

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

SAFE ROUTES TO SCHOOL

County: Fulton
P. I. Number: 0009443
Federal Route Number: N/A
State Route Number: SR 372

Crabapple Crossing; Summit Hill & Northwestern Schools - SRTS

Submitted for approval: *(Submit to "Concept Reports" in Outlook)*

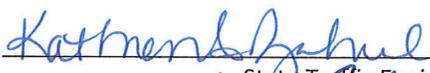
DATE 12/16/10


Sean Johnston, Kimley-Horn and Associates, Inc.
Design Consultant Name and Firm Name

DATE 12/21/2010


Project Manager

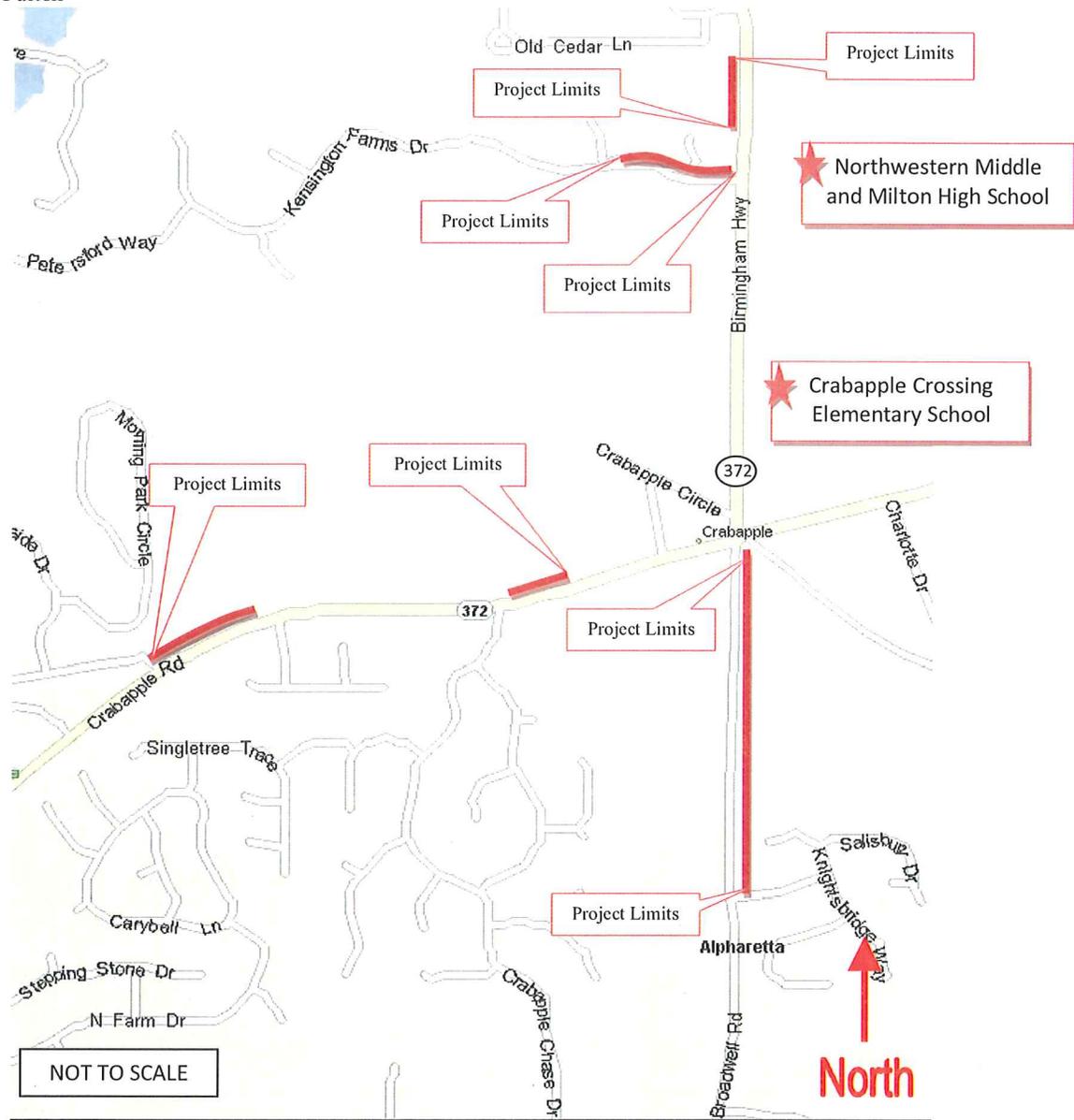
Approvals:

Concur: 
State Traffic Engineer

Date: 12-27-10

Approve: 
Director of Permits and Operations

Date: 1-5-10



Legend:

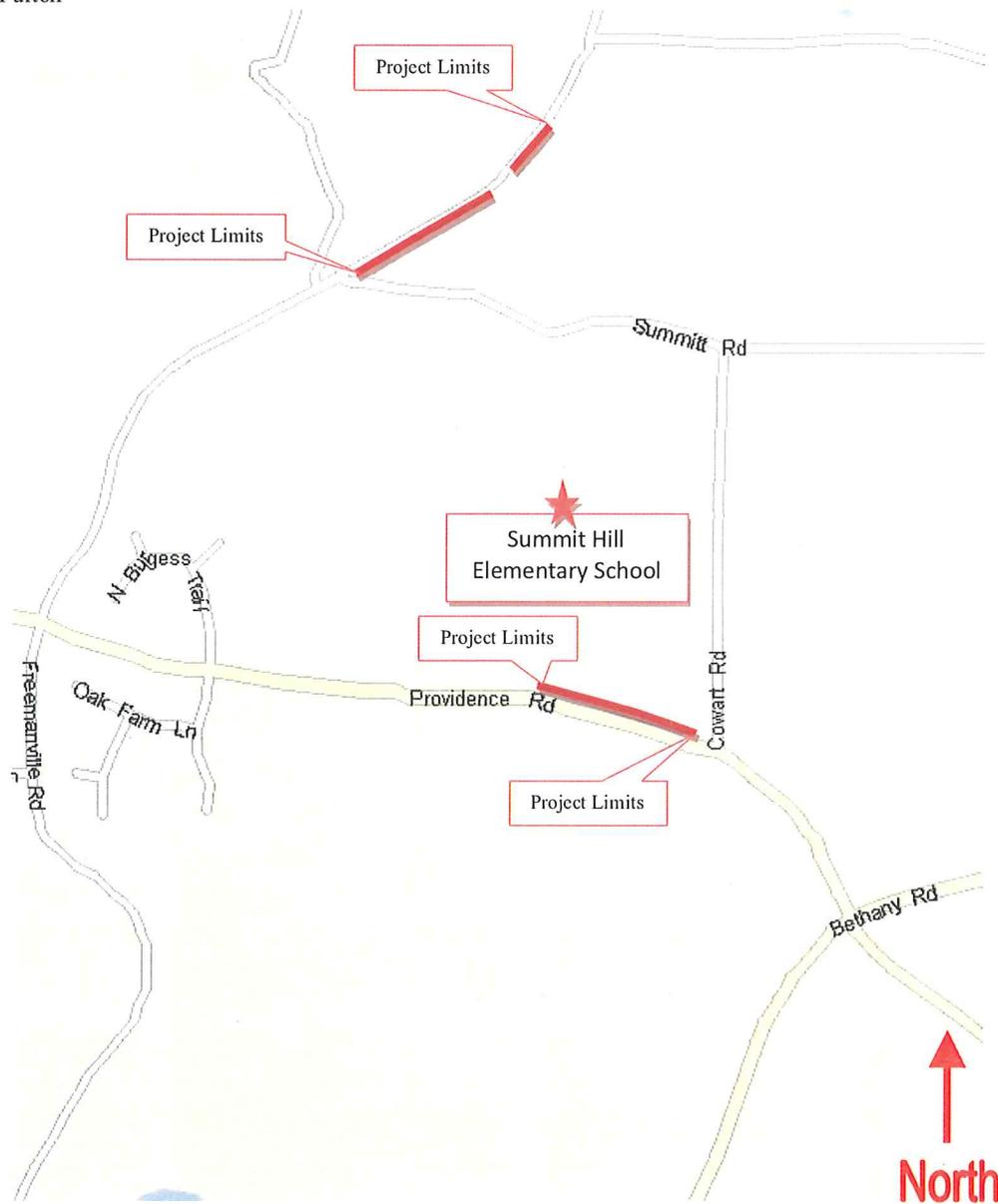
-  **School Location**
-  **Project Location**

