
Stru Reinf <u>Plan Quantity</u> (LB) Section 511				8.00		1.50		
Stru Reinf <u>Plan Quantity</u> (LB) Section 511				8.00		1.50		
Bar Reinf Steel (LB) Section 511				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Piling _____ inch (LF) Section 520				8.00		1.50		
Drilled Caisson, _____ (LF) Section 524				8.00		1.50		
Drilled Caisson, _____ (LF) Section 524				8.00		1.50		
Drilled Caisson, _____ (LF) Section 524				8.00		1.50		
Pile Encasement, _____ (LF) Section 547				8.00		1.50		
Pile Encasement, _____ (LF) Section 547				8.00		1.50		
SUM QF DIESEL=				19038.84	SUM QF UNLEADED=		4723.94	
DIESEL PRICE ADJUSTMENT(\$)				\$66,078.10				
UNLEADED PRICE ADJUSTMENT(\$)				\$15,232.82				

**ASPHALT CEMENT PRICE ADJUSTMENT FOR
BITUMINOUS TACK COAT(Surface Treatment 125% MAX)**

APPLICABLE TO CONTRACTS CONTAINING THE 413 SPEC. SECTION 413.5.01 ADJUSTMENTS ASPHALT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT

<http://www.dot.ga.gov/doingbusiness/Materials/Pages/asphaltcementindex.aspx>

ENTER APL

ENTER APM

Use this side for Asphalt Emulsion Only		
L.I.N.	TYPE	ASPHALT EMULSION (GALLONS)
TMT = <input type="text"/>		
REMARKS:		

Use this side for Asphalt Cement Only		
L.I.N.	TYPE	TACK (GALLONS)
TMT = <input type="text"/>		
REMARKS:		

ADJUSTMENT SUMMARY

FUEL PRICE ADJUSTMENT (*ENGLISH 125% MAX*)

DIESEL PRICE ADJUSTMENT(\$) \$66,078.10

UNLEADED PRICE ADJUSTMENT(\$) \$15,232.82

ASPHALT CEMENT PRICE ADJUSTMENT (BITUMINOUS TACK COAT 125% MAX) \$1,442.90

400 / 402 ASPHALT CEMENT PRICE ADJUSTMENT 125% MAX \$198,174.06

ASPHALT CEMENT PRICE ADJUSTMENT FOR BITUMINOUS TACK COAT(Surface Treatment 125% MAX)

REMARKS:

TOTAL ADJUSTMENTS **\$280,927.88**

Preliminary Right of Way Cost Estimate

Date: June 18, 2010

Project: CSSTP-0009-00 (405)

P.I. Number: 0009405

Existing/Required R/W: Varies / Varies

No. Parcels 8

Project Termini: Cedar Creek Road to Ed Hogan Road

Project Description: Atlanta Highway / Ed Hogan Intersection Improvements

Fee Simple:

Large Commercial	43,035 sf	x	\$ 1.00 /sf =	\$	43,035	
Small Commercial	4,951 sf	x	\$ 4.00 /sf =	\$	19,804	
				\$		62,839

Permanent / Temporary Construction Easement:

Large Commercial	37,303 sf	x	\$ 0.50 /sf =	\$	18,651	
Small Commercial	12,388 sf	x	\$ 2.00 /sf =	\$	24,776	
TOTAL				\$		43,427

Improvements:

0 Residential	=	\$	0
0 Commercial	=	\$	0
TOTAL		\$	0

Relocation:

0 Residential	=	\$	0
0 Commercial	=	\$	0
TOTAL		\$	0

Damages:

Proximity -	0 Parcels	\$	0
Consequential -	0 Parcels	\$	0
Cost to Cure -	0 Parcels	\$	0
TOTAL		\$	<u>0</u>

SUB-TOTAL \$ 106,266

Net Cost	\$	106,266
Scheduling Contingency 55%	\$	58,446
Adm/Court Cost 60%	\$	98,827
	\$	263,539

Total Cost

\$ 270,000

Prepared By :


 John G. Simshauser, Cert. No. 2772
 Moreland Altobelli Associates, Inc.

Reviewed / Approved:


 Howard P. Copeland
 R/W Administrator

Note: Accuracy of estimate is the sole responsibility of the Preparer.

Note: The Market Appreciation (40%) is not included in this Preliminary Cost Estimate.



Moreland Altobelli Associates, Inc.
 2211 Beaver Ruin Road, Suite 190
 Norcross, Georgia 30071
 Phone: 770-263-5945 Fax: 770-263-0166

**Preliminary Utility
 Cost Estimate**

Project: Atlanta Hwy at Ed Hogan Rd
CSSTP-0009-00(405), PI No. 0009405
Prepared By: Shrujal Amin
Prepared On: 10/20/10

Date	10/21/10
MA Project No.	BARR020
CC:	Project File

As requested for the concept cost estimate, a preliminary utility relocation cost estimate has been prepared for the subject project as detailed below:

<u>Facility Owner</u>	<u>Estimated Relocation Cost</u>
Georgia Power	\$71,000
Bellsouth	\$0
Barrow County Water	\$18,500
Barrow County Sewer	\$10,500
CSX Railroad	\$400,000 (new surface, gates, bells, etc.)

