

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0004449, Cobb County **OFFICE** Preconstruction
STP00-0004-00(449)
Intersection Improvements-
SR 360/Powder Springs Rd at Cheatham Hill/Callaway Rd
DATE October 9, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction
TO  SEE DISTRIBUTION

SUBJECT APPROVED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Scott Lee
Paul Liles
Bryant Poole
Mike Lobdell
BOARD MEMBER

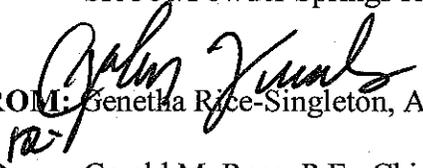
**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: P.I. No. 0004449, Cobb County
STP00-0004-00(449)
Intersection Improvements-
SR 360/Powder Springs Rd at Cheatham Hill/Callaway Rd

OFFICE: Preconstruction

DATE: September 25, 2008


FROM: Genetha Rice-Singleton, Assistant Director of Preconstruction

TO: Gerald M. Ross, P.E., Chief Engineer

SUBJECT: PROJECT CONCEPT REPORT

This project is the intersection improvements on SR 360/Powder Springs Road at Cheatham Hill/Callaway Road, located 4.0 mile southwest of Marietta, Georgia. SR 360 within the project limits is two lanes in each direction with a 14' flush median with rural shoulders. An 8' multi-use trail is located on the north side of the roadway approximately 100' from the edge of pavement. Cheatham Hill Road and Callaway Road both consist of two, 12' lanes with rural shoulders and a single left turn lane. Currently, Callaway Road is skewed at a 60 degree angle to SR 360 Powder Springs Road. In the project area, eighty-three (83) crashes occurred between 2004 and 2006. Rear-end collision account for 67% of these accidents, which is an indicator of traffic congestion. Projected traffic volumes for this section of SR 360 are 29,200 VPD in the year 2012 and 35,200 VPD for the design year 2032. The projected volumes along Callaway Road are 10,300 VPD for the year 2012 and 12,300 VPD in the design year 2032.

The proposed project will add right turn lanes in the eastbound and westbound directions on Powder Springs Road and a 5' sidewalk will be added on the north side. Additionally, the intersection skew angle of Callaway Road to Powder Springs Road would be improved from a 60 degree angle to a 70 degree angle. Cheatham Road will consist of one, 12' left turn lane, one, 12' through lane and a 12' right turn lane with curb and gutter on both sides. Callaway Road will consist of two, 12' left turn lane, one, 12' through lane and a 12' right turn lane with curb and gutter and 5' sidewalks on both sides. Traffic will be maintained via staging during construction.

Environmental concerns include requiring an Environmental assessment be prepared; this project lies within Kennesaw Mountain National Battlefield Park; a Public hearing will be held; Time saving procedures is not appropriate.

P.I. No. 0004449, Cobb County

Page 2

September 25, 2008

The estimated costs for this project are:

	<u>PROPOSED</u>	<u>APPROVED</u>	<u>FUNDING</u>	<u>PROG DATE</u>
Construction (includes E&C)	\$1,607,000	\$ 1,747,000	L230	2009
Right-of-way & Utilities	Local	Local	Local	Local

* Cobb County signed PFA to do PE, right-of-way, utilities and 20% of construction costs.

I recommend this project concept be approved.

GRS: JDQ

Attachment

CONCUR

Renetta Rice-Singleton for Ross

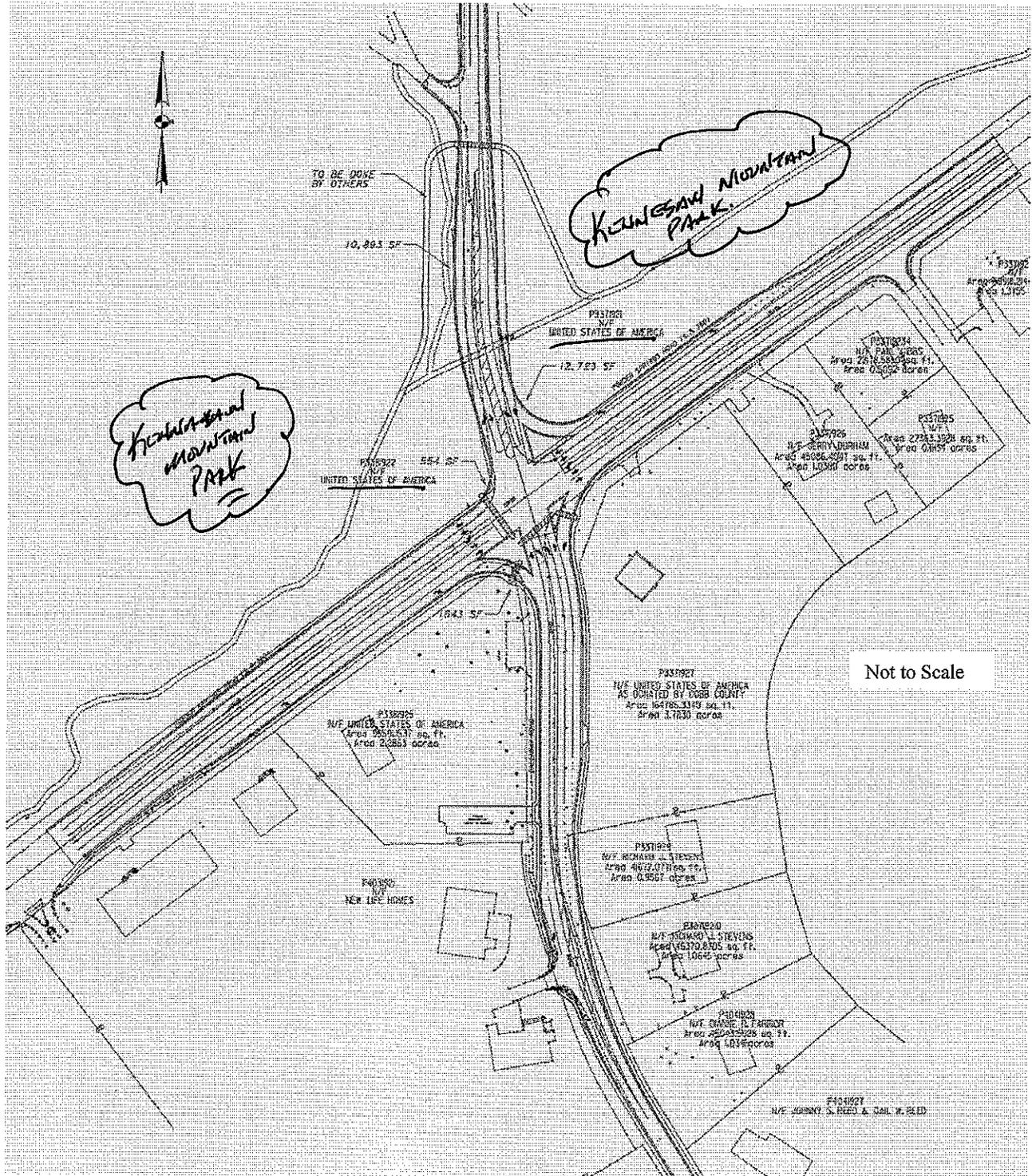
Director of Preconstruction

APPROVED

Gerald M. Ross

Gerald M. Ross, P.E., Chief Engineer

CONCEPT SKETCH
STP00-0004-00 (449), P.I. # 0004449 (Cobb County)



**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

District Seven Preconstruction

PROJECT CONCEPT REPORT

Project Number: STP00-0004-00 (449)

County: Cobb County

P. I. Number: 0004449

SR 360/Powder Springs Rd at Callaway Road/Cheatham Hill Rd

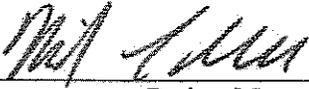
Federal Route Number: N/A

State Route Number: 360

See page 2 for Location Sketch

Recommendation for approval:

DATE 7/30/08



Project Manager

DATE 7/30/08



District Engineer

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 _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE 8-6-08



State Traffic Safety & Design Engineer

DATE _____

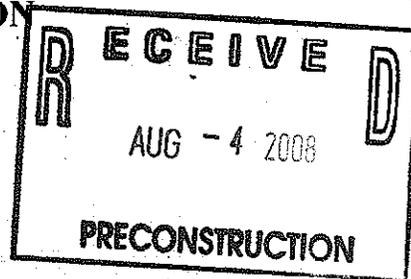
Project Review Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District Seven Preconstruction

PROJECT CONCEPT REPORT

Project Number: STP00-0004-00 (449)
County: Cobb County
P. I. Number: 0004449



SR 360/Powder Springs Rd at Callaway Road/Cheatham Hill Rd

Federal Route Number: N/A
State Route Number: 360

See page 2 for Location Sketch

Recommendation for approval:

DATE 7/30/08

Neil Miller
Project Manager

DATE 7/30/08

Ray Hoyle
District Engineer

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 8/1/08

Angela S. Allen
State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

District Seven Preconstruction

PROJECT CONCEPT REPORT

Project Number: STP00-0004-00 (449)

County: Cobb County

P. I. Number: 0004449

SR 360/Powder Springs Rd at Callaway Road/Cheatham Hill Rd

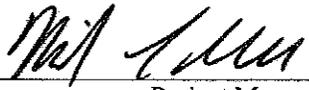
Federal Route Number: N/A

State Route Number: 360

See page 2 for Location Sketch

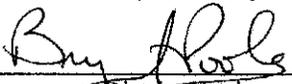
Recommendation for approval:

DATE 7/30/08



Project Manager

DATE 7/30/08



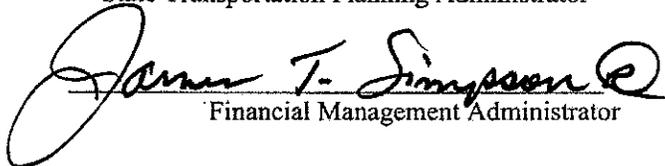
District Engineer

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 _____

State Transportation Planning Administrator

DATE 8-7-08



Financial Management Administrator

DATE _____

State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE: P.I. No. 0004449

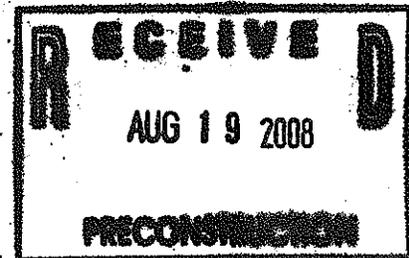
OFFICE: Environment/Location

PROJECT No. STP00-0004-00(449) / COBB County

DATE: 8/15/08

SR 360/Powder Springs Road at Callaway Road/Cheatham Hill Rd.