Project Location Map

Project Number: N/A
 P.I. Number: 0009443
 Fulton County, GA

Crabapple Crossing Elementary School
 Summit Hill Elementary School
 Northwestern Middle School
 Safe Routes to School

Source: Microsoft Streets & Trips 2006



Legend:

 **School Location**

 **Project Location**

Project Location Map

Project Number: N/A
P.I. Number: 0009443
Fulton County, GA

Crabapple Crossing Elementary School
Summit Hill Elementary School
Northwestern Middle School
Safe Routes to School

Source: Microsoft Streets & Trips 2006

Need and Purpose:

The project is a Safe Routes to School (SRTS) infrastructure project that will improve pedestrian and bicycle accessibility for students within a 2-mile radius of Crabapple Crossing Elementary School, Northwestern Middle School, and Summit Hill Elementary School in Milton, GA. Crabapple Crossing Elementary School is located along Birmingham Highway north of the intersection with Crabapple Road. North of the elementary school, Northwestern Middle School is located along School Road between Birmingham Highway and Freemanville Road. Summit Hill Elementary School is located between Freemanville Road and Bethany Bend on Providence Road.

The SRTS infrastructure program administered by the Federal Highway Administration is intended to promote walking and bicycling by students living within a two-mile radius of a school. The desired outcomes of the SRTS infrastructure program include increased health and fitness for students, as well as accessibility and environmental benefits for the community at large.

The SRTS project will enhance pedestrian and bicycle features for students walking or bicycling to school. Due to gaps in existing sidewalk, students walking or bicycling to school must do so along the existing graded roadway shoulder on portions of Crabapple Road, Broadwell Road, Birmingham Highway, Kensington Farms Road, Providence Road, and Freemanville Road. The project will improve pedestrian accessibility through installation of new sidewalks, crosswalk treatments and pedestrian signal equipment. The project will also improve bicycle accessibility by improving sidewalk and crosswalk conditions in the vicinity of the schools. Georgia code states that local jurisdictions may allow operation of bicycles on sidewalks by persons less than 12 years of age through local ordinance.

Crabapple Crossing Elementary School is located off of SR 372/Birmingham Highway, an urban minor arterial in the City of Milton. The posted speed limit is 45 mph and there is an average daily traffic (ADT) volume of 7670. The school zone signage for northbound vehicles along Birmingham Highway is located just before the school property line begins and the signage for southbound vehicles is located just before the intersection with School Road. There are 640 students enrolled at Crabapple Crossing Elementary School and 73% of total enrollment lives within a 2 mile radius of school. Twenty-two Crabapple Crossing Elementary School students live in the Kensington Farms Subdivision less than one mile from the school; however, there is currently not a sidewalk within the neighborhood for students to access the existing sidewalk on Birmingham Highway. Additionally, there are 145 Crabapple Crossing Elementary School students who live in the Waterside Subdivision off of Green Road less than 1.5 miles from the school. There are two gaps in the existing sidewalk on Crabapple Road (State Route 372) between Green Road and Birmingham Highway.

Northwestern Middle School is located off of School Road between two major north-south roadways, SR 372/Birmingham Highway and Freemanville Road. There are existing traffic signals at the intersections of School Road/ Kensington Farms Drive at Birmingham Highway and School Road at Freemanville Road. Existing pedestrian signal heads at the intersections do not have count-down functionality, and existing crosswalk and channelized right turn lane

striping can create conflicts between pedestrians and turning vehicles. Currently, 3 students bike and 30 students walk to the middle school. Nearly half of the 1233 Northwestern Middle School students live within two miles of the school. There are 24 Northwestern Middle School students that live in Kensington Farms Subdivision, less than one mile from the middle and high school. There is a gap in existing sidewalk on Birmingham Highway between Kensington Farms Drive and Owens Farm Road.

Summit Hill Elementary School is located off Providence Road just west of Cowart Road in a rural/residential area of the City of Milton. Providence Road, posted at 45 mph speed limit, is an east-west route through the City with an ADT of more than 8,000 and an 85th percentile speed of 53 mph. There is an existing signal at the school driveway and Providence Road. The school zone is not highly visible and is located just before the signal on both approaches along Providence Road. There are pedestrian movements across all three legs of the school driveway signalized intersection. The signals do not have countdown pedestrian signal heads and the existing marked crosswalks do not adhere to current Manual on Uniform Traffic Control Devices (MUTCD) or GDOT guidelines. An existing sidewalk along Providence Road begins at the school driveway and ends at the school property line before reaching Cowart Road. There are 396 students, 38% of the total enrollment, that live within a 2 mile radius from the school.

The project will improve pedestrian accessibility in the vicinity of the schools through implementation of the following improvements:

- Crabapple Crossing Elementary School and Northwestern Middle School: New sidewalk will be constructed along the west side of Birmingham Highway between Kensington Farms Drive and Owens Farm Road (approximate milepost 1.9 on SR 372), along the east side of Broadwell Road from Cathedral Drive to Crabapple Road, along the south side of Kensington Farms Drive from the Birmingham Highway sidewalk to the Kensington Farms subdivision clubhouse, and along the north side of Crabapple Road from Green Drive (approximate milepost 0.5 on SR 372) to Lecomma Trace and two short sections between Lecomma Trace and Itaska Walk. Signing and marking in the school zone will be improved by installing school zone signs with flashers and school zone pavement markings. Radar speed signs will also be installed to alert motorists who exceed the posted speed limits. The posted speed limit will be reduced from 45 mph to 35 mph along the portion of Birmingham Highway from Crabapple Road to School Drive to encourage slower speeds in the Crabapple Crossing Elementary and Northwestern Middle school zones and the Crabapple business district, which experience a high volume of pedestrian crossings, particularly during school pick-up and drop-off times. The existing marked crosswalk at the northern driveway of Crabapple Crossing Elementary School will be restriped with high-visibility striping. Additionally, pedestrian-actuated rectangular rapid flashing beacons will be installed on each side of the roadway to alert motorists to the crossing. Existing pedestrian heads at the intersections of Birmingham Highway with School Drive and Freemanville Road with School Drive will be upgraded to provide count-down functionality. Pavement markings at channelized islands at these intersections will be modified to consolidate crosswalks across the channelized right turn and will shorten crossing distances. Four raised crosswalks along

School Drive will be installed at the Northwestern Middle School driveways as additional traffic calming measures.

- Summit Hill Elementary School: New sidewalks will be constructed along Providence Road from the existing sidewalk in front of the school to Cowart Road and along Freemanville Road from Redd Road to Summit Road. School zone signage, including school zone flasher signs, radar speed signs, and school zone pavement markings, will be installed before the school zone in each direction along Providence Road. Pedestrian signal heads will be upgraded to countdown functionality at the intersection of Providence Road at the school drive.

Other Projects in the Area:

- SR 140/Celestrine Sibley Highway Widening from Mansell Road to North Ranchette Road; GDOT Project No. STP00-0187-01(014); PI No. 721300
- Sidewalks on SR 372/Birmingham Highway from Kensington Farms Road to Crabapple Road; GDOT Project No. STP00-00BK-00(051); PI No. 762534
- Intersection Improvements: SR 372/Birmingham Highway @ CR 27/Providence Road/New Providence; GDOT Project No. HPP00-0005-00(448); PI No. 0005448

Description of the proposed project:

This project consists of pedestrian and bicycling improvements for students of Crabapple Crossing Elementary School, Northwestern Middle School, and Summit Hill Elementary School. All improvements will be constructed within existing right-of-way.