Total Estimated Utility Relocation Cost: \$500,000

GDOT Benefit-Cost Calculator

enter information in green cells

Project Information

ID	0009405
Description	SR 8/Bankhead Hwy at CR 97/EdHogan Road

Cost Estimate

Date of estimate	7/6/2010
PE cost	\$139,000.00
ROW cost	\$270,000.00
UTILITY cost	\$400,000.00
CST cost	\$1,137,302.00
Total	\$1,946,302.00

Traffic in 2032

Source of traffic data	Design traffic provided by PE consultant
------------------------	--

Without project (nobuild)

Annual VMT	3,889,625
Annual VHT	106,101
Average speed (mph)	36.660

With project (build)

Annual VMT	126,150
Annual VHT	4,205
Average speed (mph)	30.000

Parameters	Default	Override	Used
Analysis year	2035	2032	2032
Discount rate	7.0%	7.0%	7%
Design life (years)	25	20	20
Base year of cost estimate	N/A	2010	2010
Current CST program year	N/A	2012	2012
Fuel price (\$/gallon)	3.22	3.22	3.22
Fuel economy (mpg)	18.03	18.03	18.03
Value of auto travel (\$/hr)	13.75	13.75	13.75
Value of truck travel (\$/hr)	72.65	72.65	72.65
Percent trucks	12%	6%	6%
Include GSP benefits	No	No	No

Costs

Total cost	\$	1,946,302
Annualized cost	\$	107,648

Auto Delay Costs

Nobuild	\$	1,371,358
Build	\$	54,350
Auto delay savings	\$	1,317,008

Truck Delay Costs

Nobuild	\$	462,495
Build	\$	18,330
Truck delay savings	\$	444,165

Fuel Costs

Nobuild	\$	694,653
Build	\$	22,529
Fuel cost savings	\$	672,124

Change in GSP

Auto delay cost adjustment	NA
Truck delay cost adjustment	NA
Fuel cost adjustment	NA
Total benefit adjustment	NA

Benefits in 2032 \$ 2,433,297

Benefit-Cost Ratio 22.60

Notes

Cost estimate was prepared for concept report update

Mitigation Cost Worksheet
January 28, 2011

Summary of Wetland Impacts							
Site	Cowardin Classification	Water Regime	Drainage Association	HUC #	Wetland or Open Water Description	Area (acres) of Temporary Impact	Area (acres) of Permanent Impact
W/L1	PFO	Seasonally flooded/saturated	Upper Oconee	03070101	Low quality, palustrine. Vegetative buffer composed of various grass, and weed species.	0.0	0.42

ADVERSE IMPACT FACTORS

Factor	Options						
Dominant Effect	Fill 2.0	Dredge 1.8	Impound 1.6	Drain 1.4	Flood 1.2	Clear 1.0	Shade 0.5
Duration of Effects	7+ years 2.0	5-7 years 1.5	3-5 years 1.0	1-3 years 0.5	< 1 year 0.1		
Existing Condition	Class 1 2.0	Class 2 1.5	Class 3 1.0	Class 4 0.5	Class 5 0.1		
Lost Kind	Kind A 2.0	Kind B 1.5	Kind C 1.0	Kind D 0.5	Kind E 0.1		
Preventability	High 2.0	Moderate 1.0	Low 0.5	None 0			
Rarity Ranking	Rare 2.0	Uncommon 0.5	Common 0.1				

† These factors are determined on a case-by-case basis.

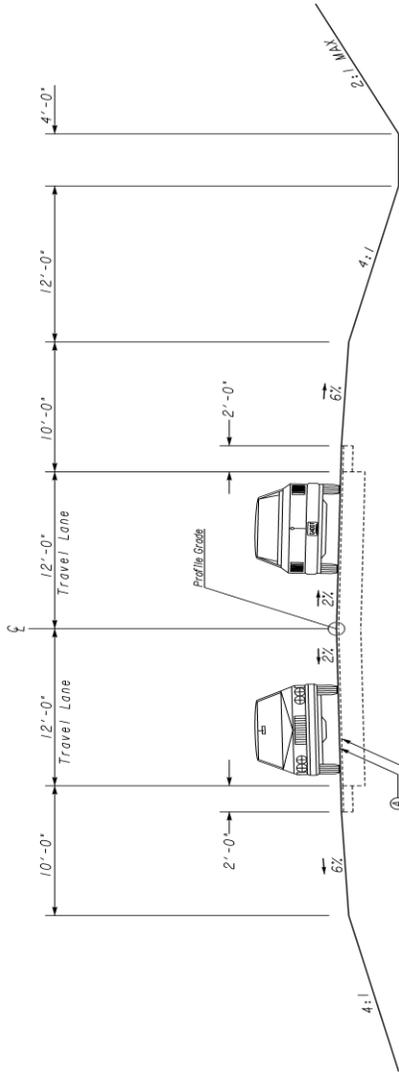
REQUIRED MITIGATION CREDITS WORKSHEET

Factor	Wetland 1					
Dominant Effect	2.0					
Duration of Effect	2.0					
Existing Condition	0.5					
Lost Kind	1.0					
Preventability	0.5					
Rarity Ranking	0.1					
Sum of r Factors	R ₁ = 6.1	R ₂ =	R ₃ =	R ₄ =	R ₅ =	R ₆ =
Impacted Area	AA ₁ = 0.42	AA ₂ =	AA ₃ =	AA ₄ =	AA ₅ =	AA ₆ =
R × AA =	2.56					

