

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

---

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

**FILE** P.I. #0010330

**OFFICE** Design Policy & Support

GDOT District 1 - Gainesville  
Gwinnett County  
SR 13 From SR 140 to SR 378 - LCI

**DATE** May 4, 2012

**FROM** *for*  Brent Story, State Design Policy Engineer

**TO** SEE DISTRIBUTION

**SUBJECT** APPROVED CONCEPT REPORT

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

Attachment

**DISTRIBUTION:**

Genetha Rice-Singleton, Program Control Administrator  
Bobby Hilliard, State Program Delivery Engineer  
Cindy VanDyke, State Transportation Planning Administrator  
Angela Robinson, Financial Management Administrator  
Glenn Bowman, State Environmental Administrator  
Kathy Zahul, State Traffic Engineer  
Georgene Geary, State Materials & Research Engineer  
Lisa Myers, State Project Review Engineer  
Jeff Baker, State Utilities Engineer  
Ken Thompson, Statewide Location Bureau Chief  
Bayne Smith, District Engineer  
Robert Mahoney, District Preconstruction Engineer  
Allen Ferguson, District Utilities Engineer  
Tim Matthews, Project Manager  
BOARD MEMBER - 4th Congressional District

**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA  
PROJECT CONCEPT REPORT**

|                                 |                               |
|---------------------------------|-------------------------------|
| Project Type: <u>LCI</u>        | P.I. Number: <u>0010330</u>   |
| GDOT District: <u>One</u>       | County: <u>Gwinnett</u>       |
| Federal Route Number: <u>23</u> | State Route Number: <u>13</u> |

*Buford Highway Median Project from Jimmy Carter Boulevard to Beaver Run Road*

Submitted for approval: (email to "Concept Reports"; delete any inapplicable signature lines)

|  |                  |
|--|------------------|
| <i>Kevin Steiner - PWD+Co.</i>   | <u>2/2/12</u>    |
| Consultant Designer & Firm or GDOT Concept/Design Phase Office Head & Office | DATE             |
| <i>[Signature] - NORCROSS</i>  | <u>3-12-12</u>   |
| Local Government (if applicable)   | DATE             |
| <i>[Signature]</i>   | <u>3-20-2012</u> |
| Office Head (GDOT Project Manager's Office)                                  | DATE             |
| <i>[Signature] Tim Matthews</i>  | <u>3/20/2012</u> |
| GDOT Project Manager   | DATE             |

Recommendation for approval:

|  |                  |
|--|------------------|
| Program Control Administrator  | DATE             |
| * <i>Glenn Bowman</i> <i>[Signature]</i>                                 | <u>3-30-2012</u> |
| State Environmental Administrator (recommendation required)              | DATE             |
| * <i>Kathy Zahul</i> <i>[Signature]</i>                                  | <u>3-28-2012</u> |
| State Traffic Engineer (recommendation required for roundabout projects) | DATE             |
| * <i>Lisa Myers</i> <i>[Signature]</i>                                   | <u>3-23-2012</u> |
| Project Review Engineer  | DATE             |
| * <i>Patrick Allen</i> <i>[Signature]</i>                                | <u>3-23-2012</u> |
| for State Utilities Engineer   | DATE             |
| * <i>Bayne Smith</i> <i>[Signature]</i>                                  | <u>4-19-2012</u> |
| District Engineer (projects not originating in District Office)          | DATE             |