FROM: 
Glenn Bowman, P.E., State Environmental/Location Engineer
TO: Genetha Rice-Singleton, Assistant Director of Preconstruction
SUBJECT: PROJECT CONCEPT REPORT REVIEW



The Concept Report for the above project has been reviewed and appears satisfactory subject to the following comments:

1. A portion of this project lives within the Kennesaw Mountain National Battlefield and archaeological and historic resources are located within the project corridor. If significant impacts to historic (4f) resources cannot be avoided, then the proposed Environmental schedule must be revised significantly.
2. This project has involvement with Kennesaw National Battlefield park. As such, the National Park Service will require an Environmental Assessment be completed for the project. The type of document listed and the time to complete the document need to be changed.
3. The concept report states a CE is anticipated. Per TPRO, this is now an EA. This Office is assuming that this is the case due to National Park Service involvement. This project does not appear to be on schedule for Dec 2008 ROW and should allow twelve (12) months for NEPA. (NEPA needs to coordinate with Project Manager to look at the schedule in more detail.)

If you have any questions, please contact Glenn Bowman at (404) 699-4401.

GB:lc

cc: Brian Summers
Jamie Simpson
Keith Golden
Angela Alexander
Bryant Poole

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

District Seven Preconstruction

PROJECT CONCEPT REPORT

Project Number: STP00-0004-00 (449)
County: Cobb County
P. I. Number: 0004449

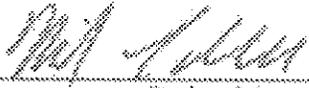
SR 360/Powder Springs Rd at Callaway Road/Cheatham Hill Rd

Federal Route Number: N/A
State Route Number: 360

See page 2 for Location Sketch

Recommendation for approval:

DATE 7/20/08


Project Manager

DATE 7/30/08


District Engineer

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 _____

State Transportation Planning Administrator

DATE _____

Office of Financial Management Administrator

DATE 8/15/08


State Environmental/Location Engineer

DATE _____

State Traffic Safety & Design Engineer

DATE _____

Project Review Engineer

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENTAL CORRESPONDENCE

FILE: STP00-0004-00(449)

Cobb County

SR 360/Powder Springs Road at Cheatham Hill/Callaway Roads

P.I. # 0004449

OFFICE: Chamblee\Metro

DATE: July 30, 2008.

FROM: Bryant Poole, District Engineer

TO: Genetha Rice-Singleton, Assistant Director of Preconstruction

SUBJECT: *PROJECT CONCEPT REPORT*

Attached is the original copy of the concept report for your further handling for approval in accordance with the PDP.

If you have any questions in regards to this concept, please contact Kevin Cowan or Merishia Robinson at (770) 986-1786.

BP\MAL\kdc

cc: Angela Alexander
Jamie Simpson
Glenn Bowman
Keith Golden
Brian Summers
File

Need and Purpose:

The need exists to improve safety, operations, and mobility for traffic at the intersection of Powder Springs Road at Callaway Road/Cheatham Hill Road in Cobb County to accommodate its growing population. The purpose of this proposed project is to reduce traffic congestion at the intersection, in order to reduce the potential for traffic accidents. The history of traffic crashes at this intersection reveals that 67% of the crashes are rear-end collisions, which are an indicator of traffic congestion.

The intersection of Powder Springs Road at Callaway Road/Cheatham Hill Road is at a crossroads of commuter traffic traveling to and from residential areas to employment centers. The proposed Windy Hill Road/Maclang Road Connector is planned south of this intersection to divert many of the commuter trips originating in Paulding County. However, there are commuter trips with destinations in the City of Marietta located northeast of this intersection. Traffic peak volumes reflect the directional traffic patterns during the A.M. and P.M. peak hours. Specifically, Powder Springs Road northbound traffic and Cheatham Hill Road southbound traffic is prominent in the morning peak hour. The reverse of these traffic movements occurs in the evening peak hour.

An intersection capacity analysis was conducted at this intersection with and without the improvements. The results of this analysis indicates that the intersection operates at a failing level of service under existing conditions and improves to a LOS "D" in the design year 2032 with the recommended improved lane configuration.

In addition to the traffic deficiencies that require improvements, Callaway Road is skewed at a 60-degree angle to Powder Springs Road. This intersection angle is undesirable and does not meet safety design requirements of the Georgia Department of Transportation. The skew creates an undesirable and unsafe left-turning path at the intersection. This project improves the intersection skew angle to 70 degrees, which would provide an improved turning movement for the left turning vehicles on Callaway Road.

Planning Background and Project History

The current 2030 RTP includes the improvement of the intersection of SR 360/Powder Springs Road at Callaway Road/Cheatham Hill Road. The proposed project is also listed in the short-range fiscal years 2005-2007 Transportation Improvement Program (TIP) as number CO-323.

Traffic Volumes and Levels of Service

Existing and future intersection capacity analysis was performed under existing and future traffic conditions with and without the proposed project. The vehicular delay value that results from the capacity analysis is used to determine the level of service (LOS) of an intersection. A summary of the intersection capacity analyses in terms of level of service and delay (seconds per vehicle) for existing, no-build and build conditions are shown in the table on the next page.

Summary of Intersection Capacity Analysis Results

Intersection	Existing Year 2005		No-Build Year 2012		Build Year 2012		No-Build Year 2032		Build Year 2032	
	AM (Delay)	PM (Delay)	AM (Delay)	PM (Delay)	AM (Delay)	PM (Delay)	AM (Delay)	PM (Delay)	AM (Delay)	PM (Delay)
	SR 360 at Callaway Rd/ Cheatham Hill Rd	F (99.6)	F (91.0)	D (40.3)	D (53.4)	C (32.4)	C (33.3)	F (83.8)	F (88.6)	D (50.2)

The existing intersection capacity analysis indicates that the intersection operates at LOS F during both the A.M. and P.M. peak hours. The projected traffic turning movements are expected to decrease on Powder Springs Road, Callaway Road and Cheatham Hill Road due to the future construction of the Windy Hill Road/Macland Road Connector. Specifically, the AM peak hour right turning traffic from Powder Springs Road to Callaway Road and the PM peak hour left turning traffic from Callaway Road to Powder Spring Road would decrease because approximately 50% of these traffic movements would be expected to use the Windy Hill Road/Macland Road Connector which is scheduled to open in November 2010. However, through traffic traveling on Powder Springs Road, Callaway Road and Cheatham Hill Road is expected to increase and create LOS F conditions by the year 2032 during both the AM and PM peak hours. With the proposed improvements, through traffic delay on these roads would be reduced, resulting in LOS D conditions for both peak hours.

Safety Improvements

Traffic accident data at the intersection of SR 360/Powder Springs Road and Cheatham Road/Callaway Road for the years 2004, 2005 and 2006 was obtained from the Georgia Department of Transportation. The total number of accidents for these three years was 83. Rear-end collisions account for 67% of these accidents. The second highest accident type was the angle-type collisions, which includes left turning accidents.

Summary of Accident Data

Year	Accidents by Type					Totals		
	Rear-end	Angle	Head-on	Sideswipe	Other Non-Collision	Accidents	Injury	Fatal
2004	21	7	1	0	1	30	13	0
2005	20	6	2	1	0	29	5	0
2006	15	8	0	0	1	24	5	1

In summary, the proposed additional turn lanes in conjunction with an improved skew angle would correct existing roadway deficiencies, improve traffic safety and increase traffic flow to facilitate the projected traffic growth.

Description of the proposed project: The proposed project would consist of adding right turn lanes in the eastbound and westbound direction on Powder Springs Road and the northbound and southbound direction of Callaway Road/Cheatham Hill Road. Also, an additional left turn lane would be added to Callaway Road. Curb & gutter would be added to Callaway Road, and 5-foot wide sidewalks would be added to the south side of Powder Springs Road and both sides of Callaway Road. Additionally, the intersection skew angle of Callaway Road to Powder Springs Road would be improved from a 60-degree angle to a 70-degree angle. The proposed improvements on Powder Springs Road would begin approximately 950 feet west of the intersection and end approximately 900 feet east of the intersection. The proposed improvements to Callaway Road/Cheatham Hill Road would end 800 feet north and 1100 feet south of the intersection respectively.

Is the project located in a Non-attainment area? X Yes No. This project is in the Atlanta Regional Commission (ARC) conforming Transportation Plan and TIP. It is identified in the FY 2006-2011 TIP as Project Reference Number CO-323 and described as an intersection improvement.

PDP Classification: Major Minor X

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

Functional Classification: Urban Minor Arterial

U. S. Route Number(s): N/A **State Route Number(s):** 360

Traffic (AADT):	Existing 2005	Base Year 2012	Design Year 2032
Powder Springs Rd	<u> 35750 </u>	<u> 29200 </u>	<u> 35200 </u>
Callaway Rd	<u> 14050 </u>	<u> 10300 </u>	<u> 12300 </u>
Cheatham Hill Rd	<u> 10200 </u>	<u> 9600 </u>	<u> 11400 </u>

Existing design features:

- Typical Sections:
 - Powder Springs Road - Two 12-foot lanes in each direction with a 14-foot flush median lane, with 6-foot rural unpaved shoulders on both sides. An existing 8-foot multi-use trail is located on the north side of the road approximately 100 feet from the edge of pavement.
 - Cheatham Hill Road - Two 12-foot lanes, with 6-foot rural unpaved shoulders on both sides. At its intersection with Powder Springs Road it has a single 12-foot left turn lane.
 - Callaway Road - Two 12-foot lanes, with 6-foot rural unpaved shoulders on both sides. At its intersection with Powder Springs Road it has a single 12-foot left turn lane.
- Posted speed:
 - Powder Springs Road – 45 mph
 - Cheatham Hill Road – 35 mph
 - Callaway Road – 35 mph

Project Concept Report Page 6
Project Number: STP00-0004-00 (449)
P.I. Number: 0004449
County: Cobb

- Minimum radius of curvature:
 - Powder Springs Road – Tangent
 - Cheatham Hill Road – 500 ft
 - Callaway Road – 507 ft
- Maximum grade
 - Powder Springs Road 2.4%
 - Cheatham Hill Road 2.0%
 - Callaway Road 2.9%
- Maximum super-elevation rate for curve: 4.00%
- Width of right-of-way: Powder Springs Road – varies 100 to 117 ft.
Cheatham Hill Road – varies 60 to 84 ft.
Callaway Road – varies 52 to 98 ft.
- Major structures: None
- Major intersections and interchanges: Powder Springs Road at Cheatham Hill Road / Callaway Road.
- Length of project on Powder Springs Road: (1,750 feet) 0.33 mile
- Powder Springs Road Mile log at Cheatham Hill Road/Callaway Road: 7.51
 - Begin Mile log on Powder Springs Road / SR360: 7.34
 - End Mile log on Powder Springs Road / SR 360: 7.70

Proposed Design Features:

- Proposed Typical Sections:
 - Powder Springs Road - Two 12-foot lanes in each direction with a 14-foot flush median lane, with 30-inch curb and gutter and grass shoulders on both sides. A 5-foot sidewalk will be constructed on the south side. (There is an existing multi-use trail north of the roadway). Eastbound and westbound 12-foot right turn lanes, 450 feet in length, will be added at its intersection with Callaway Road/Cheatham Hill Road
 - Cheatham Hill Road - One 12-foot lane in each direction with 30-inch curb and gutter on both sides. The approach of Cheatham Hill Road at its intersection with Powder Springs Road would include one 12-foot left turn lane, one 12-foot through lane and a 12-foot right-turn lane 450 feet in length.
 - Callaway Road – Two 12-foot lanes, 30-inch curb and gutter and 5-foot sidewalks on both sides. The approach of Callaway Road at its intersection with Powder Springs Road would include two 12-foot left turn lanes, one 12-foot through lane and a 12-foot right turn lane approximately 400 feet in length.
- Proposed Design Speed:
 - Powder Springs Road – 45 mph
 - Cheatham Hill Road – 35 mph
 - Callaway Road – 35 mph
- Proposed Maximum grade Maximum grade allowable: 8%
 - Powder Springs Road 2.4%
 - Cheatham Hill Road 2.0%
 - Callaway Road 2.9%
- Proposed Maximum grade driveway: 10 %
- Proposed Minimum radius of curve for Callaway Rd: 507 ft Minimum radius: 430 ft

- Proposed Minimum radius of curve for Cheatham Rd: 500 ft Minimum radius: 430 ft
- Proposed Maximum superelevation rate for curve: 4.00%
- Right-of-way
 - Width of R/W (Powder Springs Road) 100 ft. – 117 ft. varies (typ)
 - Width of R/W (Callaway Road) 52 ft. – 98 ft. varies(typ)
 - Width of R/W (Cheatham Hill Road) 60 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: 8 Number of displacements:
 - Business: 0
 - Residences: 0
 - Mobile homes: 0
 - Other: 0
- Major Structures: None
- Major intersections and interchanges: Powder Springs Road at Cheatham Hill Road / Callaway Road.
- Traffic control during construction: Traffic control consisting of flaggers, temporary barriers, and the like will be utilized to maintain traffic during construction. Some temporary lane closures may be required during stage construction where grade changes are significant.
- Design Exceptions for controlling criteria anticipated:

	<u>UNDETERMINED</u>	<u>YES</u>	<u>NO</u>
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)
- Design Variances:
 - Sidewalks are absent on the north side of Powder Springs Road and both sides of Cheatham Hill Road.
- Environmental concerns:
 - Wetlands – There are no known wetland areas and streams identified within the project limits.
 - 4f/6f – There are historic properties located on two of the four corners of the intersection and Federal parkland on three corners. It is anticipated that a programmatic 4F would be required for this project.
 - There are no impacts anticipated to any hazardous waste or archeological sites.
 - There is a cemetery near this project that is not impacted.

Project Concept Report Page 8
Project Number: STP00-0004-00 (449)
P.I. Number: 0004449
County: Cobb

- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes () No (X)
 - Categorical exclusion (~~()~~) ~~()~~ JDL . 9/15/08
 - Environmental Assessment/Finding of No Significant Impact (FONSI) (X), or
 - Environmental Impact Statement (EIS) ()
- Utility involvements: There are both overhead and underground utilities located within the project limits. These include Georgia Power, Bellsouth, Austell Gas and Cobb County Water and Sewer.

Project responsibilities:

- Design: Cobb County
- Right-of-Way Acquisition: Cobb County
- Relocation of Utilities: Cobb County
- Letting to contract: Cobb County
- Supervision of construction: Cobb County
- Providing material pits: Contractor (if required)
- Providing detours: Contractor (if required)

Coordination

- Initial Concept Meeting: An initial concept meeting was held on July 13, 2007. (See attached minutes of meeting.)
- Concept Meeting: A concept meeting was held on February 6, 2008. (See attached minutes of meeting.)
- P. A. R.: A Practical Alternatives Report (P.A.R.) is not required for this project.
- FEMA, USCG, and/or TVA. – Not applicable.
- A VE Study is not required for this project.
- Public involvement: A Public Information Open House (PIOH) is scheduled for August 7, 2008.
- Local government comments. A PMA was signed by Cobb County on July 30, 2003
- Other projects in the area:
 - GDOT Project 0004405, MSL-0004-00 (405) – SR 5/Austell Road at six locations between Sandtown Road and Hospital S. Drive – Intersection Improvements. (this project has been let to construction)
 - GDOT Project 0006723, CSSTP-0006-00 (723) – SR 360/Powder Springs Road from Garrison Road to County Services Parkway – Bicycle/Pedestrian Facility.
 - GDOT Project 0006871, CSSTP-0006-00 (871) – Callaway Road from SR 5/Austell Road to SR 360/Powder Springs Road – Widening, reconstruction and rehabilitation project.
 - GDOT Project 0006936, CSSTP-0006-00 (936) – SR 360/Powder Springs Road and SR 280/South Cobb Drive Connector – Widening, reconstruction and rehabilitation project.
 - Cobb DOT Project D4240 – Construction of a new four lane divided roadway from Macland Road (SR 360) at Powder Springs Road to Windy Hill Road.
- Other Coordination
 - A coordination meeting with the FHWA was held on October 4, 2007. (See attached minutes.)

Project Concept Report Page 9
Project Number: STP00-0004-00 (449)
P.I. Number: 0004449
County: Cobb

- A coordination meeting with the National Park Service was held on October 29, 2007. (See attached minutes.)
- A coordination meeting with the National Park Service was held on May 13, 2008. (See attached minutes.)
- Railroads: Not Applicable

Scheduling – Responsible Parties’ Estimate

- Time to complete the environmental process: 12 Months.
- Time to complete preliminary construction plans: 6 Months.
- Time to complete right-of-way plans: 3 Months.
- Time to complete final construction plans: 3 Months.
- Time to complete to purchase right-of-way: 19 Months.

Other alternates considered:

No-Build Alternative

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

Alternate 1

This alternate would include the improvement of all four quadrants of the intersection with right turn lanes constructed, an additional left turn lane on Callaway Road and curb and gutter with sidewalks on both sides of each approach to the intersection. This alternate is the preferred alternate however sidewalks will not be included on Cheatham Hill Road and on the north side of Powder Springs Road due to the detrimental impacts to the National Park Service. A multi-use path that will be located within the park on the north side of Powder Springs will serve pedestrians.

Comments: None.

Attachments:

1. Cost Estimates:
 - a. Construction including E&C
 - b. Right-of-Way
 - c. Utilities
2. Typical sections
3. Traffic Flow Diagram & Capacity Analysis
4. Benefit/Cost Ratio
5. Minutes of Initial Concept and Concept meetings
6. Other Meetings – Coordination Meeting with National Park Service
7. Concept Sketch

Estimate Report for file "P.I. No. 0004449_2008-07-21"

Section Traffic Control					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	Lump Sum	100000.00	TRAFFIC CONTROL	100000.00
Section Sub Total:					\$100,000.00

Section Grading & Drainage					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
210-0100	1	Lump Sum	200000.00	GRADING COMPLETE	200000.00
550-1180	4000	LF	39.94	STORM DRAIN PIPE, 18 IN, H 1-10	159760.00
550-1300	2000	LF	63.78	STORM DRAIN PIPE, 30 IN, H 1-10	127560.00
550-1360	500	LF	74.15	STORM DRAIN PIPE, 36 IN, H 1-10	37075.00
550-1361	300	LF	88.13	STORM DRAIN PIPE, 36 IN, H 10-15	26439.00
550-1481	50	LF	115.68	STORM DRAIN PIPE, 48 IN, H 10-15	5784.00
550-3318	4	EA	635.01	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	2540.04
550-3330	4	EA	1347.33	SAFETY END SECTION 30 IN, STORM DRAIN, 4:1 SLOPE	5389.32
668-1100	38	EA	2613.36	CATCH BASIN, GP 1	99307.68
Section Sub Total:					\$663,855.04

Section Base & Paving					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	2703	TN	19.18	GR AGGR BASE CRS, INCL MATL	51843.54
402-3141	1612	TN	74.24	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL	119674.88
402-3143	1151	TN	65.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL	74815.00
402-3190	461	TN	58.76	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	27088.36
413-1000	1512	GL	1.99	BITUM TACK COAT	3008.88
432-5010	1000	SY	1.54	MILL ASPH CONC PVMT, VARIABLE DEPTH	1540.00
Section Sub Total:					\$277,970.66

Section Concrete Work					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
441-0104	2000	SY	34.43	CONC SIDEWALK, 4 IN	68860.00
441-4050	675	SY	45.89	CONC VALLEY GUTTER WITH CURB, 8 IN	30975.75
441-6222	6000	LF	16.27	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2	97620.00
Section Sub Total:					\$197,455.75

Section MISCELLANEOUS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
634-1200	25	EA	105.16	RIGHT OF WAY MARKERS	2629.00
Section Sub Total:					\$2,629.00

Section Signing and Striping and Signals					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1020	35	SF	14.76	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	516.60
636-1033	30	SF	19.68	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	590.40
636-1041	30	SF	46.74	HIGHWAY SIGNS, TP 2 MATL, REFL SHEETING, TP 9	1402.20
636-2070	25	LF	8.52	GALV STEEL POSTS, TP 7	213.00
636-2080	150	LF	8.61	GALV STEEL POSTS, TP 8	1291.50
639-4004	4	EA	6340.10	STRAIN POLE, TP IV	25360.40
647-1000	1	LS	53242.21	TRAFFIC SIGNAL INSTALLATION NO -	53242.21
647-2140	1	EA	1328.26	PULL BOX, PB-4	1328.26

647-2150	1	EA	1624.66	PULL BOX, PB-5	1624.66
653-0120	29	EA	73.95	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	2144.55
653-1501	1140	LF	0.42	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	478.80
653-1502	5000	LF	0.43	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	2150.00
653-1704	170	LF	3.65	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	620.50
653-1804	780	LF	2.13	THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE	1661.40
653-3501	3280	GLF	0.46	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	1508.80
654-1001	65	EA	3.36	RAISED PVMT MARKERS TP 1	218.40
654-1003	125	EA	3.92	RAISED PVMT MARKERS TP 3	490.00
935-1511	100	LF	2.39	OUTSIDE PLANT FIBER OPTIC CABLE, DROP, SINGLE MODE, 6 FIBER	239.00
935-3103	1	EA	551.51	FIBER OPTIC CLOSURE, UNDERGROUND, 24 FIBER	551.51
935-4010	4	EA	41.49	FIBER OPTIC SPLICE, FUSION	165.96
Section Sub Total:					\$95,798.15