Total Required Credits = $\sum (R \times AA) =$

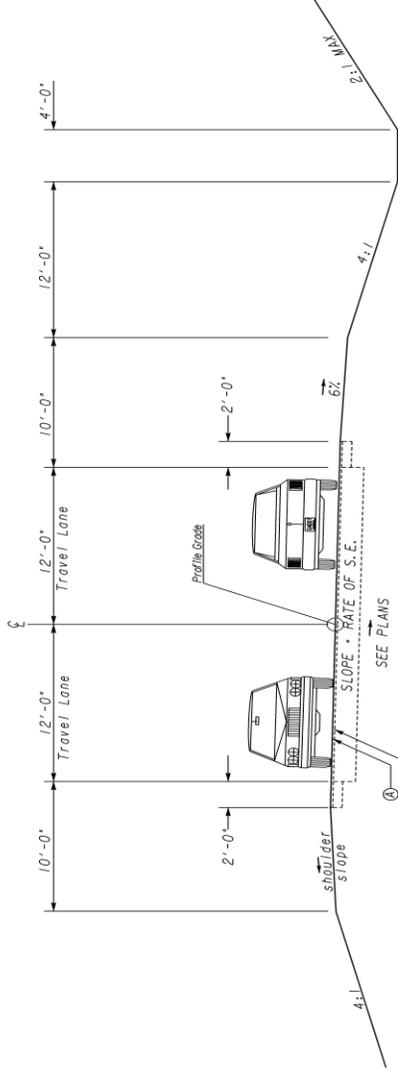
2.56

Assume market rates of approximately \$8,600 per credit in the Upper Oconee Basin. Therefore, approximate mitigation cost equals \$22,000.



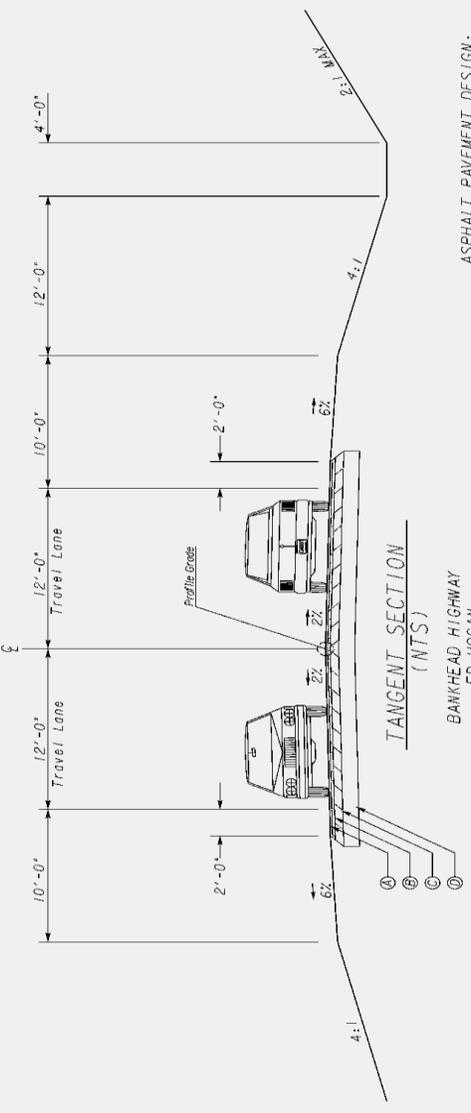
TANGENT SECTION
(NTS)
BANKHEAD HIGHWAY
ED HOGAN
SR 8 (ATLANTA HIGHWAY)

- ASPHALT PAVEMENT DESIGN:**
- Ⓐ RECYCLED ASPHALTIC CONCRETE, 12.5 mm SUPERPAVE, 165 lbs/SY
 - Ⓑ RECYCLED ASPHALTIC CONCRETE, 19.0 mm SUPERPAVE, 330 lbs/SY
 - Ⓒ RECYCLED ASPHALTIC CONCRETE, 25.0 mm SUPERPAVE, 330 lbs/SY
 - Ⓓ GRADED AGGREGATE BASE, 6"
 - Ⓔ VARIABLE DEPTH ASPHALTIC CONCRETE LEVELING, AS DIRECTED BY ENGINEER