Improvements at Crabapple Crossing Elementary School include installation of new sidewalks, additional school zone signage and flashers, pavement markings and radar speed signs. The posted speed limit will be reduced from 45 mph to 35 mph along the portion of Birmingham Highway immediately adjacent to Crabapple Crossing Elementary School and Northwestern Middle School, i.e. from Crabapple Road to School Drive. The existing marked crosswalk at the northern school driveway will be restriped with high-visibility striping, and pedestrian-actuated rectangular rapid flashing beacons will be installed on each side of the roadway to alert motorists to the crossing. Sidewalk will be constructed at the following locations:

- Along the west side of Birmingham Highway beginning approximately 200 feet north of Kensington Farms and ending approximately 600 feet south of Owens Farm Road
- Along the east side of Broadwell Road beginning approximately 550 feet north of Cathedral Drive and ending approximately 150 feet south of Crabapple Road
- Along the north side of Kensington Farms Drive from the Birmingham Highway sidewalk to the Kensington Farms subdivision clubhouse
- Along the north side of Crabapple Road from Green Drive to Lcoma Trace and a section beginning approximately 575 feet to the east of Lcoma Trace and ending approximately 450 feet to the west of Itaska Walk

Improvements to the school zones on School Road and Freemanville Road will include additional school zone signage and flashers, high visibility crosswalks, pavement markings, speed radar signs to alert motorists who exceed the posted speed limit, and countdown pedestrian signal upgrades for the signalized intersections of Birmingham Highway at School Road and Freemanville Road at School Road. Raised crosswalks will be installed along School Road on the west legs of two driveway entrances to Northwestern Middle School.

The school zone on Providence Road will be improved by adding additional school zone signage and flashers, high visibility crosswalks, pavement markings, speed radar signs to alert motorists who exceed the posted speed limit, and ADA upgrades to curb ramps. Pedestrian connectivity to Summit Hill Elementary School will be improved by adding new sidewalk from the existing sidewalk in front of the school to Cowart Road. Additional sidewalk will be installed in gaps along the east side of Freemanville Road from Redd Road to Summit Road.

See attachment #4 for project concept layout.

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

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

The project is intended to improve bicycle and pedestrian mobility and will not affect roadway capacity. The project is not required to be included in the conforming plan's model.

PDP Classification: Major (), Minor (X)

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

Functional Classification:

Crabapple Road (SR 372): Urban Minor Arterial
Broadwell Road: Urban Minor Arterial
Birmingham Highway (SR 372): Urban Minor Arterial
Kensington Farms Drive: Urban Local Road
Freemanville Road: Urban Collector
Providence Road: Urban Collector

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

State Route Number(s): SR 372

Traffic (ADT):

Crabapple Road:		
Base Year (2010):	16,340	Design Year (2012): 18,040
Broadwell Road		
Base Year (2010):	5740	Design Year (2012): 6340
Birmingham Highway		
Base Year (2010):	7670	Design Year (2012): 8795

Existing design features:

- Existing Typical Section:
 - Crabapple Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width grassed strip, intermittent 5' sidewalk (gaps on westbound side).
 - Broadwell Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width grassed strip, intermittent 5' sidewalk (gaps on northbound side).
 - Birmingham Highway (SR 372): One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width grassed strip, intermittent 5' sidewalk (gaps on southbound side).
 - Kensington Farms Drive: One 11' minimum travel lane in each direction and urban shoulders with curb and gutter
 - Freemanville Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width grassed strip, intermittent 5' sidewalk (gaps on northbound side).
 - Providence Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width grassed strip, intermittent 5' sidewalk (gaps on westbound side).
- Posted Speed
 - Crabapple Road: 45 mph
 - Broadwell Road: 35 mph
 - Birmingham Highway (SR 372): 45 mph
 - Kensington Farms Drive: 25 mph
 - Freemanville Road: 45 mph
 - Providence Road: 45 mph
- Width of Right-of-Way

In order to be eligible for Safe Routes to School funding, the local government has demonstrated that adequate existing right-of-way is available to construct the proposed project.

 - Crabapple Road (SR 372): 80' (approximate)
 - Broadwell Road: 60' (approximate)
 - Birmingham Highway (SR 372): 80' (approximate)
 - Kensington Farms Drive: 30' (approximate)
 - Freemanville Road: 60' (approximate)
 - Providence Road: 60' (approximate)
- Major structures: None
- Major interchanges or intersections along project
 - Major Intersections:
 - Broadwell Road/Birmingham Highway at Crabapple Road/ Mayfield Road

Proposed Design Features:

- Proposed Typical Section:
 - Crabapple Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (2' minimum, 5' desirable) grass strip with 5' sidewalk on westbound side.
 - Broadwell Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (2' minimum, 5' desirable) grass strip with 5' sidewalk on northbound side.
 - Birmingham Highway (SR 372): One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (2' minimum, 5' desirable) grass strip with 5' sidewalk on southbound side.
 - Kensington Farms Drive: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (0' to 2') grass strip with 5' sidewalk on eastbound side.
 - Freemanville Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (2' minimum, 5' desirable) grass strip with 5' sidewalk on northbound side.
 - Providence Road: One 11' minimum travel lane in each direction, urban shoulders with curb and gutter, variable width (2' minimum, 5' desirable) grass strip with 5' sidewalk on westbound side.
- Proposed Design Speed:
 - Crabapple Road: 45 mph
 - Broadwell Road: 35 mph
 - Birmingham Highway (SR 372): 35 mph between Crabapple Road and Kensington Farms Road; 45 mph elsewhere
 - Kensington Farms Drive: 25 mph
 - Freemanville Road: 45 mph
 - Providence Road: 45 mph
- Maximum Sidewalk Cross Slope: 2%
- Minimum Crosswalk Width: 8 feet
- Right-of-way
 - Easements: Temporary (), Permanent (), Utility (), Other ().
 - Type of access control: N/A
 - Number of parcels: 0
 - Number of displacements: 0
 - Business: None
 - Residences: None
 - Mobile homes: None
 - Other: None
- Structures: N/A
- Major intersections along the project:
 - Birmingham Highway at Kensington Farms Drive / School Drive

- Traffic control during construction: No lane closures are anticipated along Birmingham Highway, Broadwell Road, Kensington Farms Drive, Freemanville Road, or Providence Road.

- Design Exceptions to 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)
LATERAL OFFSET TO OBSTRUCTION:	()	()	(X)

- Design Variances: None Anticipated
- Environmental concerns: None Anticipated
- Level of environmental analysis:
 - Are Time Savings Procedures appropriate? Yes (X), No (),
 - Categorical exclusion: Anticipated
 - Environmental Assessment/Finding of No Significant Impact(FONSI): ()
 - Environmental Impact Statement (EIS) ().
- Utility involvements:
 - Utility facilities located within the project limits include:
 - Gas (Atlanta Gas Light)
 - Power (Georgia Power)
 - Water (City of Milton)
 - Telecommunications (AT&T, Comcast, Verizon)

VE Study Required: Yes () No (X)

Benefit/Cost Ratio: N/A .

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST	MITIGATION
By Whom	GDOT	N/A	N/A	GDOT	N/A
\$ Amount	\$55,000.00	N/A	N/A	\$436,784.05	N/A

***CST Cost includes: Construction and Engineering and Inspection*

Project responsibilities:

- Design: Design Consultant/GDOT
- Right of Way Acquisition: N/A
- Right of Way funding (real property): N/A

- Relocation of Utilities: GDOT/Affected Utility Owners
- Letting to contract: GDOT
- Supervision of construction: GDOT
- Providing material pits: Construction Contractor
- Providing detours: N/A
- Environmental Studies/Documents/Permits: Consultant/GDOT
- Environmental Mitigations: GDOT

Coordination

- Concept meeting: 05/06/2010 – Minutes Attached
- P. A. R. meetings, dates and results: None Required
- FEMA, USCG, and/or TVA: N/A
- Public involvement: N/A
- Local government comments: N/A
- Other projects in the area:
 - SR 140/Celestrine Sibley Highway Widening from Mansell Road to North Ranchette Road; GDOT Project No. STP00-0187-01(014); PI No. 721300
 - Sidewalks on SR 372/Birmingham Highway from Kensington Farms Road to Crabapple Road; GDOT Project No. STP00-00BK-00(051); PI No. 762534
 - Intersection Improvements: SR 372/Birmingham Highway @ CR 27/Providence Road/New Providence; GDOT Project No. HPP00-0005-00(448); PI No. 0005448
- Other coordination to date: N/A