Section Landscaping and Erosion Control

Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	1	AC	492.49	TEMPORARY GRASSING	492.49
163-0240	6	TN	218.50	MULCH	1311.00
163-0300	3	EA	1878.69	CONSTRUCTION EXIT	5636.07
163-0550	38	EA	204.14	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	7757.32
165-0010	1000	LF	0.59	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	590.00
165-0030	3000	LF	1.08	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	3240.00
165-0086	8	EA	317.10	MAINTENANCE OF SILT CONTROL GATE, TP 2	2536.80
165-0101	3	EA	564.95	MAINTENANCE OF CONSTRUCTION EXIT	1694.85
165-0105	38	EA	83.80	MAINTENANCE OF INLET SEDIMENT TRAP	3184.40
167-1000	1	EA	949.01	WATER QUALITY MONITORING AND SAMPLING	949.01
167-1500	18	MO	932.38	WATER QUALITY INSPECTIONS	16782.84
171-0010	2000	LF	1.50	TEMPORARY SILT FENCE, TYPE A	3000.00
171-0030	6000	LF	3.73	TEMPORARY SILT FENCE, TYPE C	22380.00
603-2018	50	SY	57.50	STN DUMPED RIP-RAP, TP 1, 18 IN	2875.00
603-7000	500	SY	5.31	PLASTIC FILTER FABRIC	2655.00
700-6910	2	AC	920.13	PERMANENT GRASSING	1840.26
700-7000	15	TN	48.01	AGRICULTURAL LIME	720.15
700-7010	12	GL	17.34	LIQUID LIME	208.08
700-8000	2	TN	282.45	FERTILIZER MIXED GRADE	564.90
700-8100	150	LB	2.26	FERTILIZER NITROGEN CONTENT	339.00
Section Sub Total:					\$78,757.17

Total Estimated Cost: \$1,416,465.77

Subtotal Construction Cost	\$1,416,465.77
E&C Rate ⁵ 10.0 %	\$141,646.58
Inflation Rate ^{C = 8%} 0.0 % @ 0 Years	\$0.00
Total Construction Cost	\$1,558,112.35
Right Of Way	\$12,400.00
Reimb. Utilities	\$250,000.00

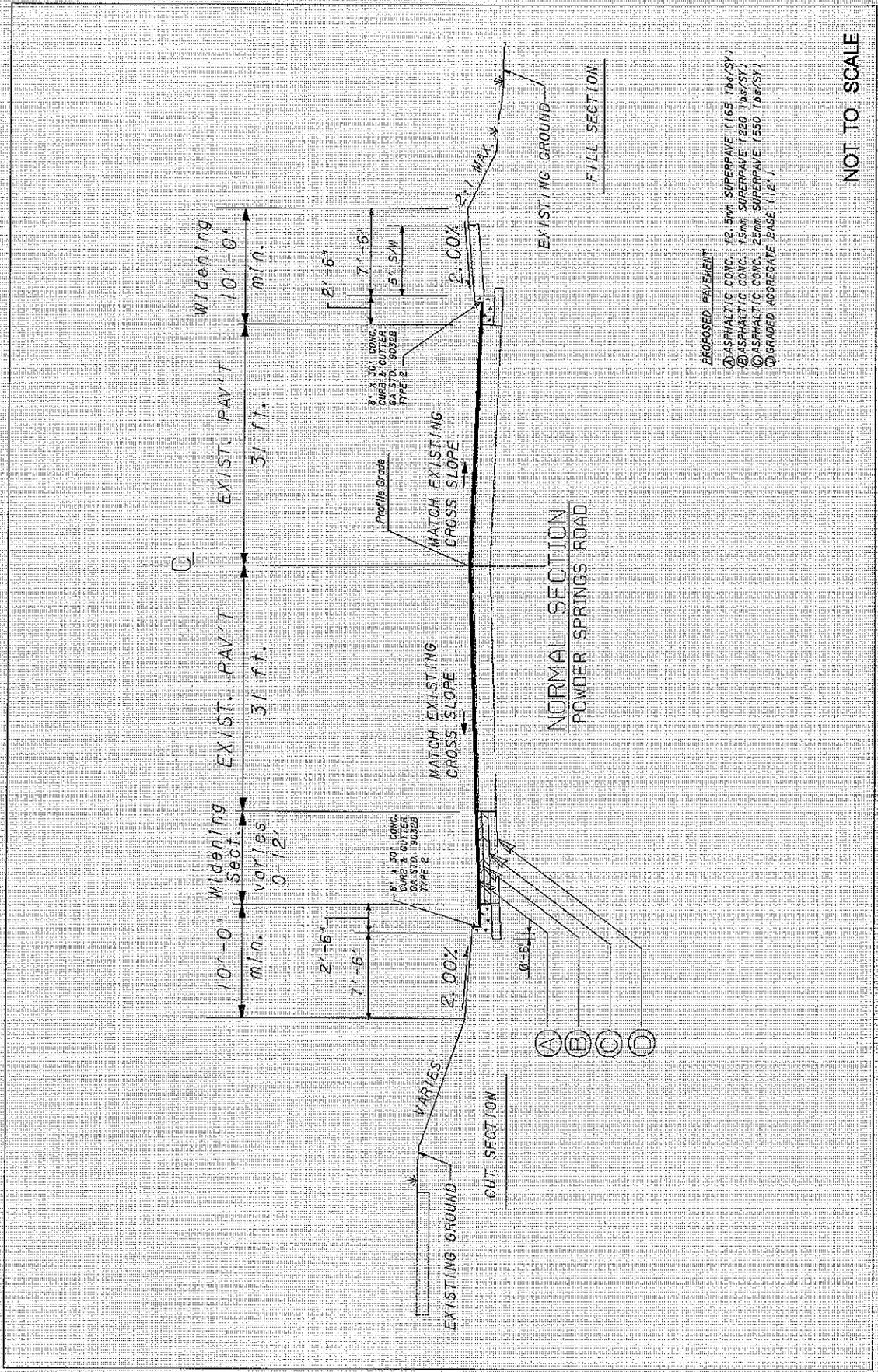
ENGINEERING @ 5% 70,823
 CONTRACTOR @ 8% 118,983

 TOTAL CONSTRUCTIONAL COST \$1,606,271
 RIGHT-OF-WAY - 12,400
 REIMB UTILITIES - 250,000

 TOTAL PROJECT COST = \$1,868,671


 8/13/08

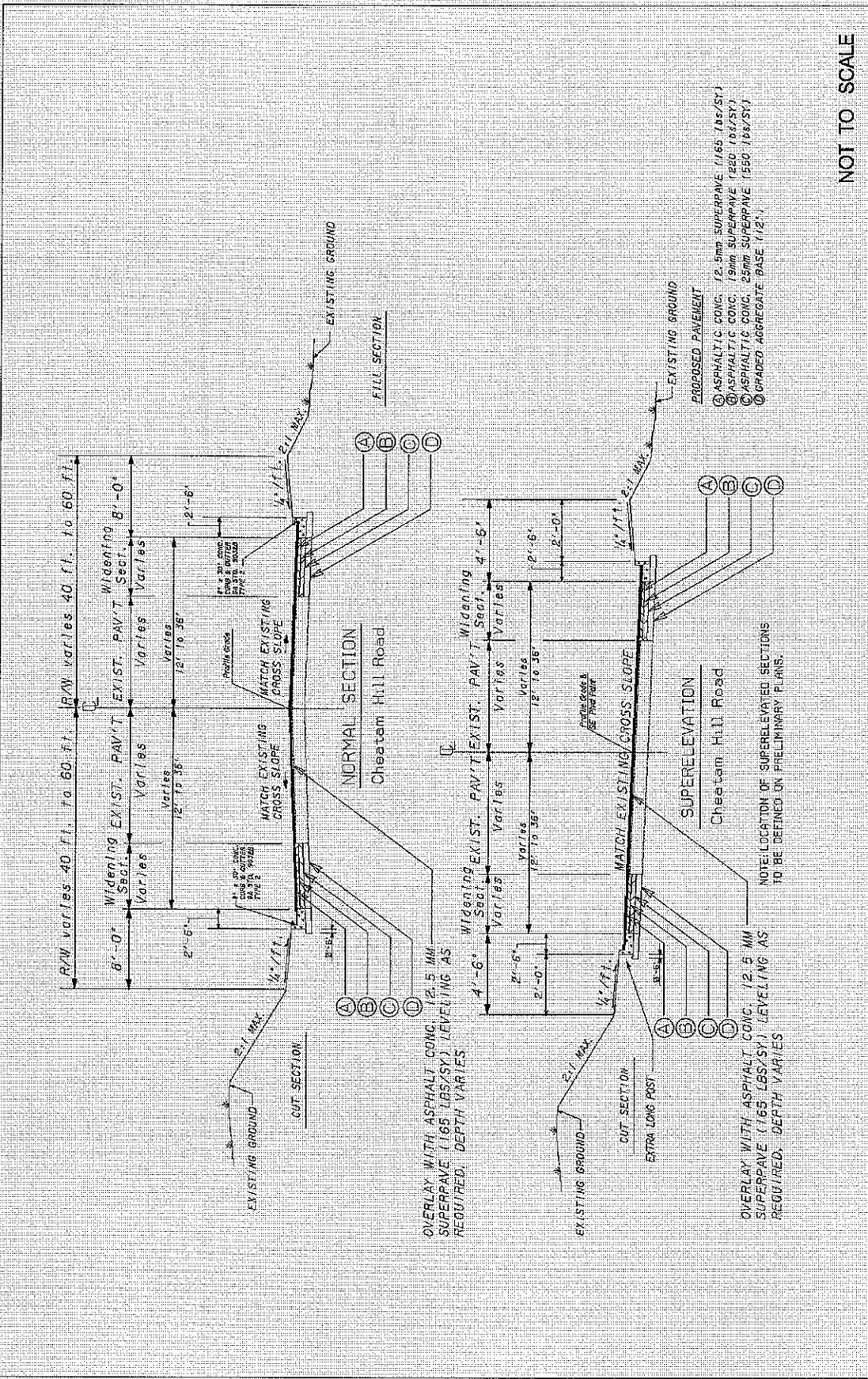
~~Grand Total Project Cost \$1,820,512.78~~



PROPOSED PAVEMENT

- ① ASPHALTIC CONC. 12.5mm SUPERPAVE (165 lbs/SY)
- ② ASPHALTIC CONC. 19mm SUPERPAVE (220 lbs/SY)
- ③ ASPHALTIC CONC. 25mm SUPERPAVE (250 lbs/SY)
- ④ GRADED AGGREGATE BASE (112')