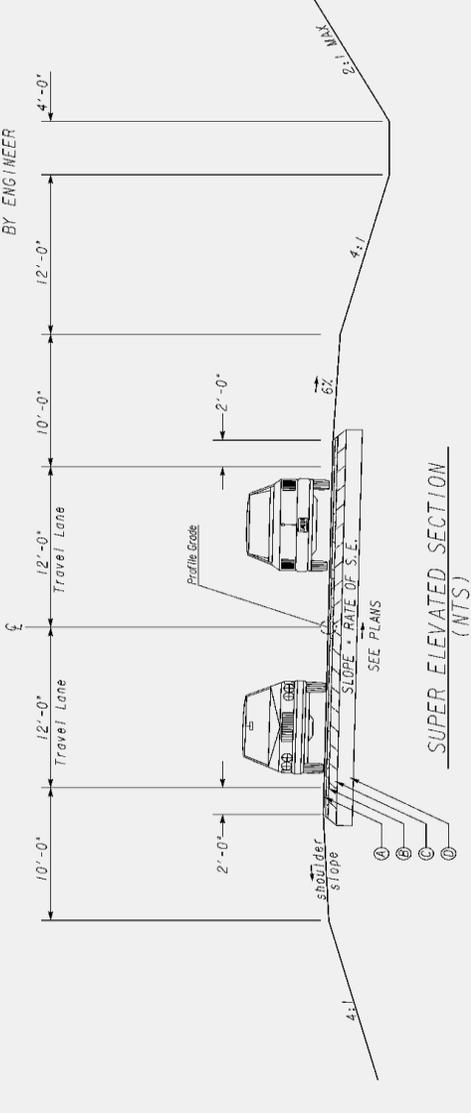
SUPER ELEVATED SECTION
(NTS)
BANKHEAD HIGHWAY
ED HOGAN
SR 8 (ATLANTA HIGHWAY)

 Mogelstad, A. J. & Co., Inc. 2211 Barber Run Road Suite 190 Norcross, GA 30071 Telephone: (770) 282-5945	NOT TO SCALE	REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE: DISTRICT 1
		CONCEPT TYPICAL SECTIONS	ED HOGAN ROAD & SR 8 INTERSECTION
		SHEET NO. 5-01	



TANGENT SECTION (NTS)
 BANKHEAD HIGHWAY
 ED HOGAN
 SR 8 (ATLANTA HIGHWAY)

- ASPHALT PAVEMENT DESIGN:
- A RECYCLED ASPHALTIC CONCRETE, 12.5 mm SUPERPAVE, 165 lbs/sy
 - B RECYCLED ASPHALTIC CONCRETE, 19.0 mm SUPERPAVE, 330 lbs/sy
 - C RECYCLED ASPHALTIC CONCRETE, 25.0 mm SUPERPAVE, 330 lbs/sy
 - D GRADED AGGREGATE BASE, 6"
 - E VARIABLE DEPTH ASPHALTIC CONCRETE LEVELING, AS DIRECTED BY ENGINEER