State Bridge Design Engineer (if applicable) DATE

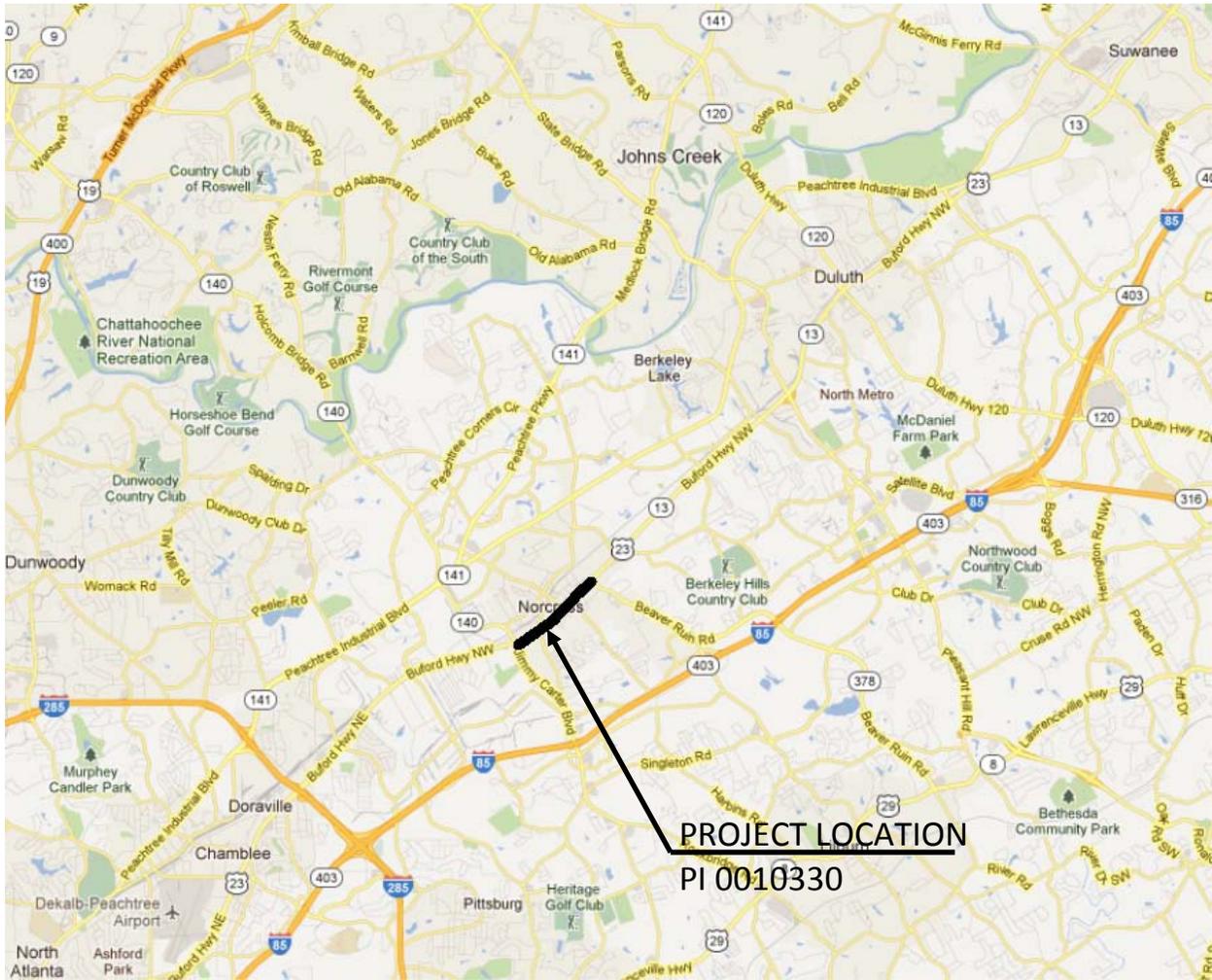
State Transportation Financial Management Administrator DATE

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

|   |                |
|---|----------------|
| <i>Cynthia L. Vause</i>   | <u>3-27-12</u> |
| State Transportation Planning Administrator (recommendation required) | DATE           |

\* Recommendation on file - *[Signature]*

## PROJECT LOCATION



## PLANNING & BACKGROUND DATA

**Project Justification Statement:** *Buford Highway (SR 13) is an important arterial roadway providing local and regional mobility between Fulton, DeKalb, Gwinnett, and Hall Counties. The importance of this corridor is detailed in the Buford Highway Multimodal Corridor Study, Prepared by the Atlanta Regional Commission in 2007. Through the City of Norcross, Buford Highway is a four lane roadway with a flush center median. This section roadway is characterized by multiple driveways and heavily congested peak hour conditions. Despite only carrying 36,000 vehicles per day, this roadway segment operates at LOS E due to the large number of access points and turning traffic. Traffic entering and exiting the large number of driveways is the primary cause of congestion along this section of Buford Highway. The existing LOS E conditions are expected to worsen to LOS F by 2030 without improvements to this corridor.*

*This project originated from the 2008 Norcross Activity Center LCI Implementation Plan.*

*Approaching the corridor from the south, there is a 15% increase in traffic volumes after crossing Jimmy Carter Boulevard, the southern logical terminus. After crossing Beaver Ruin Road, the northern logical terminus, the traffic volume drops approximately 25%.*