NOT TO SCALE

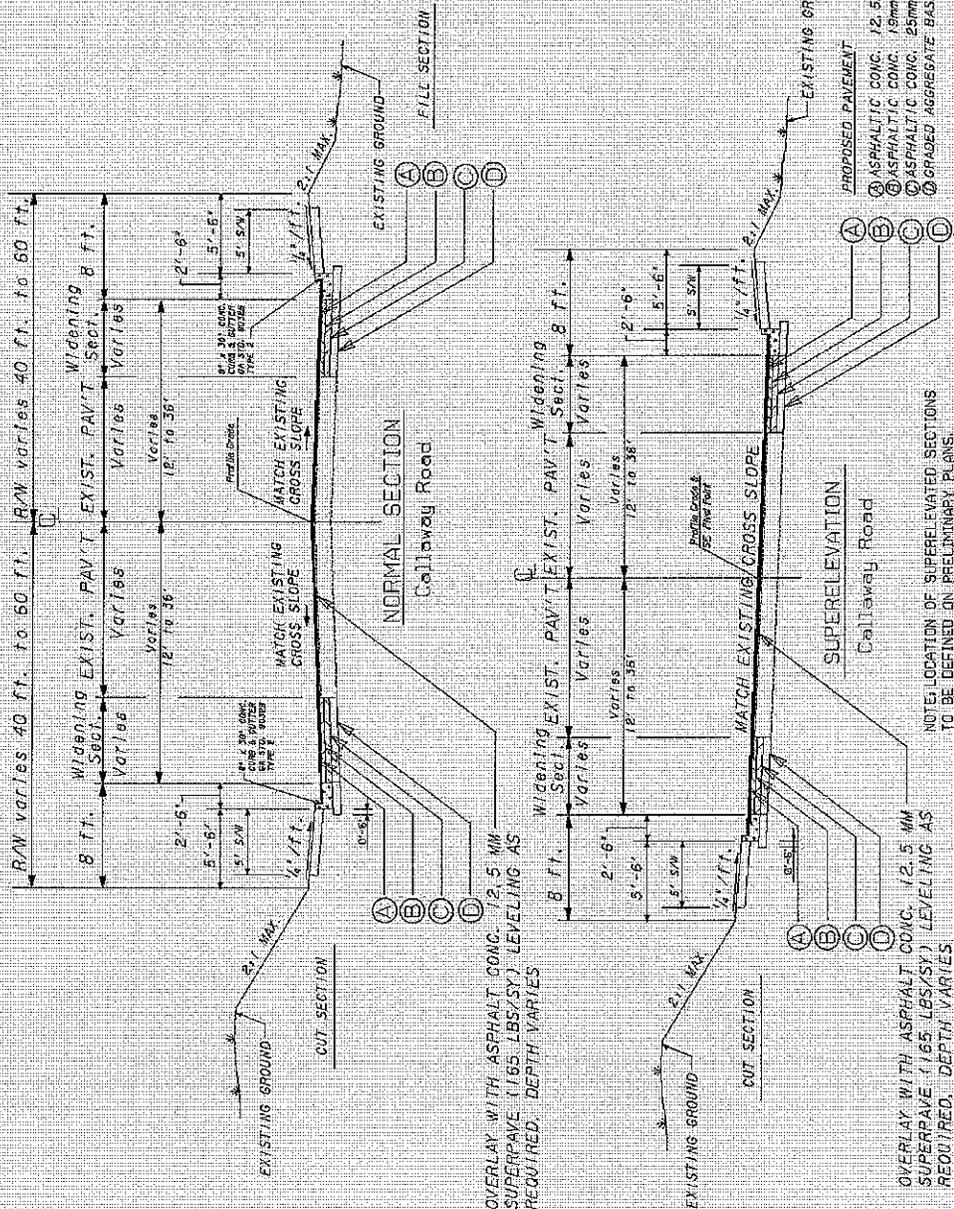


- PROPOSED PAVEMENT
- (A) ASPHALTIC CONC. 12.5mm SUPERPAVE (165 LBS/SY)
 - (B) ASPHALTIC CONC. 19mm SUPERPAVE (220 LBS/SY)
 - (C) ASPHALTIC CONC. 25mm SUPERPAVE (550 LBS/SY)
 - (D) GRADED AGGREGATE BASE (112')

NOTE: LOCATION OF SUPERELEVATED SECTIONS TO BE DEFINED ON PRELIMINARY PLANS.

OVERLAY WITH ASPHALT CONC. 12.5 MM SUPERPAVE (165 LBS/SY) LEVELING AS REQUIRED. DEPTH VARIES

NOT TO SCALE



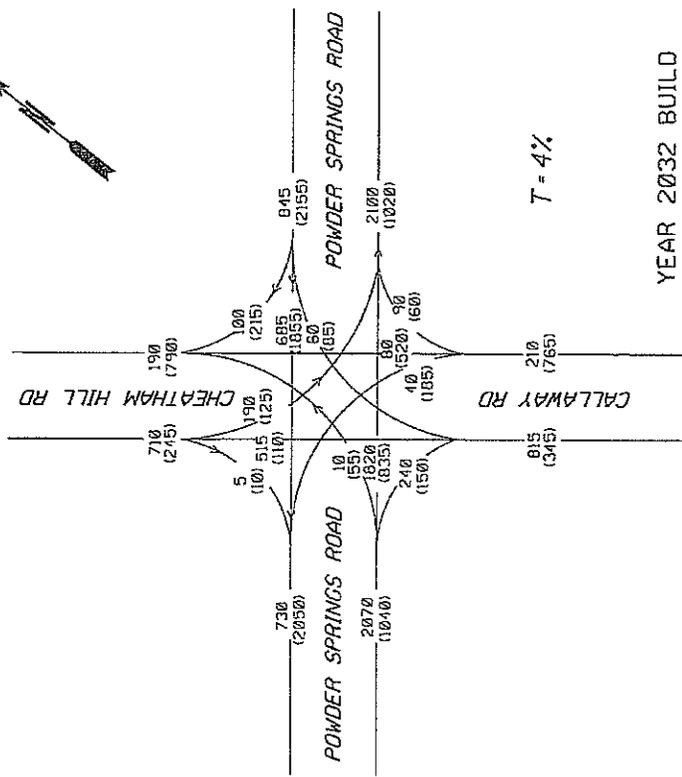
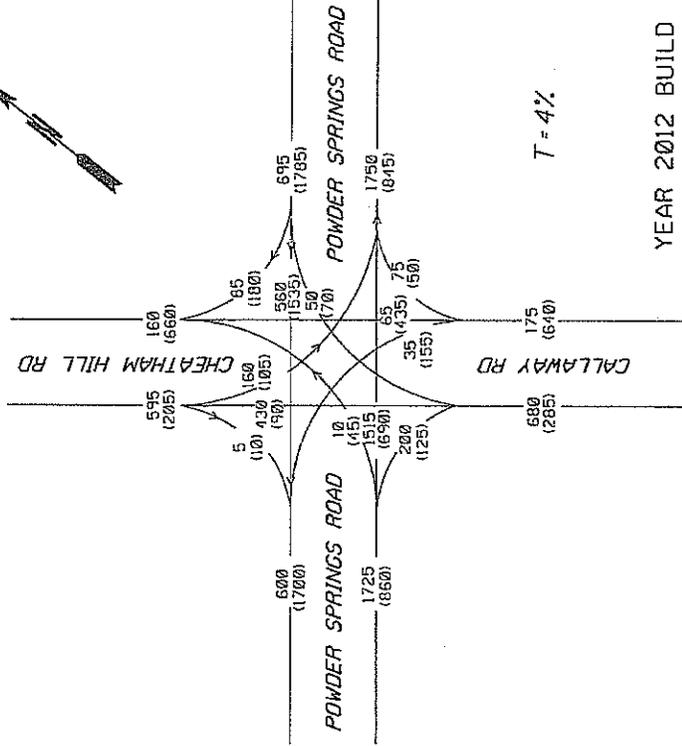
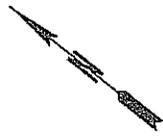
OVERLAY WITH ASPHALT CONC. 12.5 MM SUPERPAVE (165 LBS/SY) LEVELING AS REQUIRED. DEPTH VARIES

OVERLAY WITH ASPHALT CONC. 12.5 MM SUPERPAVE (165 LBS/SY) LEVELING AS REQUIRED. DEPTH VARIES

- ① ASPHALTIC CONC. 12.5mm SUPERPAVE (165 LBS/SY)
- ② ASPHALTIC CONC. 19mm SUPERPAVE (220 LBS/SY)
- ③ ASPHALTIC CONC. 25mm SUPERPAVE (250 LBS/SY)
- ④ GRADED AGGREGATE BASE (12")

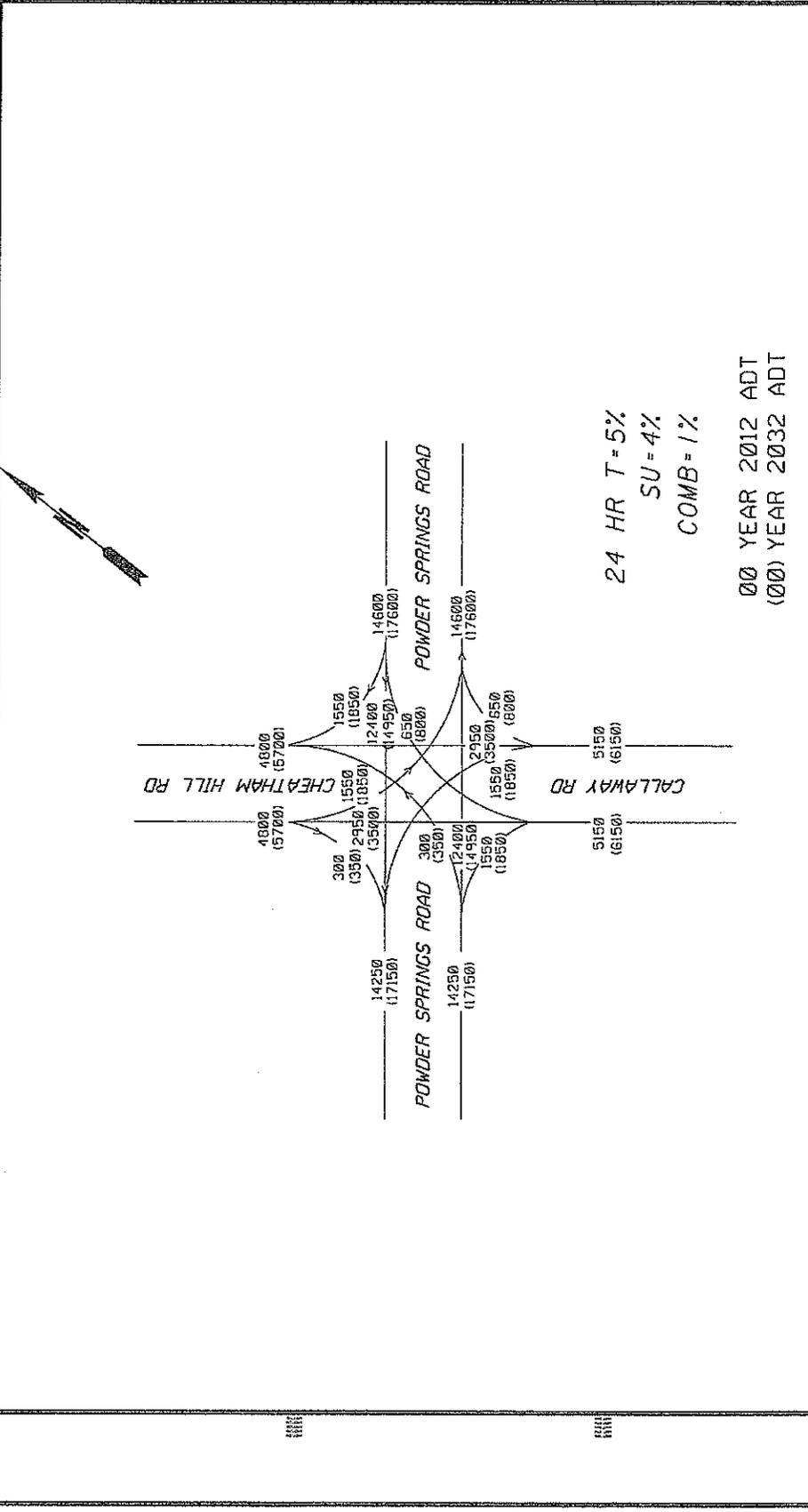
NOTE: LOCATION OF SUPERELEVATED SECTIONS TO BE DEFINED ON PRELIMINARY PLANS.