Scheduling – Responsible Parties' Estimate

- | | | |
|---|--------------|-----------|
| • Time to complete the environmental process: | Begin: 4/10 | End: 3/11 |
| • Time to complete preliminary construction plans: | Begin: 10/10 | End: 5/11 |
| • Time to complete right-of-way plans: | Begin: n/a | End: n/a |
| • Time to complete the Section 404 Permit: | Begin: n/a | End: n/a |
| • Time to complete final construction plans: | Begin: 5/11 | End: 8/11 |
| • Time to complete the purchase of right-of-way: | Begin: n/a | End: n/a |
| • List other major items that will affect the project schedule: | Begin: n/a | End: n/a |

Alternates considered: (1) Install sidewalk with curb and gutter and associated minor storm drainage improvements in the following locations: along the north side of Crabapple Road in between existing sidewalk gaps from Green Road to Birmingham Highway; along the right side of Broadwell Road from existing sidewalk north of Cathedral Drive to the intersection with Crabapple Road; along the left side of Birmingham Highway from Kensington Farms Drive to existing sidewalk north of the intersection; along the south side of Kensington Farms Drive from the intersection with Birmingham Highway to the neighborhood clubhouse; along the right side of Freemanville Road in between existing sidewalk gaps from Summit Road to Redd Road; and along the north side of Providence Road from Coward Road to existing sidewalk in front of Summit Hill Elementary Hill. Restripe the existing marked crosswalk at the Crabapple Crossing Elementary School northern driveway with high-visibility striping and install pedestrian-actuated

rectangular rapid flashing beacons on each side of the roadway. Install raised crosswalks along School Road in place of existing marked crosswalks. Upgrade pedestrian signal heads to countdown functionality and modify pavement markings to consolidate crosswalks across the

channelized right turn movements at the intersections of Birmingham Highway with School Drive and Freemanville Road with School Drive. Install solar powered school zone flashers, radar speed signs, and school zone pavement markings before the school zone on Birmingham Highway, Freemanville Road, and Providence Road.

(2) Install sidewalk with curb and gutter and associated minor storm drainage improvements in the following locations: along the north side of Crabapple Road in between existing sidewalk gaps from Green Road to Birmingham Highway; along the right side of Broadwell Road from existing sidewalk north of Cathedral Drive to the intersection with Crabapple Road; along the left side of Birmingham Highway from Kensington Farms Drive to existing sidewalk north of the intersection; along the south side of Kensington Farms Drive from the intersection with Birmingham Highway to the neighborhood clubhouse; along the right side of Freemanville Road in between existing sidewalk gaps from Summit Road to Redd Road; along the north side of Providence Road from existing sidewalk in front of Summit Hill Elementary Hill to Bethany Bend; and along the north side of Redd Road from South Thompson Road to Brittle Road. Restripe the existing marked crosswalk at the Crabapple Crossing Elementary School northern driveway with high-visibility striping and install pedestrian-actuated rectangular rapid flashing beacons on each side of the roadway. Install raised crosswalks along School Road in place of existing marked crosswalks. Upgrade pedestrian signal heads to countdown functionality and modify pavement markings to consolidate crosswalks across the channelized right turn movements at the intersections of Birmingham Highway with School Drive and Freemanville Road with School Drive. Install solar powered school zone flashers, radar speed signs, and school zone pavement markings before the school zone on Birmingham Highway, Freemanville Road, and Providence Road.

(3) No Build.

Comments:

Comparison Summary of Alternates 1-3

Alternate (1) is recommended for this concept.

Alternate (2) is not recommended for this concept. Construction of a sidewalk along Providence Road east of Cowart Road would likely require additional right-of-way, which is not an allowable activity under federal Safe Routes to School requirements, and would require extension of an existing box culvert and impacts to an existing stream. Construction of sidewalk along Redd Road would also require acquisition of additional right-of-way. Additionally, there is not a suitable location for a marked crossing of Redd Road due to limited sight distance caused by sharp horizontal and vertical curvature of the roadway.

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Alternate (3) is not recommended for this concept. The no-build alternate would not promote walking and bicycling for children attending Crabapple Crossing Elementary School, Summit Hill Elementary School, and Northwestern Elementary School as stated in the project need and purpose.

Attachments:

1. Construction Cost Estimate
2. Concept Sketches
3. Concept Typical Sections
4. Concept Team Meeting Minutes (05/06/2010)

JOB ESTIMATE REPORT

JOB NUMBER : 0009443

SPEC YEAR: 01

DESCRIPTION: CRABAPPLE CROSSINGS; SUMMIT HILL & NORTHWESTERN SCHOOLS SRTS

ITEMS FOR JOB 0009443

LINE ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0004		*\$*	CONSTRUCTION ENGR INSPECTION	1.000	20800.00	20800.00
0005		EA	ADA RAMPS	9.000	400.00	3600.00
0010		LS	TRAFFIC CONTROL - 0009443	1.000	15000.00	15000.00
0015		AC	TEMPORARY GRASSING	1.000	800.00	800.00
0020		LF	MAINT OF TEMP SILT FENCE, TP C	2000.000	2.00	4000.00
0025		LF	TEMPORARY SILT FENCE, TYPE C	4000.000	4.00	16000.00
0030		LS	GRADING COMPLETE - 0009443	1.000	50000.00	50000.00
0035		SY	CONC SIDEWALK, 4 IN	2200.000	45.00	99000.00
0040		LF	CONC CURB & GUTTER/ 8"X30"TP2	4465.000	27.00	120555.00
0045		SF	HWY SIGNS, TP1MAT,REFL SH TP 9	360.000	19.00	6840.00
0050		LF	GALV STEEL POSTS, TP 7	450.000	9.00	4050.00
0055		CY	CL B CONC, INCL REINF STEEL	340.000	20.00	6800.00
0060		EA	SIGNAL ASS, FLASHING SCHOOL, CO	6.000	5850.66	35104.00
0065		LF	THERM SOLID TRAF STRIPE, 24",WH	75.000	5.00	375.00
0070		LF	THERM SOLID TRAF STRIPE, 8",WH	1500.000	2.00	3000.00
0075		LS	TRAF SIGNAL INSTALLATION NO - 1	1.000	6500.00	6500.00
0080		LS	TRAF SIGNAL INSTALLATION NO - 2	1.000	6500.00	6500.00
0085		EA	PAVEMENT MARKING, WORD, TP 1	18.000	64.44	1160.06
0090		LS	TRAF SIGNAL INSTALLATION NO - 3 (RREF'S)	1.000	10000.00	10000.00
0095		LS	TRAF SIGNAL INSTALLATION NO - 4 (RADAR SIGNS)	1.000	26700.00	26700.00