*As shown in Attachment 4, this segment of Buford Highway experienced an average of 225 accidents, 68 injuries per year. One vehicular fatality occurred in 2009. These rates far exceed statewide averages for similar facilities. Three pedestrian collisions occurred in the three year period, resulting in two pedestrian injuries and zero pedestrian fatalities.*

*Gwinnett Bus Routes 10, 20 and 30 all use Buford Highway as a connection area between each other and a way to get to the Doraville Marta Station. Pedestrians not only use Buford Highway for bus transit but it is a major commercial and residential area for non-vehicular users.*

**Description of the proposed project:** *This project includes improvements along Buford Highway in the heart of the City of Norcross, from Jimmy Carter Boulevard to Beaver Ruin Road, a distance of 1.4 miles. The project is in Gwinnett County, with the southern terminus being 2.4 miles from the DeKalb County line. The improvements include the overlay and restriping of Buford Highway, as well as the installation of a raised, landscaped median. A double curbed median with thick vegetation is proposed to discourage pedestrian crossings at undesignated areas, and will serve to encourage pedestrians to use the existing intersection crosswalks. Midblock crossings are being evaluated at key locations. GDOT's "Guidelines for the Installation of Marked Crosswalks at Uncontrolled Intersections and Mid-block Crossings", GDOT Pedestrian and Streetscape Guide, Figure 78 indicates that roads with ADT over 15,000 and speeds of 35 mph and higher are not recommended for uncontrolled crossings unless significant crossing enhancements are provided to improve crossing safety for pedestrians. As a result, additional pedestrian crossing assistance beyond striped a crosswalk would be needed at this location. A **High-Intensity Activated crossWalk (HAWK)** beacon will be provided where warranted, and each location will be evaluated independently. Due to the traffic volume and width of the road, rectangular rapid flashing beacons are *not recommended*. Generally, no signal upgrades or shoulder improvements are proposed. Proposed raised concrete islands will be adequately sized, and crosswalks located to allow ADA compliant ramp location.*

*Pedestrian activity at the southernmost midblock crossing is almost entirely transit users. As a result, other alternatives have been discussed with Gwinnett County Transit about changes to the*

bus circulation routes and centralized transfer station. Transit officials are currently evaluating changes and are in contact with the City, and their consultant.

**Federal Oversight:**     Full Oversight     Exempt     State Funded     Other

**MPO:**     N/A     MPO - Atlanta Regional Commission (ARC)  
 Project ID # GW-357

**Regional Commission:**     N/A     RC – Atlanta Regional Commission  
 RC Project ID # GW-357

**Congressional District(s):** 7

**Projected Traffic ADT:**

Current Year (2012): 36,000    Open Year (2015): 36,500    Design Year (2035): 54,000

**Functional Classification (Mainline):** Urban Minor Arterial Street

**Is this project on a designated bike route?**     No     YES  
*if project is on a bike route, please list if state or local route & include route number.*

**Is this project located on a pedestrian plan?**     No     YES

**Is this project located on or part of a transit network?**     No     YES

**CONTEXT SENSITIVE SOLUTIONS**

**Issues of Concern:** *None. This project does not negatively affect historical or environmental resources. Aesthetics are only improved by the addition of the landscaped median. By the nature of the proposed mid-block crossings, the project improves the community.*

**Context Sensitive Solutions:** N/A

**DESIGN AND STRUCTURAL DATA**

**Mainline Design Features: Roadway name/identification**

| Feature                         | Existing   | Standard*  | Proposed   |
|---------------------------------|------------|------------|------------|
| <b>Typical Section</b>          |            |            |            |
| - Number of Lanes               | 4          | 4          | 4          |
| - Lane Width(s)                 | 12'        | Min. 11'   | 11'        |
| - Median Width & Type           | 14', flush | 20' raised | 15' raised |
| - Outside Shoulder Width & Type | N/A        | N/A        | N/A        |
| - Outside Shoulder Slope        | N/A        | N/A        | N/A        |
| - Inside Shoulder Width & Type  | N/A        | N/A        | N/A        |
| - Sidewalks                     | 5'         | 5'         | N/A        |
| - Auxiliary Lanes               | 12'        | 11'        | 11'        |
| - Bike Lanes                    | N/A        | N/A        | N/A        |
| <b>Posted Speed</b>             | 45         |            | 45         |
| <b>Design Speed</b>             | 45         |            | 45         |