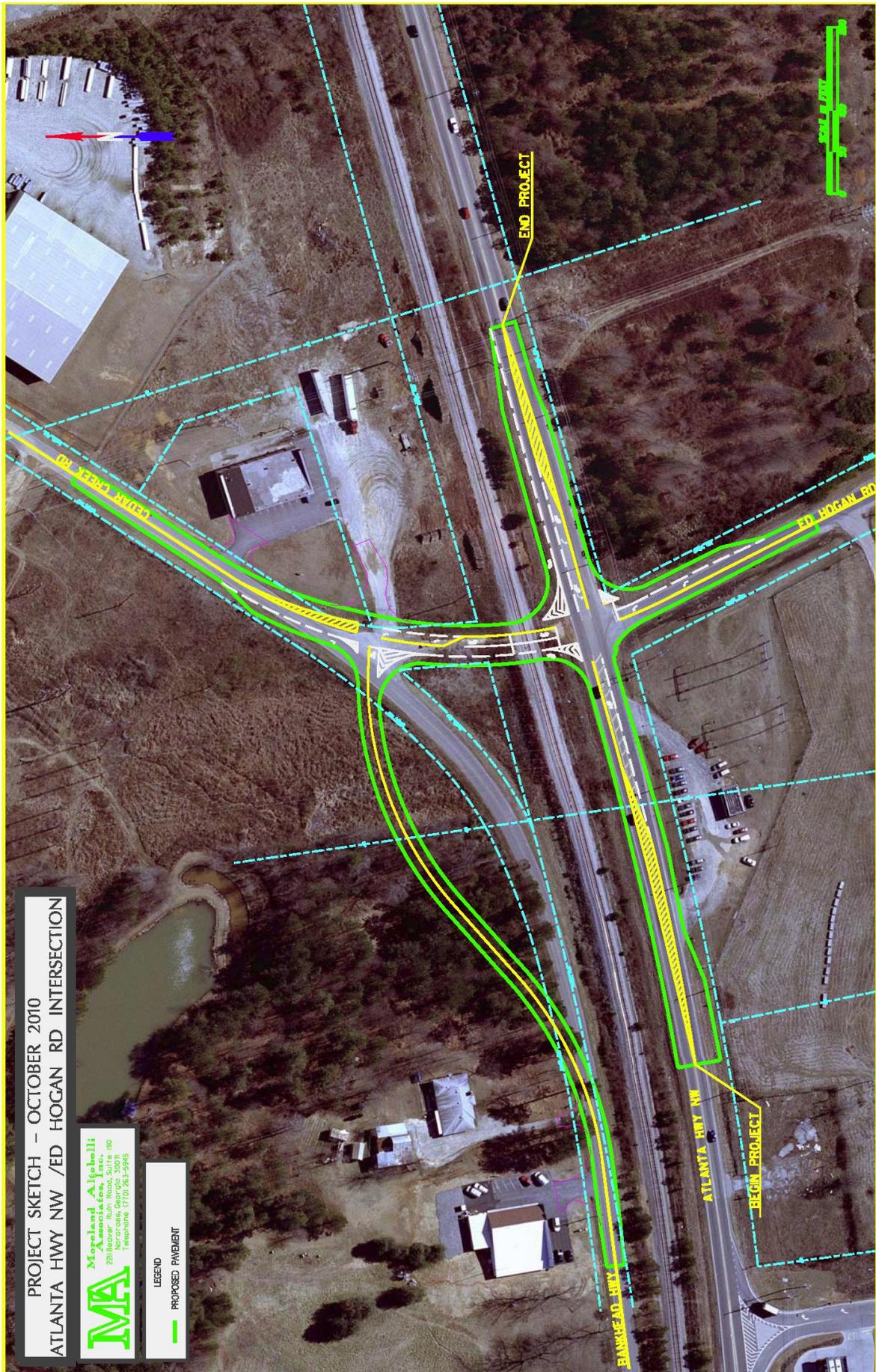


SUPER ELEVATED SECTION (NTS)
 BANKHEAD HIGHWAY
 ED HOGAN
 SR 8 (ATLANTA HIGHWAY)

REVISION DATES	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE/DISTRICT 1
	CONCEPT TYPICAL SECTIONS
	ED HOGAN ROAD & SR 8 INTERSECTION
	U-24111 5-02



NOT TO SCALE



PROJECT SKETCH - OCTOBER 2010
 ATLANTA HWY NW / ED HOGAN RD INTERSECTION

MA
 Moseley & Associates
 2818 Beaver Run Road, Suite 180
 Norcross, Georgia 30071
 Telephone: (770) 763-5995

LEGEND
 — PROPOSED PAVEMENT



Moreland Altobelli Associates, Inc.
 2211 Beaver Ruin Road, Suite 190
 Norcross, Georgia 30071
 Phone: 770-263-5945 Fax: 770-263-0166

MEETING MINUTES

Project: Atlanta Hwy at Ed Hogan Rd
CSSTP-0009-00(405), PI No. 0009405

Meeting: Concept Kickoff

Location: GDOT Gainesville District Office

Prepared By: Shrujal Amin

Prepared On: 8/2/10

Meeting Date	7/28/10
MA Project No.	BARR020
CC:	Attendees File

ATTENDEES	ORGANIZATION	PHONE	E-MAIL
Daniel Yearwood	Barrow County	770-307-3005	dyearwood@barrowga.org
Darrell Greeson	Barrow County	770-867-0664	dreeson@barrowga.org
Robert Mahoney	GDOT	770-532-5526	rmahoney@dot.ga.gov
Kim Coley	GDOT	770-532-5530	kcoley@dot.ga.gov
Shrujal Amin	MAAI	770-263-5945	samin@maai.net
Shane Dover	GDOT	770-532-5580	sdover@dot.ga.gov
Kim Byers	GDOT	770-718-5015	kbyers@dot.ga.gov
Larry Stevens	GA Power	706-296-1916	lstevens@southernco.com
Key Phillips	GDOT	404-631-1376	kphillips@dot.ga.gov
Loren Barlett	GDOT	404-631-1570	lbartlett@dot.ga.gov
Richard Crowley	GDOT	404-631-1372	rcrowley@dot.ga.gov
Allen Ferguson	GDOT	770-532-5510	aferguson@dot.ga.gov
Robby Oliver	GDOT	770-532-5510	roliver@dot.ga.gov
Todd Sumption	GDOT	770-532-5532	tsumption@dot.ga.gov
Bret Anderson	GDOT	770-718-5042	bretanderson@dot.ga.gov
Kris Stephens	GA Power	706-357-6670	X2kstephen@southernco.com

Items Discussed

A Concept Team Meeting for the referenced project was held on Tuesday, July 27 at the DOT District Office in Gainesville. The meeting began at approximately 10 a.m. and ended at approximately 12:00 p.m. Those listed above were in attendance.

The meeting began with introductions and discussion of the proposed projects. Robert Mahoney opened with a brief description of the project. He asked Shrujal Amin to walk the attendees through the project layout and concept report. Mr. Amin stated that there were no anticipated historic impacts and that the ecological impacts would be further studied to determine wetland and stream impacts.

Key Phillips asked if a grade separated railroad crossing had been considered. Mr. Mahoney responded that in light of the current financial situation, it would not be prudent to propose a larger scale project. Mr. Phillips responded that the railroad may ask for cost comparison prior to providing an agreement. Mr. Phillips also asked why the crossing was originally closed. Darryl Greeson stated that an accident had occurred at this crossing in the early 1990's that caused the county to deem the crossing as unsafe. Mr. Phillips recommend adding "pre-signals" if the design stays in it's current iteration.