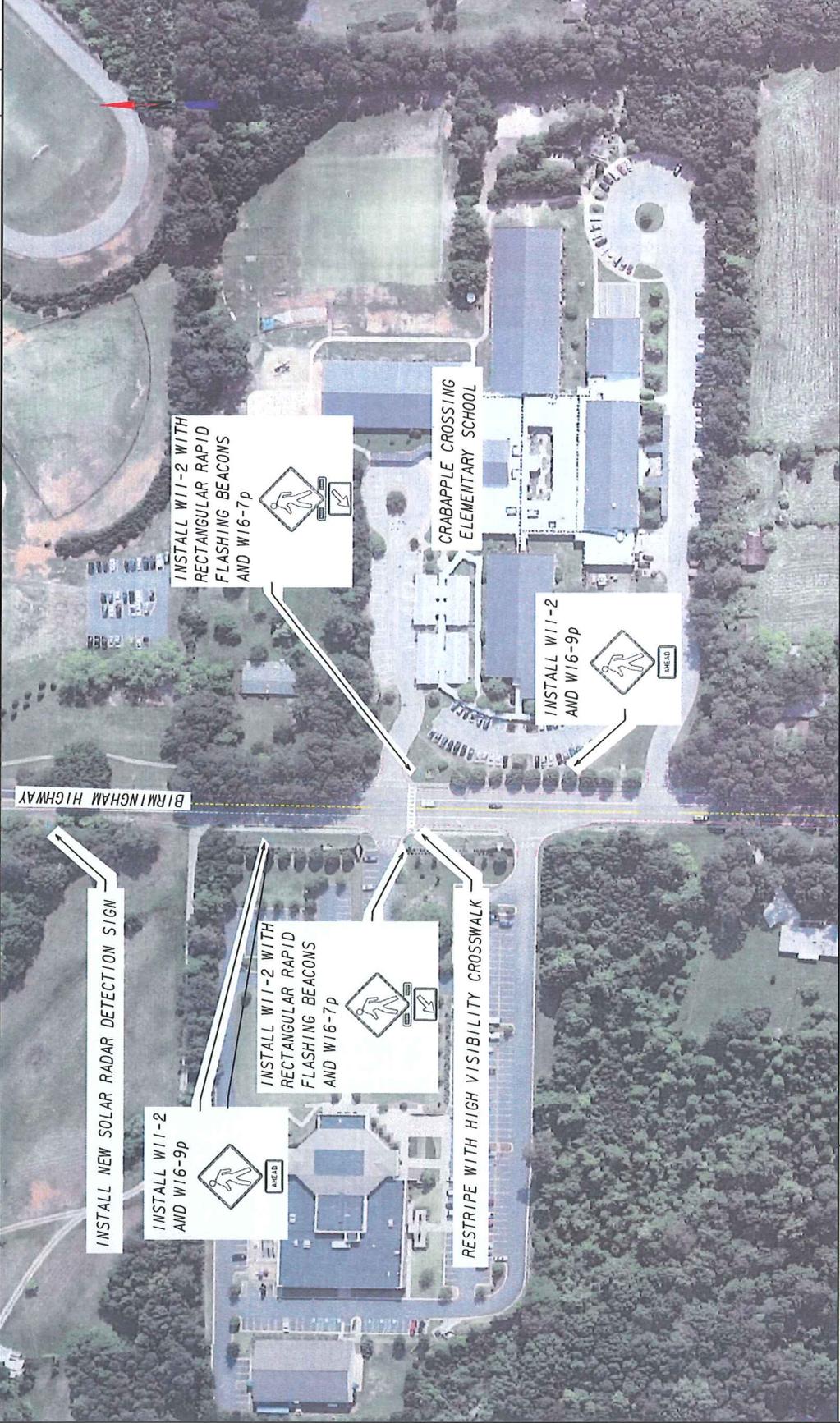
ITEM TOTAL
INFLATED ITEM TOTAL

436784.05
436784.05

TOTALS FOR JOB 0009443

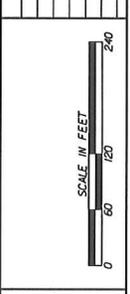
ESTIMATED COST:
CONTINGENCY PERCENT (0.0) :
ESTIMATED TOTAL:

436784.06
0.00
436784.06



REVISION DATES	

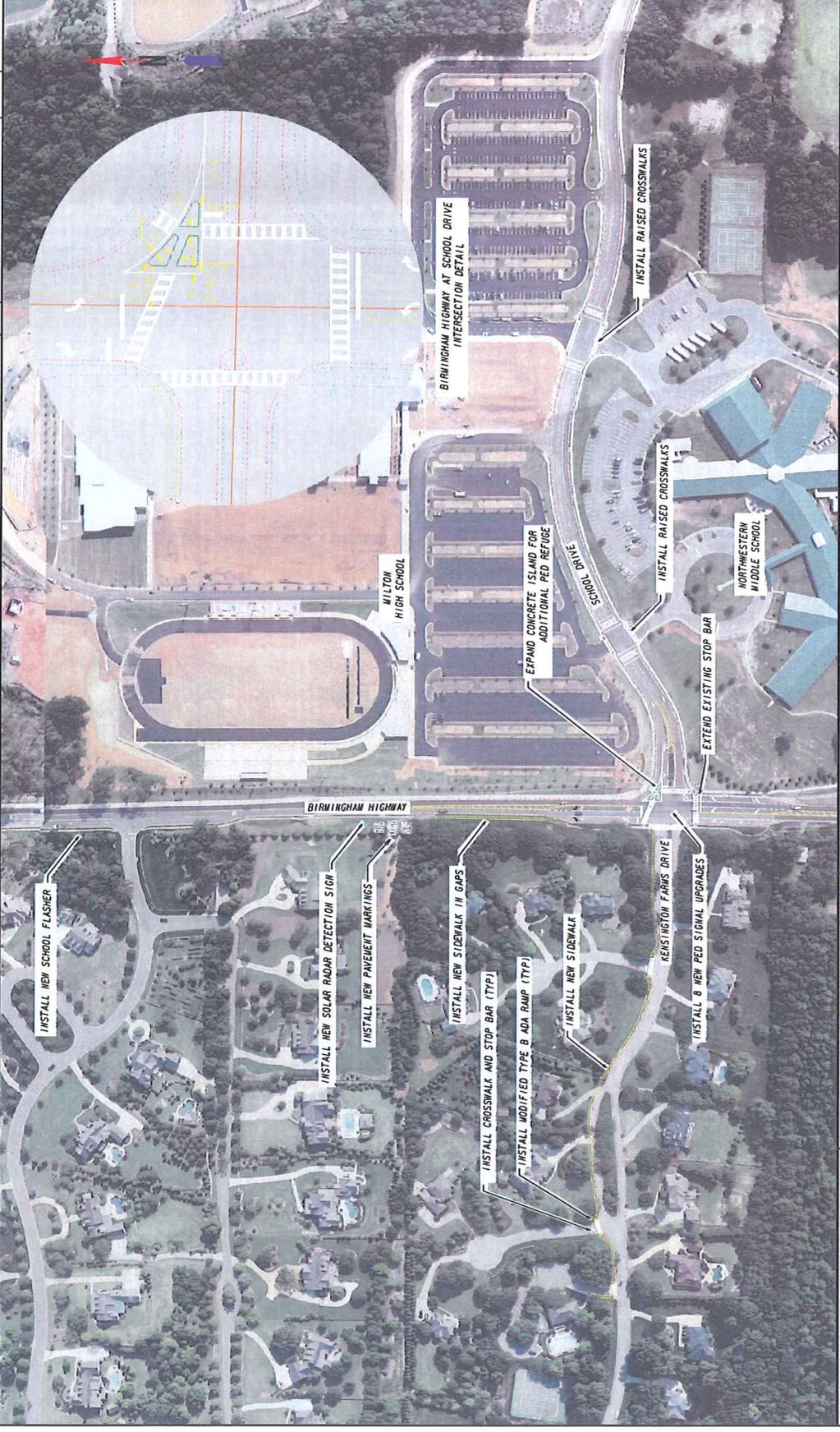
GEORGIA DEPARTMENT OF TRANSPORTATION
 CONCEPT EXHIBIT 3
 FULTON COUNTY SAFE ROUTES TO SCHOOL



 PROPOSED SIDEWALK EXISTING SIDEWALK PROPOSED CROSSWALK	 PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS PERMANENT EASEMENT FOR CONSTR TEMPORARY EASEMENT FOR CONSTR TEMPORARY EASEMENT FOR CONSTR OF DRIVES
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PROJECT NUMBER
P1 NO. 0008443