|                                    |                  |                      |  |
|------------------------------------|------------------|----------------------|--|
| <b>Min Horizontal Curve Radius</b> | <b>711'</b>      | <b>711'</b>          | <b>711'</b>  |
| <b>Superelevation Rate</b>         | <b>.04 ft/ft</b> | <b>.04 ft/ft max</b> | <b>.04 ft/ft max</b>   |
| <b>Grade</b>                       |                  |                      |  |
| <b>Access Control</b>              | <b>By permit</b> | <b>By permit</b>     | <b>By permit</b>   |
| <b>Right-of-Way Width</b>          | <b>100'</b>      | <b>100'</b>          | <b>100'</b>  |
| <b>Maximum Grade – Crossroad</b>   |                  |                      |  |
| <b>Design Vehicle</b>              | <b>S-BUS 50</b>  |                      | <b>S-BUS 50 –<br/>(R&amp;L turns)<br/>Passenger --<br/>(U turns)</b> |
| <i>Additional Items as needed</i>  |                  |                      |  |

\*According to current GDOT design policy if applicable

**Major Structures:** N/A

**Major Interchanges/Intersections:**

*Jimmy Carter Blvd and Buford Highway – Signalized Intersection*

- *North Norcross Tucker Rd and Buford Highway - Signalized Intersection*
- *South Cemetery St and Buford Highway - Signalized Intersection*
- *Mitchell Rd and Buford Highway - Signalized Intersection*
- *Beaver ruin Rd and Buford Highway - Signalized Intersection*

**Utility Involvements:**

- Gwinnett County ITS
- Georgia Power Distribution
- Georgia Power Transmission
- Atlanta Gas Light
- AT&T
- City of Norcross Power
- Charter - Communication
- Comcast
- Zayo
- Level3
- Gwinnett County Water/Sewer

**Public Interest Determination Policy and Procedure recommended (Utilities)?**  YES  NO

**SUE Required:**  Yes  No

**Railroad Involvement:** *Norfolk Southern has rail lines within 1000 feet of the corridor, but there are no impacts to any railroad property.*

**Right-of-Way:** *Refer to Chapter 3 of GDOT's Design Policy Manual for guidance.*

Required Right-of-Way anticipated:  YES  NO  Undetermined

Easements anticipated:  Temporary  Permanent  Utility  Other

Anticipated number of impacted parcels: 5

Anticipated number of displacements (Total): 0

Businesses: 0

Residences: 0

Other: 0

**Location and Design approval:**  Not Required  Required

**Off-site Detours Anticipated:**  No  Yes  Undetermined

**Transportation Management Plan Anticipated:**  YES  NO

**Design Exceptions to FHWA/AASHTO controlling criteria anticipated:**

| FHWA/AASHTO Controlling Criteria  | YES                      | NO                                  | Undetermined             |
|-----------------------------------|--------------------------|-------------------------------------|--------------------------|
| 1. Design Speed                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Lane Width                     | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Shoulder Width                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Bridge Width                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Horizontal Alignment           | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Superelevation                 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Vertical Alignment             | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. Grade                          | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9. Stopping Sight Distance        | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. Cross Slope                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 11. Vertical Clearance            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 12. Lateral Offset to Obstruction | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 13. Bridge Structural Capacity    | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**Design Variances to GDOT standard criteria anticipated:**

| GDOT Standard Criteria                                  | Reviewing Office |                                     |                                     |                          |
|---|------------------|-------------------------------------|-------------------------------------|--------------------------|
|   |                  | YES                                 | NO                                  | Undetermined             |
| 1. Access Control<br>- <i>Median Opening Spacing</i>    | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Median Usage & Width                                 | DP&S             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| 3. Intersection Skew Angle                              | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Lateral Offset to Obstruction                        | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 5. Intersection Sight Distance                          | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 6. Bike & Pedestrian Accommodations                     | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. GDOT Drainage Manual                                 | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. Georgia Standard Drawings                            | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 9. GDOT Bridge & Structural Manual                      | Bridge Design    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. Roundabout Illumination<br>- <i>(if applicable)</i> | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 11. Rumble Strips/Safety Edge                           | DP&S             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

*Proposed median is 15'. This is narrower than the GDOT requirement.*

**VE Study anticipated:**  No  Yes  Completed – Date: [Click here to enter a date.](#)

## ENVIRONMENTAL DATA

### Anticipated Environmental Document:

GEPA:  NEPA:  Categorical Exclusion  EA/FONSI  EIS

### Air Quality:

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

The project as described in this concept report is consistent in the scope and description to the Atlanta Regional Commission's Transportation Plan and the State Implementation Plan for the attainment of clean air quality in Georgia and is in compliance with both state and federal air quality standards.