Richard Crowley inquired about the status of the railroad agreement. Mr. Amin stated that there was not a formal agreement in place, however the county has been in discussions with CSX and they agreed in



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MEETING MINUTES

principle to adding a rail crossing on Ed Hogan road provided the county closed other locations in the county. Mr. Greeson and Mr. Yearwood agreed and state that the details of which crossings to close were being evaluated. Mr. Crowley stated that there must be some public involvement because of the closures.

Mr. Mahoney stated that Barrow County has the wherewithal to let this project and would be expected to do so. Because the county will let the project, they will be expected to coordinate utility relocations and prepare the railroad agreement. Kris Stephens of Georgia Power requested cad files to mark any facilities in the area. It was also noted that Windstream owns the telecommunications facilities in the project vicinity.

Mr. Phillips stated that there may be some concern over the gate length spanning three lanes at the railroad crossing and asked that this span be verified. Kim Coley asked that all environmental submission be coordinated through the district. It was also noted that a three lane section has been built since the photos were taken and that the aerial photography should be updated if possible.

Mr. Mahoney then concluded the meeting.



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MEETING MINUTES

Project: Cedar Creek Rd at SR 211
Atlanta Hwy at Ed Hogan Rd

Meeting: Concept Kickoff

Location: Barrow County

Prepared By: Shrujal Amin

Prepared On: 8/10/09

Meeting Date	8/07/09
MA Project No.	BARR020,BARR021
CC:	Attendees File

ATTENDEES	ORGANIZATION	PHONE	E-MAIL
Daniel Yearwood	Barrow County	770-307-3010	dyearwood@barrowga.org
Darrell Greeson	Barrow County	770-867-0664	dreeson@barrowga.org
Robert Mahoney	GDOT	770-532-5520	rmahoney@dot.ga.gov
Buddy Gratton	MAAI	770-263-5945	bgratton@maai.net
Shrujal Amin	MAAI	770-263-5945	samin@maai.net

Items Discussed

A meeting for the referenced projects was held on Friday, August 7, 2009 at the Barrow County offices. The meeting began at approximately 10 a.m. and ended at approximately 12:30 p.m. Those listed above were in attendance.

The meeting began with introductions and discussion of the proposed projects. Buddy Gratton opened by indicating that the projects were not currently entered into TPRO. He also went on to say that the projects because of their proximity should be done as one project with a single concept and environmental document.

Darrell Greeson provided conceptual drawings of both projects. Shrujal Amin asked for an electronic copy of the sketches so that he could prepare more formal displays for presentation.

Robert Mahoney stated that the PFA has not been presented to the county yet. The PFA will indicate that the County will be responsible for PE and Right of Way. In the meantime, Mr. Mahoney will allocate funds to review and administer the projects.

Mr. Mahoney stated that the projects must follow the Plan Development Process (PDP) and that Barrow County will be expected to provide twenty percent of the construction funds. Because of the complexity of requirements and expenses that go along with following the PDP, it was suggested that the Cedar Creek intersection project be constructed using alternate funds. Mr. Mahoney suggested that the county seek state aid funds or look at building it with only county funds.

Mr. Greeson asked if the county could perform some of parts of the construction if there would be an associated cost savings in doing so. Mr. Mahoney stated that the county could only do work if it was after all necessary permits and environmental clearances had been obtained. Chairman Yearwood stated that SPLOST funds could be used to construct the Cedar Creek intersection if it was determined to be in the



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Norcross, Georgia 30071
Phone: 770-263-5945 Fax: 770-263-0166

MEETING MINUTES

county's best interests. Mr. Mahoney stated that he would present conceptual drawings to GDOT's Office of Environment and Location (OEL) to get an opinion on whether the projects could be built under one concept and environmental document. Mr. Amin stated that he would have the project historian and ecologist do a sight visit on the week of August 10th and get back with Mr. Mahoney if there were any issues to report.

After discussions in the office, a site visit was conducted.

Action Items

Mr. Mahoney will discuss letting both projects as one with OEL and FHWA.
Mr. Greeson will provide Mr. Amin with an electronic scan of the concept drawing.
MAAI will send an ecologist and historian to conduct an environmental scan.
MAAI will prepare concept drawing and a schedule for County and GDOT review.



Barrow County Board of Commissioners

233 East Broad Street Winder Georgia 30680 Phone: (770) 307-3010 Fax: (770) 307-3141

Douglas Garrison
Chairman

Jerry Lamm
District 1

W.J. "Bill" Brown
District 2

James Roger Wehunt
District 3

Isaiah Berry
District 4

Billy E. Parks
District 5

Ben Hendrix
District 6

January 8, 2007

Mr. Leslie Scherr
CSX Railroad
Principal Manager Public Projects
500 Water Street. J301
Jacksonville, FL 32202

Re: New Railroad Crossing Request

Dear Mr. Scheer:

This letter is to request a new railroad crossing near Winder, Georgia to connect Cedar Creek Road to Ed Hogan Road near rail mile marker 529. As we discussed at our meeting in late December of 2006, traffic congestion in the Winder area is becoming more of a problem. The number of railroad crossings that allow north-south traffic flow across the railroad and highway corridor is worsening the overall congestion in the City of Winder due to population growth. A recent traffic study prepared for the City of Winder and Barrow County by the Georgia Department of Transportation (GDOT) to address congestion identified this improvement as one of the best solutions to improve congestion.