SHEET NO. TOTAL SHEETS



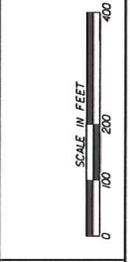
GEORGIA DEPARTMENT
OF TRANSPORTATION

CONCEPT EXHIBIT 4

FULTON COUNTY
SAFE ROUTES TO SCHOOL

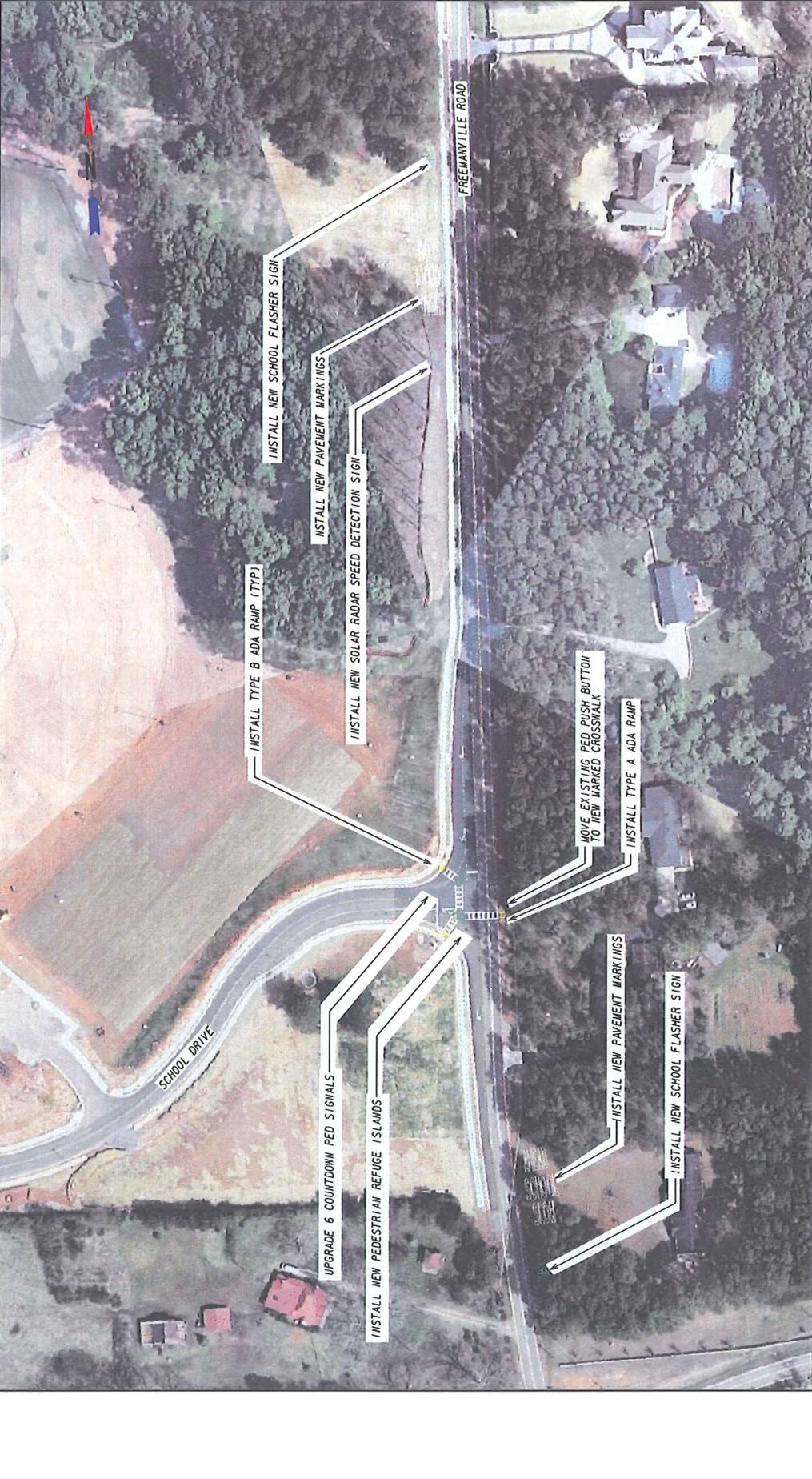
REVISION DATES

NO.	DATE	DESCRIPTION

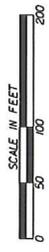


	PROPOSED SIDEWALK
	EXISTING SIDEWALK
	PROPOSED CROSSWALK

	PROPERTY AND EXISTING R/W LINE
	REQUIRED R/W LINE
	CONSTRUCTION LIMITS
	PERMANENT EASEMENT FOR CONSTR
	MAINTENANCE OF DRAINAGE STRUCTURES
	TEMPORARY EASEMENT FOR CONSTR
	TEMPORARY EASEMENT FOR CONSTR OF DRIVES

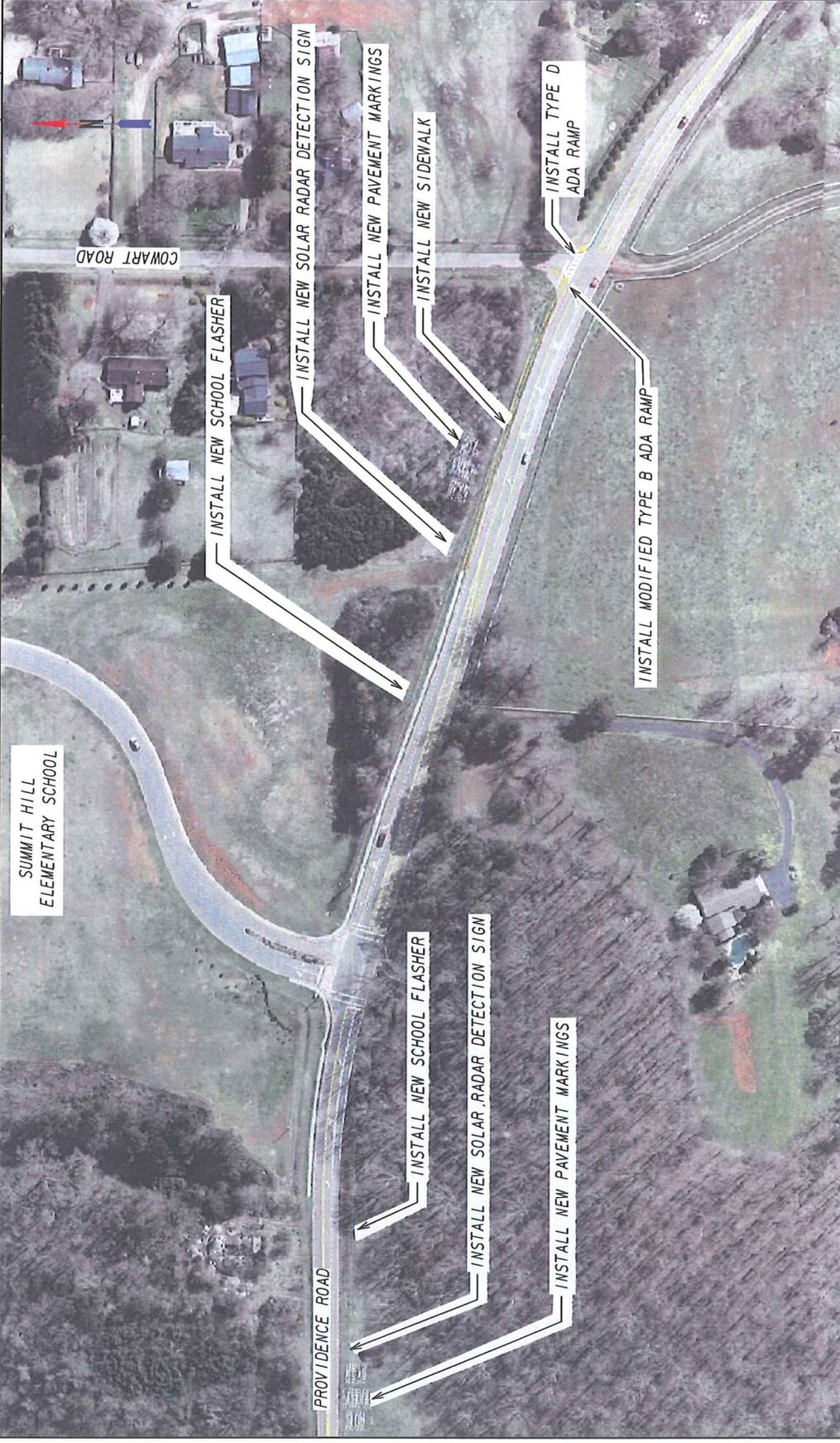


<p>PROPERTY AND EXISTING R/W LINE</p> <p>REQUIRED R/W LINE</p> <p>CONSTRUCTION LIMITS</p> <p>PERMANENT EASEMENT FOR CONSTR & MAINTENANCE OF DRAINAGE STRUCTURES</p> <p>TEMPORARY EASEMENT FOR CONSTR OF STOPS</p> <p>TEMPORARY EASEMENT FOR CONSTR OF DRIVES</p>	<p>PROPOSED SIDEWALK</p> <p>EXISTING SIDEWALK</p> <p>PROPOSED CROSSWALK</p>	<p>REVISION DATES</p>	<p>GEORGIA DEPARTMENT OF TRANSPORTATION</p> <p>CONCEPT EXHIBIT 5</p> <p>FULTON COUNTY SAFE ROUTES TO SCHOOL</p>
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SHEET NO.
 TOTAL SHEETS