NOT TO SCALE



	DESIGNED BY:	STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE:
	CHECKED BY:	
SUPERVISOR BY:	TRAFFIC PLAN BY:	DATE:
SUPERVISOR BY:	TRAFFIC PLAN BY:	DATE:

PROJECT NUMBER: COUNTY: ROAD NUMBER: SCALE: 1" = 100' DATE: 11/11/11



24 HR T = 5%
 SU = 4%
 COMB = 1%

00 YEAR 2012 ADT
 (00) YEAR 2032 ADT

 MORELAND-ALQUELLI ASSOC., INC. 1770 263-5945	DESIGNED BY: _____ DRAWN BY: _____ CHECKED BY: _____ SUPERVISED BY: _____	REVISION DATES _____ _____ _____	OFFICE: _____ STATE OF GEORGIA DEPARTMENT OF TRANSPORTATION 2012/2032 AVERAGE DAILY TRAFFIC 600
	PROJECT: _____ COUNTY: _____ ROAD NUMBER: _____		

Benefit Cost Analysis Work Sheet
CONGESTION Projects

Project Number: STP00-0004-00(449)

P.I Number: 0004449

County: Cobb

Project Description: SR 360/Powder Springs Road at Callaway Road/Cheatham Hill Road

Congestion Benefit = Tb + CMb + Fb

Person Time Savings Benefit (Tb)

*Db (hrs)	0.01186
ADT	23,300.00
Tb (\$s)	\$9,499,118.75

Commercial or Truck Time Savings Benefit (CMb)

Db (hrs)	0.01186
% Truck Traffic	0.04
ADT	23,300.00
CMb	\$2,007,595.57

Fuel Savings Benefit (Fb)

ADT	23,300.00
Fb (\$s)	\$3,310,298.96

Total Congestion Benefit	\$14,817,013.28
Total Project Cost	\$2,396,219.10
B/C Ratio	6.18

* Reduction in delay or **Delay Benefit (Db)** can be defined as the difference between the peak hour travel time through the corridor without the proposed improvement and the peak hour travel time through the corridor with the proposed improvement



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

MEETING MINUTES

Project: SR 360/Powder Springs Rd @
 Callaway/Cheatham Hill Rd
 P.L No. 0004449

Meeting: Concept Team Meeting

Location: GDOT District 7 Conference Room

Prepared By: Shrujal Amin

Prepared On: 7/13/07

Meeting Date	7/13/07
MA Project No.	06612
CC:	Attendees File

Attendee	Organization	Phone	Email
Kevin Cowan	GDOT	770-986-1110	kevin.cowan@dot.state.ga.us
Mac Cranford	GDOT	770-986-1111	mac.cranford@dot.state.ga.us
Mike Lobdell	GDOT	770-986-1257	mike.lobdell@dot.state.ga.us
Scott Lee	GDOT	770-986-1261	scott.lee@dot.state.ga.us
Jennie Coons	GDOT	404-699-6865	jennifer.nichole@dot.state.ga.us
Mike Murdoch	GDOT	404-699-4417	mike.murdoch@dot.state.ga.us
Ron Cooper	Cobb DOT	770-590-6350	ron.cooper@cobbcounty.org
David Jackson	Cobb DOT	770-528-1660	david.jackson@cobbcounty.org
Shrujal Amin	MAAI	770-263-5945	samin@maai.net

A Concept Team Meeting for the above referenced project was held on Friday July 13th, 2007 at the Georgia Department of Transportation, District Office in Chamblee. The meeting began at approximately 9:00 a.m. and ended at approximately 10:45 a.m. Those listed above were in attendance.

Mac Cranford opened the meeting introducing himself and stating the purpose for the meeting. He started off the introductions and had everyone state their involvement with the project.

After introductions, Mr. Cranford went through the draft version of the project concept report and had David Jackson to explain the project. Mr. Jackson briefly expounded on the need for the project and the early and ongoing negotiations that have occurred with the National Parks Service due to the fact that three corners of the intersection are on Park Property. He explained that Cobb County donated one of the corners to the Park Service in order to prevent commercial development from taking place. In that process the county retained enough land to build the project within the existing right of way.

Shrujal Amin went on to explain the typical section for the project was still in flux because one of the stated goals of the project is to affect as little of the park property as possible. To this end, he cited the need for a design variance to forgo sidewalk on some of the curb and gutter sections adjacent to park property. Mike Lobdell and Mac Cranford indicated that this was a reasonable request and that a variance should be deemed appropriate under the circumstances.

Mr. Cranford stated that a little more traffic analysis may be required to better show the traffic improvements that will result from the implementation of this project. He asked Mr. Amin to determine the opening year Level of Service (LOS) as well as the year in which the LOS again goes to "F". Mr.



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

MEETING MINUTES

Jackson mentioned that a project to improve the Windy Hill/Macklin Road intersection had just been approved and that an analysis in conjunction with the Powder Springs/Cheatham Hill Project would better highlight actual improvements in traffic flow. He also indicated further improvements (i.e. additional turn lanes) had been looked up adversely by the Park Service.

Mr. Lee suggested bringing the pedestrian crossing on the north side of the project down to Powder Springs Road. Mr. Jackson indicated that the Park was not necessarily in favor of doing that. Mr. Lobdell asked that Mr. Jackson confirm the Park's position in regards to the location of the trail's roadway crossing. Mr. Jackson said he would confirm and relay the information to Mr. Amin in order to update the Concept Drawing accordingly.

Mr. Murdoch of GDOT OEL indicated that because of the proximity of park property that even though a 4F situation may be possible it was more likely that a "De Minimus" finding would be appropriate. He encouraged documenting all meetings and discussions held with the parks service and asked that the project be presented to Jennifer Giersh of FHWA as soon as possible. Mr. Amin indicated that he would involve Moreland Altobelli's Environmental Coordinator to better explain the environmental efforts that have already been made in regards to the parks land.

Mr. Jackson added that the Park Service would like to have buried utilities on the project but that funding this request may be an issue.

Minutes of Concept Team Meeting
February 6, 2008 10:00 A.M.
GDOT District 7 Preconstruction Conference Room 144, Chamblee Office

Intersection Improvements of Powder Springs Rd at Callaway Rd
Project Number: STP00-0004-00(449)
P. I. Number: 0004449
Cobb County

Attendees are listed below:

<u>Name</u>	<u>Company</u>	<u>Phone</u>	<u>Email</u>
Merishia Robinson	GDOT-District 7	770-986-1114	mrobinson@dot.ga.gov
Scott Lee	GDOT-District 7	770-986-1261	slee@dot.ga.gov
Ted Crabtree	GDOT-District 7	770-963-1260	tcrabtree@dot.ga.gov
Jania Braswell	GDOT-District 7	770-986-1785	jbraswell@dot.ga.gov
Edlin Regis	GDOT-District 7	770-986-1773	eregis@dot.ga.gov
Cindy Treadway	GDOT-OEL	404-699-6865	ctreadway@dot.ga.gov
Lloyd R. Morris	NPS	Ext. 228 770-427-4686	lloyd_morris@nps.gov
Anita Barnett	NPS	Ext. 705 404-562-3124	Anita_Barnett@nps.gov
Shrujal Amin	MAAI	770-263-5945	samin@maai.net
Karla Poshedly	MAAI	770-263-5945	kposhedly@maai.net
Linda Cooks	MAAI	770-263-5945	lcooks@maai.net

Ms. Merishia Robinson opened the meeting with introductions of all the attendees. Ms. Karla Poshedly then gave a presentation of the project, discussing its need and purpose, the operational need for the project, and the accident and traffic data. She noted that the footprint of the project was reduced to minimize impact to National Park Service (NPS) property. Also sidewalk along Callaway Road (in front of the Kolb Farm) has now been included in the plans. There would be no acquisition of property from within the NPS boundary. There may be issues with poles on the north side of Powder Springs Road. Mr. Lloyd Morris with NPS stated that the poles are already on parkland.

Ms. Anita Barnett with NPS stated that she would need to check with the cultural resource folks if the sidewalk could be installed on the south side of Powder Springs Road, in front of the Kolb Farm. Ms. Poshedly added that sidewalk would also be installed on the west side of Callaway Road. The sidewalk will be installed where the road is currently (the roadway is being moved further east onto non-historic property at the southeast quadrant). Landscape (grass) will be added to the Kolb Farm side of Callaway Road. Mr. Jania Braswell brought up the issue of the proposed parking lot on the Kolb Farm property, east of the cemetery. Ms. Poshedly stated that the proposed parking lot would be a separate project, to be worked out between Cobb County and the NPS. Ms. Braswell questioned that there would be no parking provided for the public between the completion of the GDOT project and the construction of the new parking lot. Mr. Morris stated that the County is planning a multi-use trail on the north side of Powder Springs, east of Cheatham Hill Road/Callaway Road. Ms. Poshedly suggested that the existing driveway could be left open and available to the public, until the new parking lot is completed.

Ms. Barnett requested that a legend be added to the concept plans.

Mr. Shrujal Amin noted that the project might require temporary easement from NPS property on the southwest corner needed to tie in the slope of the property with the reconstructed roadway. He questioned whether that would be considered an adverse impact? Ms. Barnett stated that she would need to see the impacts before answering that question. Ms. Poshedly stated that the amount of encroachment due to temporary easement would not be known until the design is complete.

Ms. Barnett stated that even though the proposed parking lot is a separate Cobb County project, NPS would need to see the agreement of what is happening with the proposed parking lot. The question arose of whether it would still be considered a part of this project and would it then become a Section 4(f) issue? Mr. Scott Lee stated that in order to avoid a Section 4(f) impact, Cobb County could complete the proposed parking lot before the GDOT project is constructed.

Mr. Lee noted that the project might run into a problem with level of service (LOS). The project would only bring the LOS of "F" up to a "D." Not getting a great deal of benefit from the project for the money. The FHWA may not approve it. A project in Stone Mountain recently had a similar problem. He stated that the Department might want to run the concept by FHWA. Mr. Ted Crabtree suggested re-emphasizing the accident problem in the area and reiterate how the project would have the potential to reduce traffic accidents. He asked that the need and purpose in the concept report be revised to show accident history comparisons to accident history of critical intersections statewide. Perhaps the need and purpose section should start by discussing safety and traffic and then discuss accident rates. Mr. Crabtree stated that the accident information is now available for 2004-2006.

Ms. Robinson then went through each page of the project concept report, noting items that may need to be revised.

Mr. Lee stated that the District Utilities Office would send Moreland Altobelli Associates, Inc. a letter regarding requirements for utilities for this project.