The new railroad crossing being proposed would be similar to the crossing recently installed at Midland Avenue and Highway 53 along the same corridor. The proposed crossing would be at grade with the necessary crossing arms, signals, turn lanes, and stacking space to provide a safe crossing. A figure of the proposed crossing configuration and road alignment is attached for your review.

Barrow County understands CSX currently requires three (3) crossings to be closed for every new crossing opened. Safety is one of our major concerns for requesting the new crossing. Several of the existing railroad crossing that connects Bankhead Highway to Georgia Highway 8 have adverse grades with existing safety problems. As we discussed, one of the railroad crossings was recently closed to tractor trailer traffic at CSX request due the number of incidents in the past months. At this point, Barrow County is offering possible closure of crossings at Russell Cemetery Road, Cosby Road and one along Bankhead Highway. We request the crossing closure along Bankhead Highway be delayed until the overpass related to the West Winder Bypass is completed in the future. These railroad crossing are our initial proposal that we would like to continue to analyze and confirm as future agreements are developed to define this project.

Barrow County and the City of Winder support the effort to open this new crossing in an effort to reduce congestion and provide safer crossings for the traveling public. Based on our discussion, this request to CSX will begin the preliminary engineering for the proposed crossing that would result in a construction agreement in the future.

Please call if you have any questions or would like to review our traffic studies to support this request.

Sincerely,

A handwritten signature in black ink, appearing to read "Doug Garrison", written in a cursive style.

Douglas Garrison
Barrow County Board of Commissioner Chairman

DG/vrb

CC: Representative Terry England
Mayor Buddy Ouzts – City of Winder
Keith Lee – Barrow County Chief of Operations
Terry M. Darragh, P.E. – Public Works Director
Darrell Greeson – Barrow County Engineer
Bob Beck – City of Winder



City Of Winder

February 5, 2007

A Lamar Ouzts
Mayor

City Council:

Sonny Morris
Mayor Pro-Tem
Ward 1

Charlie Eberhart
Ward 2

Ridley Parrish
Ward 3

Frank Dunagan
Ward 4

Mike Mingus
At Large

Larry Evans
At Large

Bob Beck
City Administrator

Jane Skelton
City Clerk - Treasurer

Leslie Ginn
Finance Director

Sabrina Wall
Deputy City Clerk

Ambrose Jackson
Administrative Assistant

John E. Stell
City Attorney

Mr. Leslie Scherr
CSX Railroad
Principal Manager Public Projects
500 Water Street. J301
Jacksonville, Florida 32202

RE: New Railroad Crossing Request

Dear Mr. Scherr:

As Mayor of Winder, I am writing on behalf of the citizens of Winder in support of Barrow County's request for a new railroad crossing to connect Cedar Creek Road to Ed Hogan Road near rail mile marker 529. Traffic problems in Winder have escalated to the point that support and assistance from CSX railroad in granting this request identified by the Georgia Department of Transportation as one of the best solutions to improving congestion in our community is critical. The new railroad crossing proposed at this location would be similar to the recently installed crossing at Midland Avenue/Highway 53. I also join Barrow County in asking that the Bankhead Highway crossing be delayed until the overpass related to the West Winder Bypass is completed.

I would like to thank you in advance for your consideration of Barrow County's request and efforts to open this new crossing. Any assistance you can provide to our community to help ease our traffic congestion would be greatly appreciated.

Sincerely,

Buddy Ouzts
Mayor

cc: Representative Terry England
Barrow County Commission Chairman Doug Garrison
Keith Lee – Barrow County Chief of Operations
Terry M. Darragh – Public Works Director
Darrell Greeson – Barrow County Engineer
Bob Beck – City of Winder



L. L. Scherr
Principal Manager
Public Projects Department

March 22, 2007

Chairman Douglas Garrison
Barrow County Board of County Commissioners
233 East Broad Street
Winder, GA. 30680

Subject: Installation of new grade crossing in Winder, Georgia.

Dear Chairman Garrison:

Thank you for your letter dated January 8, 2007 requesting CSX commence Preliminary Engineering (PE) process for your proposed project. In view of the commitments made by both Barrow County and the City of Winder in the December 2006 meeting and subsequent written correspondence, CSX will commence with the PE process immediately.

As was noted in your letter, CSX will work with the County in establishing the three (3) crossings for closure and the timeline necessary to accomplish the task. If the candidates are not all identified by the time the construction agreement is to be written, provisions can be written into the agreement to allow continuation of the project. It will be required to have all closure items identified and covered by separation agreement before construction of the new crossing can begin. This provides for at least one year from now to identify and negotiate those details.

We look forward to working with the County and the City in providing a safer and more efficient transportation system for both motorist and the railroad.