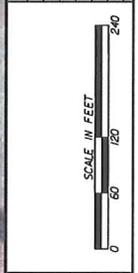


GEORGIA DEPARTMENT
 OF TRANSPORTATION

CONCEPT EXHIBIT 6

FULTON COUNTY
 SAFE ROUTES TO SCHOOL

REVISION DATES



 PROPOSED SIDEWALK	 EXISTING SIDEWALK
 PROPOSED CROSSWALK	 EXISTING CROSSWALK

 PROPERTY AND EXISTING R/W LINE	 REQUIRED R/W LINE
 CONSTRUCTION LIMITS	 PERMANENT EASEMENT FOR CONSTR & DRAINAGE STRUCTURES
 MAINTENANCE OF DRAINAGE STRUCTURES	 TEMPORARY EASEMENT FOR CONSTR
 TEMPORARY EASEMENT FOR DRIVES	 TEMPORARY EASEMENT FOR DRIVES

PROJECT NUMBER
PI NO. 6009443

SHEET NO.

TOTAL SHEETS



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
PERMANENT EASEMENT FOR CONSTR. & MAINTENANCE OF DRAINAGE STRUCTURES
TEMPORARY EASEMENT FOR CONSTR. OF SLOPES
TEMPORARY EASEMENT FOR CONSTR. OF DRYES

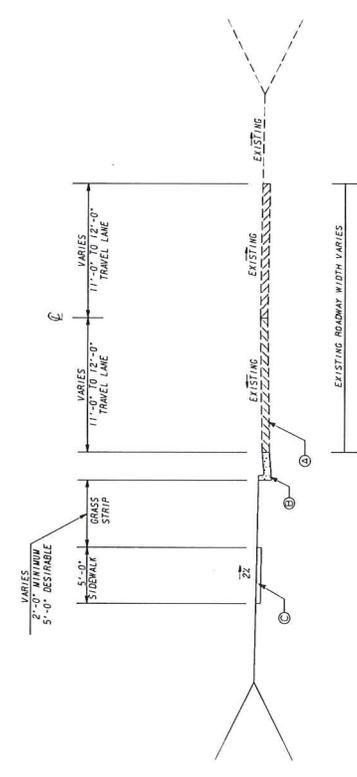
PROPOSED SIDEWALK
EXISTING SIDEWALK
PROPOSED CROSSWALK



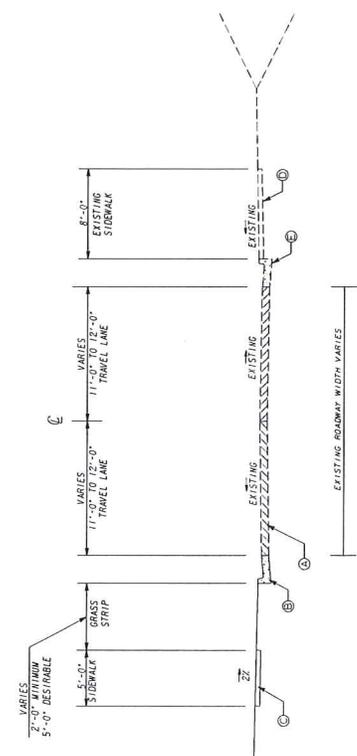
SCALE IN FEET
0 50 100 200

REVISION DATES

GEORGIA DEPARTMENT OF TRANSPORTATION
CONCEPT EXHIBIT 7
FULTON COUNTY
SAFE ROUTES TO SCHOOL



TS-3
CRABAPPLE ROAD
 (FROM GREEN DR TO ITASKA WALK)



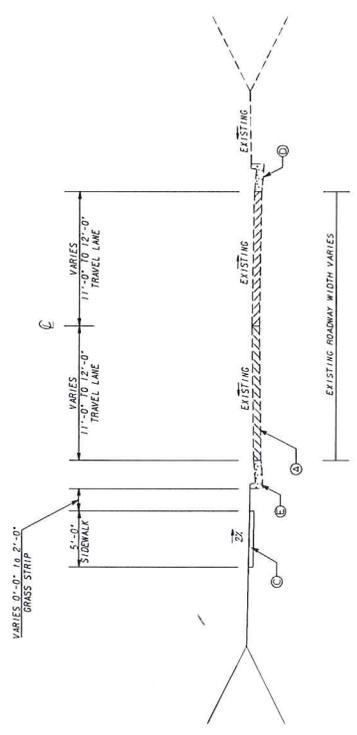
TS-4
BIRMINGHAM HIGHWAY
 (FROM KENSINGTON FARMS DR TO OWENS FARM DR)

- REQUIRED PAVEMENT**
- Ⓐ EXISTING PAVEMENT, TO BE RETAINED
 - Ⓑ 30" CURB AND GUTTER
 - Ⓒ CONC. SIDEWALK, 4 IN.
 - Ⓓ EXISTING SIDEWALK, TO BE RETAINED
 - Ⓔ EXISTING 30" CURB AND GUTTER TO BE RETAINED

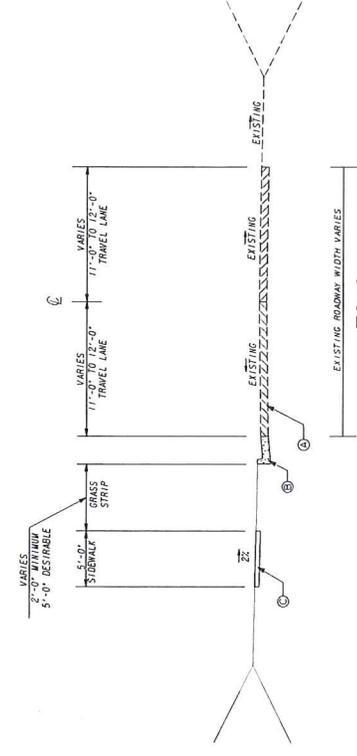
REVISION DATES	GEORGIA DEPARTMENT OF TRANSPORTATION
	TYPICAL SECTIONS
	FLUJON COUNTY SAFE ROUTES TO SCHOOL
	DRAWING NO. 5-02



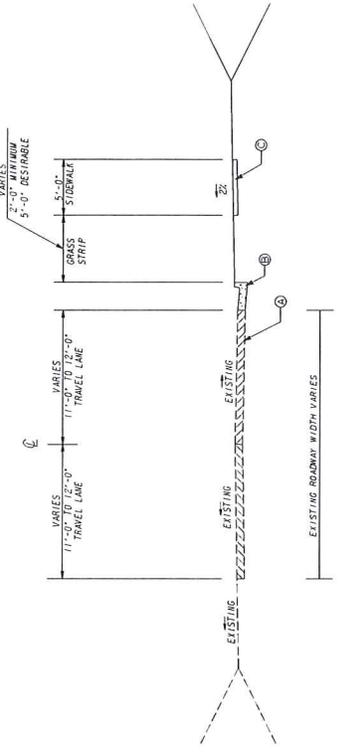
- PROPERTY AND EXISTING R/W LINE**
- REQUIRED R/W LINE**
- CONSTRUCTION LIMITS**
- PERMANENT EASEMENT FOR CONSTR & UTILITIES
 - TEMPORARY EASEMENT FOR CONSTR
 - TEMPORARY EASEMENT FOR CONSTR OF SLOPES
 - TEMPORARY EASEMENT FOR CONSTR OF DRIVES



TS-5
 KENSINGTON FARMS DRIVE
 (FROM BIRMINGHAM HWY TO SUBDIVISION CLUBHOUSE)

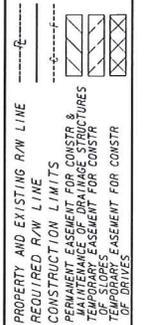


TS-6
 PROVIDENCE ROAD
 (FROM SCHOOL ENTRANCE TO COWART RD)