**Environmental Permits/Variations/Commitments/Coordination anticipated:** *List all anticipated permits, variances, commitments, and coordination needed –Section 404, TVA, Water Quality, etc.*

| Permit/ Variance/ Commitment/ Coordination Anticipated | YES                                 | NO                                  | Remarks   |
|--|-------------------------------------|-------------------------------------|---|
| 1. U.S. Coast Guard Permit                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 2. Forest Service/Corps Land                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 3. CWA Section 404 Permit                              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | There is a stream that could be impacted; unsure of impacts at this time. |
| 4. Tennessee Valley Authority Permit                   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 5. Buffer Variance                                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 6. Coastal Zone Management Coordination                | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 7. NPDES   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |   |
| 8. FEMA  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 9. Cemetery Permit                                     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 10. Other Permits                                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 11. Other Commitments                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |
| 12. Other Coordination                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |   |

Is a PAR required?  No  Yes  Completed – Date: [Click here to enter a date.](#)

**NEPA/GEPA:** Categorical Exclusion in progress. No significant NEPA issues identified.

**Ecology:** There is a stream that could be impacted; unsure of impacts at this time.

**History:** History survey in progress. Project is not expected to have any adverse effects to eligible historic resources.

**Archeology:** Archaeological survey has not yet been completed. Due to disturbed nature of proposed ROW, no impacts to archaeological resources is anticipated.

**Air & Noise:** Project will be cleared with air and noise screenings.

**Public Involvement:** A public meeting was held February 25, 2012 (See attachment 8)

**Major stakeholders:** Traveling public, business owners, City of Norcross, Gwinnett Village CID.

## CONSTRUCTION

**Issues potentially affecting constructability/construction schedule:** None.

**Early Completion Incentives recommended for consideration:**  No  Yes

## PROJECT RESPONSIBILITIES

### Project Activities:

| Project Activity                              | Party Responsible for Performing Task(s)                    |
|---|---|
| Concept Development                           | <i>GDOT Office, Consulting firm, Local government, etc.</i> |
| Design  | Pond  |
| Right-of-Way Acquisition                      | Norcross  |
| Utility Relocation                            | By Locals   |
| Letting to Contract                           | Norcross  |
| Construction Supervision                      | Norcross  |
| Providing Material Pits                       | Pond  |
| Providing Detours                             | Pond  |
| Environmental Studies, Documents, and Permits | Pond  |
| Environmental Mitigation                      | Pond  |
| Construction Inspection & Materials Testing   | Norcross  |

**Lighting required:**  No  Yes

**Concept Meeting:** *A stakeholder meeting was held on August 17-18, 2010. See attachment 5.  
A concept team meeting was held on December 5, 2011. See attachment 6.*

### Other projects in the area:

- A continuous flow intersection is in the concept phase for the intersection of Jimmy Carter Boulevard at Buford Highway. The project is currently not funded. Estimated construction date 2015.
- GDOT Project CSSTP-M003-00(821), PI M003821. Resurface & Maintenance SR 140 (Jimmy Carter Blvd) from Chattahoochee River to I-85. Project currently underway.
- GDOT Project CSTE-009-00(075), PI 0009075. TE Pedestrian Facility SR 13/Buford Highway from CR 655/Amwiler Road to Jimmy Carter Boulevard. Estimated construction 2013.

**Other coordination to date:** *None.*

**Project Cost Estimate and Funding Responsibilities:**

|                  | Breakdown of PE | ROW       | Utility | CST*        | Environmental Mitigation | Total Cost  |
|------------------|-----------------|-----------|---------|-------------|--------------------------|-------------|
| \$ By Federal    | \$220,000       | \$0       | \$0     | \$1,403,535 | \$0                      | \$1,623,535 |
| \$ By Locals     | \$55,000        | \$170,000 | \$0     | \$373,829   | \$0                      | \$598,829   |
| Date of Estimate | 2/1/2012        | 4/13/12   |         | 4/13/2012   |                          |             |
|                  |                 |           |         |             |                          |             |

\*CST Cost includes: Construction, Engineering and Inspection, and Liquid AC Cost Adjustment.