Mr. Lee suggested giving the subdivision just south of the NPS property on Callaway Road a dedicated left turn lane. It is just a matter of changing the striping.

Mr. Lee stated that the scheduled let date for this project is December 2008. The programming quarterly meeting is scheduled for March 13, 2008. He said that GDOT would be changing the right-of-way authorization date and let date of the project at this meeting. Mr. Lee asked if the project design and right-of-way acquisition would be completed in 2009, with a new construction let date in 2010? Most everyone at the meeting agreed with the suggested change in dates.

It was agreed that the County would coordinate with the NPS regarding the parking lot issue. The agreement would to be firm before the project starts.

Ms. Braswell will send a copy of the current schedule to Mr. Amin.

Ms. Robinson thanked everyone for coming and the meeting was adjourned.

MEETING MINUTES

Powder Springs Road at Cheatham Hill Road/Callaway Road October 4, 2007

Time: 10:05 AM – 10:45 AM

Location: GDOT/OEL's Office

Those in Attendance

Jennifer Giersch, FHWA
Susan Knudson, OEL
Eric Duff, OEL
Michael Murdoch, OEL
Cindy Treadway, OEL
David Jackson, Cobb County DOT
Shrujal Amin, Moreland Altobelli Associates, Inc.
Bruce King, Moreland Altobelli Associates, Inc.
Linda Cooks, Moreland Altobelli Associates, Inc.

1. All attendees were introduced.
2. Bruce King opened with an explanation of the purpose of the meeting, which was to acquaint both FHWA and OEL with this project.
3. David Jackson gave a detailed description of the project's historical events including past coordination with the previous Superintendent of the Kennesaw Mountain National Battlefield Park (KMNBP), the County's acquisition of the parcel situated in the SE corner of the intersection. Bruce King noted that the current roadway improvements associated with Cheatham Hill Road are there under a Special Use Permit, which has expired and would need to be renewed under a Right-of-Way Utilization Permit. Susan Knudson stated that the ROW Utilization Permit is beyond the scope of this project.
4. Bruce King presented the Concept Alternative and discussion ensued. It was concluded that the sidewalk should be part of the proposed project improvements, so that we may get the thoughts from the NPS.
5. Bruce King noted the existing and future traffic levels of service, which were accepted by FHWA.
6. The need to have a coordination meeting with the National Park Service to review the proposed intersection improvements was noted by Bruce King. Discussion ensued and it was concluded that Moreland Altobelli Associates, Inc. should set

Meeting Minutes
October 4, 2007
Powder Springs Road
Page 2 of 2

up such a meeting including all those present today as well as Daniel Brown, the current Superintendent of KMNBP, Anita Barnett from the NPS Regional Office, a representative of the SHPO's Office, and Jeff Carr, who is a Historian with OEL. The venue for that meeting should be Cobb County DOT's office in order to conveniently conduct a site visit after the meeting.

**Minutes of Coordination Meeting with National Park Service
October 29, 2007, 10:00 A.M. Cobb DOT Conference Room**

**Intersection Improvements of Powder Springs Rd at Callaway Rd
Project Number: STP00-0004-00 (449)
P. I. Number: 0004449
Cobb County**

Attendees are listed below:

Name	Company	Phone	Email
Michael Murdoch	GDOT-OEL	404-699-4417	michael.murdoch@dot.state.ga.us
Bruce King	MAAI	770-263-5945	bking@maai.net
Karla Poshedly	MAAI	770-263-5945	kposhedly@maai.net
Linda Cooks	MAAI	770-263-5945	lcooks@maai.net
Cindy Treadway	GDOT-OEL	404-699-6865	cindy.treadway@dot.state.ga.us
Jeff Carr	GDOT-OEL	404-699-4410	jeffrey.carr@dot.state.ga.us
Merishia Robinson	GDOT-District 7	770-986-1114	merishia.robinson@dot.state.ga.us
Jania Braswell	GDOT-District 7	770-986-1785	janja.braswell@dot.state.ga.us
Felton Rutledge	MAAI	770-528-3664	felton.Rutledge@cobbcounty.org
Daniel McDuff	PBS&J/Cobb DOT	770-528-1635	daniel.mcduff@cobbcounty.org
Amanda Schraner	HPD/DNR	404-463-6687	amanda.schraner@dnr.state.ga.us
Lloyd R. Morris	NPS	Ext. 228 770-427-4686	lloyd_morris@nps.gov
Dan Brown	NPS	678-538-1210	daniel_r_brown@nps.gov
Anita Barnett	NPS	Ext. 705 404-562-3124	anita_Barnett@nps.gov
Jennifer Giersch	FHWA	404-373-1680	jennifer.giersch@fhwa.dot.gov
Bob Entorf	HPD	404-571-6775	Robert.Entorf@dnr.state.ga.us
David Jackson	Cobb DOT	770-528-1660	david.jackson@cobbcounty.org

Mr. Bruce King opened the meeting with introductions of all attendees. Mr. David Jackson then gave a brief history of the project. He stated that there is a high volume of traffic from Macland Road and southwest Cobb turning right from Powder Springs Road onto Callaway Road. This project is proposed to add an eastbound right-turn lane on Powder Springs Road. There is a historic resource (the Kolb Farm) that is located on the southwest corner. Therefore, the concept was developed where the laneage of Powder Springs Road was shifted opposite of the Kolb Farm to provide the right-turn lane.

Mr. Jackson continued to state that currently there is a new location project that is to be built with the 1% SPLOST funds that will connect Macland Road to Windy Hill Road. This project will divert some traffic from this intersection, but there is still the need for the eastbound right-turn lane on Powder Springs Road.

Mr. Jackson stated that the National Park Service now owns all four quadrants of the intersection. He said the 4th quadrant (southeast corner) of the intersection was previously privately owned. The owner was to build a Quik-Trip on this property; instead Cobb County purchased the corner property and deeded it to the National Park Service (NPS). Mr. Dan Brown stated that it was stipulated in the deed to that property that the NPS would work with Cobb County to develop a mutually agreeable improvement project at the intersection as it related to

the 4th quadrant. Mr. Jackson added that enough right-of-way was allocated to build a northbound right-turn lane on Callaway Road before the 4th quadrant was deeded.

Mr. Dan Brown discussed the fact that the NPS is working on a multi-use bike trail with Cobb County and that the trail was factored into this plan.

Ms. Karla Poshedly was then asked to present the traffic justification for the project. She explained that the intersection would operate at level of service "F" during peak hours of the projected year 2032. With improvements to the intersection (eastbound and northbound right-turn lanes) the level of service of the intersection would operate with a level of service "D", which is an acceptable level of service. She said that the right-turn lanes serve to add capacity to the through lane by removing the right-turn vehicles from the stream of traffic. This would allow for more efficient use of the green time for the through traffic and thus improve the level of service of the intersection.

Mr. Bruce King described the lane configuration of the intersection by each approach. He also described the location of the sidewalks provided. He stated that there is a worn dirt path along Powder Springs Road fronting the Kolb Farm property along Powder Springs Road. He said the new sidewalk would connect with the existing sidewalk located east of the intersection along the south side of Powder Springs Road. Dan Brown with NPS asked if it was possible to connect the new sidewalk to the one located at the southeast corner of the Kolb Farm property, and it was agreed to evaluate that option.

Mr. Jackson stated that some right-of-way was deeded many years ago to the State for Powder Springs Road. However, when Powder Springs Road was widened to five lanes, the roadway may have spilled over the deeded right-of-way. He stated that he believes there was no new right-of-way purchased at the time that the roadway widening was allowed by an agreement with the NPS. The right-of-way shown on the concept plan is the agreed upon designated land for the roadway. It does not represent County or State ownership.

Mr. Brown said that he had seen a previous concept plan that had a westbound right-turn lane on Powder Springs Road. Mr. Jackson responded that Cobb County wanted to minimize the footprint of the project, being respectful of the Kennesaw Mountain National Battlefield Park.

Mr. Brown then asked Mr. Jackson to review the lane configuration with him again, so he could understand the proposed project. Mr. Jackson went over the concept layout again and stated that the County wants to aid users (pedestrians), minimize footprint of the project but allow people to connect to the trails.

Mr. Brown asked if access to the parking area was considered. He asked about the parking lot that is shown to be built by others in the southeast corner on the Kolb Farm property. Mr. Felton Rutledge said that there is plan to move the parking area so that people do not back into and out of the existing parking lot into the street, Powder Springs Road. Mr. Brown agreed that it would be better to move the existing parking lot to avoid this future safety problem.

Mr. Jackson said that Cobb County is trying to avoid a higher level of environmental document that is why Cobb is minimizing impacts to the parkland. A Categorical Exclusion (CE) is the type of environmental document being prepared instead of an Environmental Assessment (EA).

Ms. Anita Barnett stated that the National Park Service requires an EA. She stated that the National Park Service (NPS) CE is much less detailed than the requirements of the FHWA CE. Ms. Barnett said that the NPS may accept a FHWA-type CE as long as it includes enough detail regarding impacts.

Ms. Barnett asked how much right-of-way would be bought on Powder Springs Road for the road project. Mr. Jackson said that no right-of-way would be purchased, but that there may be some encroachment on the northwest side of Powder Springs Road due to the shifting of the five lanes over to provide the right-turn lane.

Mr. Brown said that it would make sense to add a sidewalk along Callaway Road along the frontage of the Kolb Farm. Ms. Poshedly said that the sidewalk would not be on the grass shoulder; it would be located where the existing roadway pavement is now located. Mr. Brown stated that the cemetery is not part of the Kennesaw Mountain National Battlefield Park. The cemetery is, however, a part of the National Register Historic District. Mr. Lloyd Morris with NPS said that cemetery is still active; it contains the Kolb family burial plots. He said that the NPS only maintains the cemetery grounds by cutting the grass. Mr. Rutledge said that a fence was placed around the cemetery to define the cemetery.

Mr. Brown stated that the multi-use trail is on the northeast side of Powder Springs Road/Cheatham Hill Road intersection. He said that it was his understanding that there was a proposal at one time to relocate the utilities on this side underground. Mr. Rutledge said that the NPS was going to submit a request for a grant to place the utilities underground, but the request fell through. Mr. Brown asked if the relocation of utilities could be a part of this project. Mr. Jackson said that to move utilities underground would cost millions and would make the project too expensive to build.

Mr. King asked about the traffic signal poles for the project. Ms. Poshedly said that the location of the traffic poles might need to be adjusted, but that they would still be located within the designated roadway area. Mr. Brown said that the GDOT right-of-way lines on the plans along Powder Springs Road need verification by the Land Division of the National Park Service because of the shift of lanes. Mr. Brown asked about the type of signal poles. Mr. Jackson stated that the signals would be placed on mast arm poles that would be painted either dark green or brown and located within the existing right-of-way.