TS-7
 FREEMANVILLE ROAD
 (FROM SUMMIT RD TO REDD RD)

- REQUIRED PAVEMENT
- Ⓐ EXISTING PAVEMENT, TO BE RETAINED
 - Ⓑ 30" CURB AND GUTTER
 - Ⓒ CONC. SIDEWALK, 4 IN.
 - Ⓓ EXISTING 30" CURB AND GUTTER TO BE RETAINED



Kimley-Horn and Associates, Inc.
 Engineers, Planners, Architects, Scientists
 600 North McDonough Boulevard
 Norcross, Georgia 30071

REVISION DATES



GEORGIA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

FULTON COUNTY SAFE ROUTES TO SCHOOL

DRAWING NO. 5-03

MEETING MINUTES

Date: May 6, 2010
Project: Crabapple Crossing Elementary SRTS
Northwestern Middle SRTS
Summit Hill Elementary SRTS
GDOT Project No.'s: CSSRS-0009-00(443); PI 0009443
County: Fulton
Subject: Concept Team Meeting

Attendees:

Kathy Zahul	Georgia Department of Transportation (GDOT)
Norm Cressman	GDOT
Emmanuella Myrthil	GDOT
Sarah Leaders	City of Milton
Carter Lucas	City of Milton
George Freiburger	Crabapple Crossing Elementary School
Don Webb	Summit Hill Elementary School
Deana Skimel	Northwestern Middle School
Abby Mattera	GDOT Safe Routes to School Resource Center
Maya Agarwal	Alta Planning + Design (Alta)
Sean Johnston	Kimley-Horn and Associates (KHA)
Elise Hipp	KHA

This Safe Routes to School concept team meeting was held on Thursday, May 6, 2010 in Crabapple Crossing Elementary School in Milton, Georgia to discuss the sponsor's application and concepts for proposed infrastructure improvements in the vicinity of the school. The proposed project consists of sidewalk and additional signage to improve conditions for children walking and bicycling to school.

The following is a summary of key items discussed:

- Overall
 - The sponsor's SRTS infrastructure project application proposes improvements to the Birmingham Highway and Providence Road school zones as follows:
 - Additional School Zone signage including flashers, pavement stencils, and Speed Check signs along roads within school zones.
 - Replacement of existing crosswalks with high visibility where feasible/necessary
 - It was suggested to add stop bars (at a minimum) and high-visibility crosswalks (if feasible) be installed where feasible on minor side roads at intersections with mainline roads such as Birmingham Highway or Providence Road.
 - Pedestrian countdown signal heads and push buttons were recommended for all signals.
- Crabapple Road
 - The sponsor's SRTS infrastructure project application proposes to fill sidewalk gaps between Green Road and Birmingham Highway on the north side of Crabapple Road with new sidewalk.
 - The driveway across from the intersection of Crabapple Chase Drive and Crabapple Road may present challenges for meeting ADA compliance. The driveway likely cannot be reconstructed to accommodate a sidewalk, and it may be necessary to obtain right-of-way

or easement for a retaining wall if the driveway is closed. Due to this condition, it may not be possible to install a sidewalk at this location as part of the SRTS infrastructure improvement. However, the City of Milton could coordinate with the property owner for installation of sidewalk in the future.

- Crabapple Crossing Elementary
 - The sponsor's application proposed a short sidewalk connection across school property from the front of the school building to the existing sidewalk on Birmingham Highway. This was proposed because a classroom trailer was placed on the existing sidewalk on school property at the time the application was submitted. The trailer has since been removed, therefore the proposed connection is no longer necessary.
- Birmingham Highway
 - New sidewalk was recommended to fill in a short existing gap on the west side of Birmingham Highway just north of Kensington Farms Drive. New curb and gutter will be necessary on Birmingham Highway in the locations of proposed sidewalk additions.
- Birmingham Highway at School Drive
 - The suggestion was made to modify the northbound right-turn-only lane. Suggestions included extending the stop bar across the turn lane, or modifying the striped island to allow for only one crosswalk across the channelized portion of the right-turn lane.
 - If the stop bar is extended across the northbound right-turn only lane as described above, adding additional signage indicating "stop on red" was suggested.
 - Increasing the size of the raised island in the northeast corner of the intersection to be 4' from the painted edge of traveled way on Birmingham Highway was discussed. A larger island would provide additional refuge for children crossing the north leg.
 - It was suggested that children crossing Birmingham Highway to access the Kensington Farm subdivision should be encouraged to cross on the south leg of the intersection, in order to align with the proposed sidewalk on Kensington Farm Drive.
- Kensington Farms Drive
 - New sidewalk along the south side of the road from Birmingham Highway to the subdivision clubhouse is proposed.
 - It was noted that there may be a need for some short sections of retaining wall and/or handrail along Kensington Farms Drive due to existing shoulder slopes. This is a lower priority improvement due to the potential for impacts to residential property.
- School Drive
 - Raised crosswalks are proposed for the two existing crosswalks along School Road. These crosswalks connect the Northwestern Middle School property with Milton High School on the north side of the street. It was also suggested to consider raised intersections rather than raised crosswalks at these locations. Storm drainage conditions will be evaluated to determine whether raised intersections are feasible.
- School Drive at Freemanville Road
 - It was noted that an existing crosswalk and pedestrian signal head had no curb ramp or landing area in the northeast corner of the intersection. It may be difficult to construct a sidewalk or landing area inside the right-of-way at this location. However, a count-down pedestrian head will be installed at a minimum.
 - A suggestion was made to move the crosswalk on Freemanville Road to the south side of the intersection and to add sidewalk or a landing area in the southeast corner of the intersection.
- Freemanville Road

- The sponsor's application proposes to fill in sidewalk gaps between Summit Road and Redd on the east side of Freemanville Road.
- Gravel path was originally proposed for the sidewalk/trail to fill in this gap for cost purposes. Due to right-of-way constraints, it may be more feasible and practical to install 5-foot concrete sidewalk in this location, rather than a 10-foot gravel trail. This will be evaluated during concept development.
- Providence Road
 - It was noted that the crosswalk across Providence Road does not lead to a sidewalk or landing area. Consideration of a landing area on the south side of the road was suggested.
 - The project proposes to install sidewalk along Providence Road from existing sidewalk in front of Summit Hill Elementary School to Cowart Road.
 - A multi-use gravel path is proposed along Providence Road from Coward Road to Bethany Bend. A large box culvert on the north side of the road, east of Cowart Road, creates a pinch point and would make sidewalk difficult to install and maintain within the right-of-way in this area.
- Cowart Road
 - A new sidewalk connection is proposed along Cowart Road, leading behind an existing barricade to the gravel portion of Cowart Road.
- Redd Road
 - The sponsor's application proposes a gravel trail on Redd Road between South Thompson Road and Brittle Road. A trail or sidewalk will likely be problematic for the following reasons:
 - Sight distance is extremely limited along this stretch of road.
 - A mid-block crossing would be necessary to cross Redd Road, either at Brittle Road or at South Thompson Road. Redd Road experiences high volumes of fast-moving traffic around relatively tight radii.
 - Existing shoulder slopes would make installation of a trail or sidewalk inside the right-of-way challenging.
- Broadwell Road
 - The gap in the sidewalk along the east side of the road from Crabapple Road to Cathedral Drive was discussed. Improvements on Broadwell Road were not part of the sponsor's application, however they may be substituted for other improvements that prove to be unfeasible due to right-of-way constraints or other engineering issues. The following solutions were suggested for this section of Broadwell Road:
 - Create a mid-block crossing across Broadwell to connect existing sidewalk. However, it was noted that a pedestrian hybrid beacon, or HAWK signal may not be warranted across Broadwell Road.
 - Extend the existing sidewalk on the east side of Broadwell to the intersection of Crabapple Road/Mayfield Road, Mid Broadwell Road, and Broadwell Road/Birmingham Highway. It appears that portions of the road are inside the Alpharetta city limits. However, the project may be able to be constructed if the city of Milton agrees to maintain the sidewalk inside the roadway right-of-way.

These minutes contain the understanding of KHA and Alta representatives regarding discussions, decisions, action items, etc. at the meeting.