**ALTERNATIVES DISCUSSION**

**Alternative selection:** Only the no-build and preferred alternatives were considered. Roadway widening to a six-lane divided section does not address the project justification statement and was not evaluated. The volumes, crash data, and other information show that this project is a operation improvements project, not a capacity project.

| <b>Preferred Alternative: Raised median</b>   |                  |                              |                    |
|---|------------------|------------------------------|--------------------|
| <b>Estimated Property Impacts:</b>  | <b>5</b>         | <b>Estimated Total Cost:</b> | <b>\$1,777,364</b> |
| <b>Estimated ROW Cost:</b>  | <b>\$170,000</b> | <b>Estimated CST Time:</b>   | <b>12 months</b>   |
| <b>Rationale:</b> <i>This alternative is the most cost effective solution that addresses the Project Justification. It minimizes right of way, construction cost, construction time, and environmental impacts.</i> |                  |                              |                    |

| <b>No-Build Alternative: No build</b>  |            |                              |                 |
|--|------------|------------------------------|-----------------|
| <b>Estimated Property Impacts:</b>   | <b>0</b>   | <b>Estimated Total Cost:</b> | <b>\$0</b>      |
| <b>Estimated ROW Cost:</b>   | <b>\$0</b> | <b>Estimated CST Time:</b>   | <b>0 months</b> |
| <b>Rationale:</b> <i>It is estimated that this would result in a worsening of traffic level of service, to level F by the design year.</i> |            |                              |                 |

**Comments:** None.

**Attachments:**

1. Concept Layout
2. Typical sections
3. Detailed Cost Estimates:
  - a. Construction including Engineering and Inspection
  - b. Completed Fuel & Asphalt Price Adjustment forms
  - c. Right-of-Way
4. Traffic/Pedestrian Information
  - a. Crash summaries
  - b. Pedestrian Count Summary
5. Stakeholder Meeting
6. Minutes of Concept Team Meeting
7. Project Framework Agreement
8. Summary from Public Information Open House

**APPROVALS**

Concur:                     All R M:My                      
Director of Engineering