Respectfully,

Leslie L. Scherr
Principal Manager
CSX Public Projects

Cc: Mayor Buddy Ouzts, City of Winder

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APR 04 2007

JS

500 Water Street,
13th Floor, (S/C J-301)
Jacksonville, Florida 32202
Ph. (904) 366-3057
Fax Ph. (904) 366-4042

email:

Les_Scherr@CSX.COM

Michelle Leonard

From: Scherr, Les [Les_Scherr@csx.com]
Sent: Monday, January 05, 2009 11:52 AM
To: Michelle Leonard
Cc: Guthrie, Norma
Subject: CSX crossing in Barrow County, GA - Ed Hogan Rd
Attachments: Pub Proj manual.pdf

Ms Leonard

I apologize for the disconnect, but there can be nothing progressed until the City/County presents CSX with some engineering documents from which we can review to make an estimate. This is the same issue as previously discussed and I am still waiting for drawings of the proposed crossing to begin the process. CSX does not design the road up to the crossing, just the surface and signalization used at the crossing. If you can have your engineering person contact me about this we can start the process. My unfortunate choice of words in the 2007 letter implies that I have what I need to start engineering. I was only trying to reassure the Chairman that CSX was ready to proceed. I mentioned this situation to Winder City Administrator, Mr. Bob Beck when I met with him on Oct 28th, 2008 and was under the impression that there was no road crossing construction planned. The meeting I attended was with regard to a future bridge which may be built across CSX.

I will give you the short list of what happens when and include the CSX Public Projects manual. In view of the fact that the Chairman of the commissioners and the City Mayor previously committed to close the required 3 crossings to open a new one, I will forego that dialogue, but it can be found in the attached manual. But to be sure everyone is clear, the crossing I discussed in Winder in 2007 was to re-install Ed Hogan Rd. Is this still the intended crossing site?

Steps going from here:

1- City/County contacts CSX they wish to install a new road crossing at a predetermined location. They include the railroad milepost location and a set of scaled engineered drawings of the proposed road. The preparation of the plans and construction of the project are 100% the City/County's responsibility. CSX will review the plans and then submit a Preliminary Engineering agreement including an advanced payment clause for execution in the appropriate amount. PE agreements make no commitments for either party to pursue the construction of this project, it only provides you with the design and estimate to complete the project. Surfaces cost in the neighborhood of \$7,500 to \$10,000 to design and the signalization starts around \$10,000 to \$15,000 for a conventional crossing. So for discussion sake we would submit a PE agreement to the City for \$25K. Once the contract is executed and the payment received CSX will review all plans submitted and begin design. The design stage takes @ 90 days depending on if there are any engineering obstacles. During this stage we will provide you with a complete estimate for both the signal and surface work to be installed. If there is any drainage or utility that is necessary to be installed or relocated for this project, it is be the sponsor's responsibility.

2 – The Construction agreement follows the PE stage. This typically follows the PE, but a copy of the construction agreement can be submitted to the sponsor after the PE agreement is in place for review and comments. We see a lot of time lost with the two lawyers – CSX and sponsors trying to resolve issues. Minor issues can take as long as major ones it would seem. But once the sponsor gives the go ahead, CSX will prepare our standard Construction agreement and submit for the sponsor's signature. Once again, after the contract is executed by both sides and the check for the project submitted. CSX will schedule for construction, which typically takes approximately one year to complete.

As I have stated before, the entire construction of the road across the railroad is the sponsor's responsibility. CSX will install the surface which is between the two rails and 2 feet outside of each rail and the signalization only. We do not do drainage, maintenance of traffic, curb and gutter work or paving. It would be best to have a joint project where CSX and the City/County construct this crossing at the same time to avoid delays. The crossing height is very important and it is vital to have all of the track work done BEFORE the road is paved to up to the track to prevent any grade differential. CSX will provide flagman at project costs for protection of the road contractor as he

works within 50 feet of the RR. A very frequently unforeseen expense is the Railroad Protective Liability Insurance. The RPL is a \$5M/\$10M policy which is required when working within 50 feet of a live railroad. Normal CGL does not cover damage within this 50 foot zone, so your contractor MUST provide this insurance. Depending on the contractor it can be very expensive- I have seen over \$15,000 before. This insurance is not governed by the RR, but by the insurance industry and can not be arranged for through the RR.

I hope I have answered your questions satisfactorily and will await your engineering plans for review. I have attached a copy of the CSX Public Project manual for you use in preparation.

Sincerely

Leslie L. Scherr
Principal Manager Public Projects
500 Water Street
Jacksonville, FL 32202
Ph: 904-366-3057
Fax 904-366-4042
Email: Leslie_Scherr@CSX.com

From: Michelle Leonard [mailto:mleonard@barrowga.org]
Sent: Monday, January 05, 2009 10:05 AM
To: Scherr, Les
Subject: CSX crossing in Barrow County, GA

Mr. Scherr,

I spoke with you in early 2008 regarding a new railroad crossing in Winder, GA. I have attached a letter for your reference. In the letter, it states that CSX will commence with the PE process immediately. I wish to clarify what the responsibilities are of the County and what those are of CSX, as well as what the steps are in moving forward. If you do not mind, please identify the process of opening the new railroad crossing from concept through completion so we may plan accordingly.

Thank you for you help,
Michelle

Michelle Leonard, P.E.
Barrow County
Assistant Public Works Director
233 East Broad Street
Winder, GA 30680
770-307-3402
770-307-3141 (fax)

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