Mr. Brown asked about relocating the existing pedestrian crossing across Cheatham Hill Road several hundred feet north of Powder Springs Road to along the immediate north side of Powder Springs Road. Mr. Jackson said that there is not an easy way to do that until the multi-use trail is built in that area. Mr. Brown agreed that the NPS would leave that crossing where it is until the multi-use trail is moved. Mr. Jackson stated that cabling for pedestrian crossing signals would be installed underground at the Cheatham Hill intersection along the north side of Powder Springs Road in anticipation of the multi-trail project.

Ms. Barnett stated that this project would require public involvement and detailed documentation of the issues pursuant to NPS requirements. She said that also a Memorandum of Understanding would need to be included with the document.

Ms. Barnett stated that she would need to get the Land Division of the NPS to confirm the property lines (right-of-way lines). She stated that once all of the requirements are met in the environmental document, then she could issue a Memorandum of Understanding.

Mr. King asked after the CE is prepared, how do we process this document. Ms. Barnett suggested that if it is all right with Ms. Jennifer Giersch, MA should just send the Table of Contents with the impact issues identified to her so she would know if all the impacts were addressed. The finished document should be sent to GDOT first for their review and approval, and then the NPS would be given a copy to review.

Mr. Brown asked if the driveway to the parking area in front of the Kolb Farm could be removed as part of this project. He also asked if the new parking area could be build as part of this project. Mr. Bob Entorf said that a new parking lot would require an archeological survey. Mr. Brown said he believes that there has been an archeological survey done on the parkland, but there may not be one on the Kolb Farm. Ms. Poshedly asked if a Section 4(f) would be required with the site work improvements of the Kolb Farm because the property is a historic resource. Mr. Jeff Carr stated that a Section 4(f) would only be required if there were an adverse effect. Mr. Rutledge said that this project could close the driveway but not move the parking lot. He said this would force motorists to use the other entrance. Ms. Giersch said that if you close the driveway to the parking area, then that could be an adverse impact to the Kolb Farm and it would require mitigation measures. Mr. Murdock said that building a new parking lot and closing and removing the pavement of the existing parking lot would be a change in the cultural landscape. He said that the document would have to show that this change is not an adverse impact on the historic resource.

Mr. King said that he would prefer that this site work be done as a separate project, so that the CE would be sufficient for the intersection improvement project. He then suggested that everyone from the meeting visit the site together immediately after the meeting is adjourn so that when issues are discussed in the document, everyone would have a clear picture of what is out at the site.

The meeting was then adjourned. Attendees reconvened at the project site.

The tree line on the north side of Powder Springs Road west of Cheatham Hill Road needs to be surveyed. The relocation of the power lines may require removal of existing trees. The power lines are not proposed to be buried underground.

If the existing gravel parking lot at the cemetery is removed, the two state markers and interpretive sign can remain at their present location if a sidewalk is provided for pedestrian access. Mr. King stated that it would be evaluated as a part of this project.

Any design for a proposed parking lot on the Kolb Farm property, at the southeast corner of the farm would need to avoid removal of existing trees on the property. Amanda Schraner asked the question as to when the existing dirt driveway was created on the Kolb Farm. Mr. Brown and Mr. Morris both thought that it was created in the 1960s/1970s when the Kolb Farm House was rehabilitated. Ms. Amanda Schraner thought that it may be best to try to use existing graveled area currently at the site for the proposed parking site, unless the existing gravel was removed and grass was planted as part of the mitigation. Mr. Brown stated that space for six cars should be sufficient. This is the current capacity of the existing parking area at the cemetery. Periodically, however, a bus will use the site for parking. Enough area to allow for a bus to turn around in the lot should be considered. Mr. Brown stated that it would be good to provide parking in the new area for NPS employees living in the Kolb Farm house away from the current spot, which is in rear of the house. Ms. Schraner stated that a parking lot paved with asphalt and striped with yellow lines may be inappropriate. The design of the new parking lot should be as unobtrusive as possible. Mr. King suggested that all parking should be located along the south property line of the Kolb Farm and the existing trees must be preserved, bringing it as far away from the house and cemetery as possible. Mr. King thanked everyone for coming and the meeting was adjourned.

Minutes of Coordination Meeting with National Park Service

May 13, 2008, 10:30 A.M.

Kennesaw Mountain National Battlefield Park Headquarters Office

Intersection Improvements of Powder Springs Rd at Callaway Rd

Project Number: STP-0004-00(449)

P. I. Number: 0004449

Cobb County

Attendees are listed below:

<u>Name</u>	<u>Company</u>	<u>Phone</u>	<u>Email</u>
Bruce King	MAAI	770-263-5945	bking@maai.net
Alison Faulkner	MAAI	770-263-5945	afaulkner@maai.net
Lloyd R. Morris	NPS	Ext. 228 770-427-4686	lloyd_morris@nps.gov
Anita Barnett	NPS	Ext. 705 404-562-3124	anita_barnett@nps.gov
Brad Bennett	NPS	770-427-4686	brad_bennett@nps.gov
Riana Ventura Bishop	NPS	770-427-4686	riana_ventura_bishop@nps.gov

After introductions, Mr. King noted the discrepancy between the existing right-of-way survey lines as shown by the NPS and Moreland Altobelli Associates, Inc. (MA). Mr. King stated that the NPS shape files' right-of-way lines and the MAAI right-of-way survey lines need to match as closely as possible in order to resolve this discrepancy. Mrs. Barnett said that she would pull the roadway deeds associated with Callaway Road/Cheatham Hill Road and Powder Springs Road, and provide a copy to MA. Similarly, MA is to send a copy of the records utilized by their land surveyor to Anita Barnett.

Mrs. Barnett noted that the proposed right-of-way and construction easement at the western corner of Powder Springs Road and Callaway Road lies outside of the existing MA right-of-way limits; although this is NPS property, this proposed right-of-way and construction easement area would not result in any adverse impacts to the Kolb Farm property. Mr. Lloyd Morris concurred with Mrs. Barnett's opinion regarding the proposed right-of-way and construction easement and shifted the meeting's discussion to the proposed retaining wall on the northeast corner of the Powder Springs Road/Cheatham Hill Road intersection. Mr. King noted that an archaeological survey for Civil War artifacts would be conducted prior to the construction of the proposed retaining wall at this intersection. Mr. Morris said that he would coordinate with the Park Historian on this matter.

Mrs. Ventura-Bishop suggested that the proposed retaining wall materials should either aesthetically match any other existing retaining walls within Kennesaw Mountain National Battlefield Park (KMNB Park) or the natural landscape if this is the first such wall within the KMNB Park. Mrs. Ventura-Bishop offered that an example of a concrete-and-stonework wall from another NPS project could be used to meet the needs of a solidly constructed, cost-effective, and aesthetically neutral retaining wall for this project.

Meeting Minutes

May 13, 2008

Powder Springs Road and Callaway Road/Cheatham Hill Road Intersection

Page 3 of 3

Mr. Morris noted that there is an abandoned house structure in the low-lying forested area that belongs to the NPS and that the existing driveway serving the abandoned house would be removed as part of the proposed construction. He suggested that a new vehicular access to the property should be incorporated into the construction plans for the proposed project. The location of that new driveway needs to be clarified with Cobb County and NPS.

Mr. King described the proposed lane configuration of the Powder Springs Road and Callaway Road/Cheatham Hill Road intersection by each approach. He also described the location of the sidewalks provided. He said the new sidewalk would connect with the existing sidewalk located northwest corner of the Kolb Farm property to the one existing on the east side of that intersection.

The meeting was then adjourned. Mr. Morris, Mrs. Ventura-Bishop, Mr. King, and Mrs. Faulkner reconvened at the project site to complete the environmental screening form. The field site meeting began on the Kolb Farm property. Mr. Morris guided Ms. Faulkner through the first 26 questions in Part C of the environmental screening form. Subsequently, the site visit moved to the area north of Powder Springs Road and Callaway Road/Cheatham Hill Road intersection, and Ms. Faulkner documented the dominant vegetation present in this area along both sides of Cheatham Hill Road.

Ms. Faulkner assessed the nearby stream characteristics on the west side of Chatham Hill Road. Ms. Faulkner concluded that these two streams are ephemeral streams. However, upon following the stream channel easterly, Ms. Faulkner noted that the channel abruptly terminates well before reaching the edge of existing pavement on Cheatham Hill Road. Ms. Faulkner noted that the termination points would be obtained using GPS equipment and will be shown on the construction plans.

Mr. Morris, Mr. King, and Ms. Faulkner reconvened with Mrs. Ventura-Bishop at the horse trailer parking area driveway and walked easterly to where the driveway intersects with Cheatham Hill Road. Mr. Morris watched southbound vehicles approaching the hill, which limits the sight distance for left-turning vehicles out of the driveway, and counted the number of seconds from the disappearance of a vehicle north of the hill to the vehicle's reappearance at the crest of the hill. Mr. Morris noted that approximately 4 seconds elapse between a vehicle's disappearance and reappearance, and that this is definitely an inadequate amount of time for a left-turning vehicle to safely turn onto Cheatham Hill Road.

Mr. King asked Ms. Faulkner to document the vegetative species present in the pasture between this forested area on the east side of Cheatham Hill Road and the north side of Powder Springs Road. Ms. Faulkner documented the dominant herbaceous species.

The meeting adjourned and all attendees of the field site meeting thanked each other for their time.

Meeting Minutes

May 13, 2008

Powder Springs Road and Callaway Road/Cheatham Hill Road Intersection

Page 3 of 3

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The meeting adjourned and all attendees of the field site meeting thanked each other for their time.

NOTICE OF LOCATION AND DESIGN APPROVAL

Project STP00-0004-00 (449)
P.I. No. 0004449

Notice is hereby given in compliance with Georgia Code 22-2-109 that the Georgia Department of Transportation has approved the Location and Design of this project.

The date of location approval is OCTOBER 9, 2008

The proposed project would consist of adding right turn lanes in the eastbound and westbound direction on Powder Springs Road and the northbound and southbound direction of Callaway Road/Cheatham Hill Road. Also, an additional left turn lane would be added to Callaway Road. Curb & gutter would be added to Callaway Road, and 5-foot wide sidewalks would be added to the south side of Powder Springs Road and both sides of Callaway Road. Additionally, the intersection skew angle of Callaway Road to Powder Springs Road would be improved from a 60-degree angle to a 70-degree angle.

This project is within Land Lots 337, 338 and 404, 19th District in Cobb County. Drawings or maps or plats of the proposed project, as approved, are on file and are available for public inspection at the Georgia Department of Transportation:

Sebastian Nesbitt
Area Engineer
Georgia Department of Transportation
snesbitt@dot.ga.gov
Marietta Area Office
1269 Kennestone Circle
Marietta, GA 30066
(770) 528-3238

Any interested party may obtain a copy of the drawings or maps or plats or portions thereof by paying a nominal fee and requesting in writing to:

Mike Lobdell, P.E.
Preconstruction Engineer
Georgia Department of Transportation
District 7 Office
mlobdell@dot.ga.gov
5025 New Peachtree Road
Chamblee, GA 30341
(770) 986-1257

Any written request or communication in reference to this project or notice SHOULD include the Project and P.I. Numbers as noted at the top of this notice.