Approve:                     Dale M Ross                      
Chief Engineer

                    5/3/2012                      
Date

**Attachment 1:  
Concept Layout**

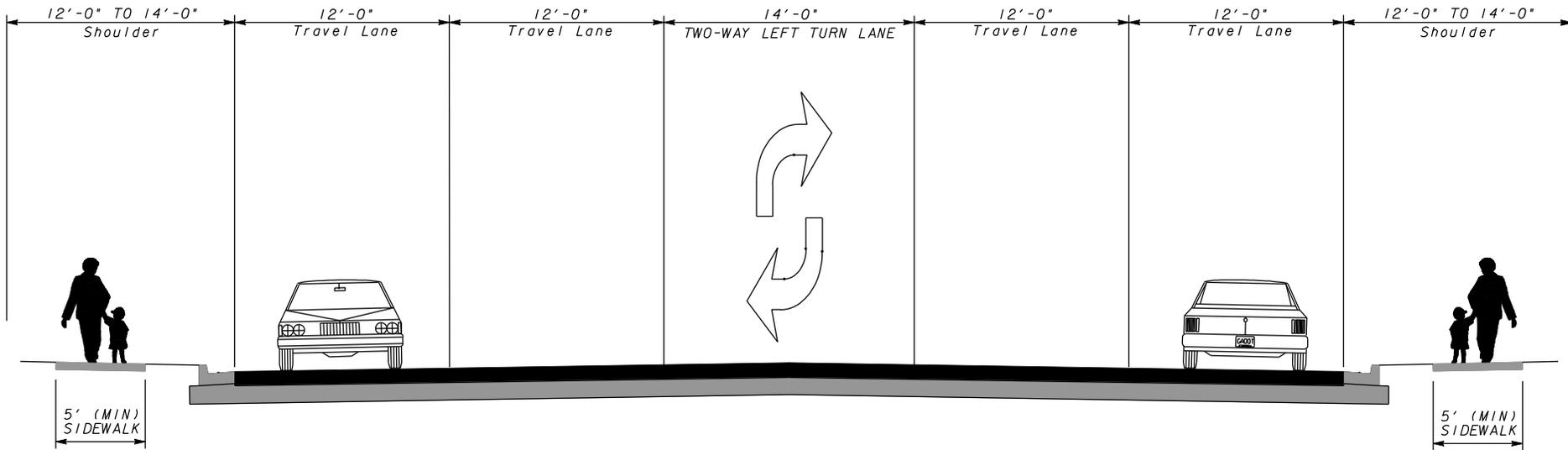


AUGUST 2011  
CITY OF NORCROSS  
BUFORD HWY MEDIAN IMPROVEMENTS

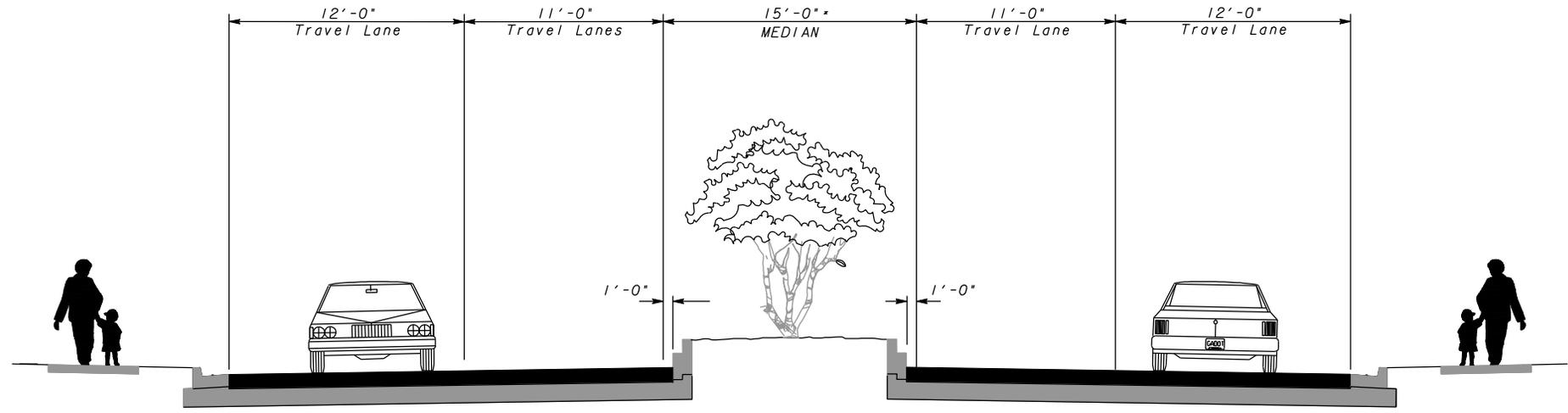


**POND**  
Architects-Engineers-Planners  
3500 Parkway Lane  
Suite 600  
Norcross, Ga. 30092  
Phone: 678-336-7740  
Fax: 678-336-7744  
Web: www.pondco.com

## **Attachment 2: Typical Sections**



**BUFORD HIGHWAY  
EXISTING TYPICAL SECTION**



**BUFORD HIGHWAY  
PROPOSED TYPICAL SECTION**

\* ADJACENT TO LEFT TURN LANES, MEDIAN WIDTH IS REDUCED TO 2' (FACE OF CURB TO FACE OF CURB), AND DOUBLE CURB IS REDUCED TO A SINGLE CURB

| REVISION DATES |  |
|----------------|--|
|                |  |
|                |  |
|                |  |
|                |  |
|                |  |
|                |  |

**Attachment 3:  
Detailed Cost Estimates**

|   |   |             |            |              |              |
|---|---|-------------|------------|--------------|--------------|
| DATE: April 13, 2012                                    |   |             |            |              |              |
| Project No. 1120148                                     |   |             |            |              |              |
| Client: City of Norcross                                |   |             |            |              |              |
| Description: <b>Buford Highway Medians - PI 0010330</b> |   |             |            |              |              |
| <b>CONSTRUCTION COST ESTIMATE</b>                       |   |             |            |              |              |
| <b>Item No.</b>   | <b>ITEMS:</b>   | <b>Unit</b> | <b>Qty</b> | <b>Price</b> | <b>Cost</b>  |
| <b><u>ROADWAY ITEMS</u></b>                             |   |             |            |              |              |
| 150-1000  | TRAFFIC CONTROL   | LS          | 1          | \$150,000.00 | \$150,000.00 |
| 210-0100  | GRADING COMPLETE -  | LS          | 1          | \$250,000.00 | \$250,000.00 |
| 310-5100  | GR AGGR BASE CRS, 10 INCH, INCL MATL                                      | SY          | 1000       | \$15.57      | \$15,570.00  |
| 402-1812  | RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME                     | TN          | 80         | \$64.95      | \$5,196.00   |
| 402-3130  | RECYC 1" ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME | TN          | 842        | \$67.56      | \$56,885.52  |
| 402-3190  | RECYC 2" ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME   | TN          | 50         | \$66.74      | \$3,337.00   |
| 402-3121  | RECYC 6" ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME   | TN          | 100        | \$61.69      | \$6,169.00   |
| 413-1000  | BITUM TACK COAT   | GL          | 250        | \$2.54       | \$635.00     |
| 432-5010  | MILL ASPH CONC PVMT, VARIABLE DEPTH                                       | SY          | 1000       | \$3.16       | \$3,160.00   |
| 441-0018  | DRIVEWAY CONCRETE, 8 IN TK  | SY          | 50         | \$38.14      | \$1,907.00   |
| 441-0740  | CONC MEDIAN, 4 IN   | SY          | 940        | \$42.80      | \$40,232.00  |
| 441-4030  | CONC VALLEY GUTTER, 8 IN  | SY          | 500        | \$37.40      | \$18,700.00  |
| 441-5002  | CONCRETE HEADER CURB, 6 IN, TP 2  | LF          | 8000       | \$14.52      | \$116,160.00 |
| 441-9999  | DOUBLE CONCRETE HEADER CURB   | LF          | 5950       | \$52.00      | \$309,400.00 |
| 441-6222  | CONC CURB & GUTTER, 8 IN X 30 IN, TP 2                                    | LF          | 50         | \$11.00      | \$550.00     |
| 446-1100  | PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH                             | LF          | 1950       | \$19.03      | \$37,108.50  |
| 500-9999  | CLASS B CONC, BASE OR PVMT WIDENING                                       | CY          | 280        | \$185.53     | \$51,948.40  |
| 901-1000  | STREETSCAPING AMENITIES   | LS          | 1          | \$150,000.00 | \$150,000.00 |
| 902-1000  | GATEWAY SIGNAGE   | LS          | 1          | \$100,000.00 | \$100,000.00 |
| <b><u>EROSION CONTROL - PERMANENT</u></b>               |   |             |            |              |              |
| 700-6910  | PERMANENT GRASSING  | AC          | 0.5        | \$612.06     | \$306.03     |
| 700-7000  | AGRICULTURAL LIME   | TN          | 5          | \$51.25      | \$256.25     |
| 700-7010  | LIQUID LIME   | GL          | 5          | \$20.70      | \$103.50     |
| 700-8000  | FERTILIZER MIXED GRADE  | TN          | 0.5        | \$456.78     | \$228.39     |
| 700-8100  | FERTILIZER NITROGEN CONTENT   | LB          | 100        | \$2.54       | \$254.00     |
| <b><u>EROSION CONTROL - TEMPORARY</u></b>               |   |             |            |              |              |
| 163-0232  | TEMPORARY GRASSING  | AC          | 0.5        | \$216.16     | \$108.08     |
| 163-0240  | MULCH   | TN          | 1          | \$214.93     | \$214.93     |
| 163-0503  | CONSTRUCT AND REMOVE SILT CONTROL GATE, TP 3                              | EA          | 10         | \$484.05     | \$4,840.50   |
| 163-0550  | CONSTRUCT AND REMOVE INLET SEDIMENT TRAP                                  | EA          | 40         | \$187.85     | \$7,514.00   |
| 165-0030  | MAINTENANCE OF TEMPORARY SILT FENCE, TP C                                 | LF          | 1000       | \$1.32       | \$1,320.00   |
| 165-0087  | MAINTENANCE OF SILT CONTROL GATE, TP 3                                    | EA          | 5          | \$139.42     | \$697.10     |
| 167-1000  | WATER QUALITY MONITORING AND SAMPLING                                     | EA          | 2          | \$575.78     | \$1,151.56   |
| 167-1500  | WATER QUALITY INSPECTIONS   | MO          | 12         | \$735.71     | \$8,828.52   |
| 171-0030  | TEMPORARY SILT FENCE, TYPE C  | LF          | 2000       | \$3.58       | \$7,160.00   |
| 716-2000  | EROSION CONTROL MATS, SLOPES  | SY          | 300        | \$1.22       | \$366.00     |
| <b><u>SIGNING AND MARKING</u></b>                       |   |             |            |              |              |
| 636-1020  | HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3                             | SF          | 300        | \$15.00      | \$4,500.00   |
| 636-2070  | GALV STEEL POSTS, TP 7  | LF          | 600        | \$8.00       | \$4,800.00   |
| 653-0120  | THERMOPLASTIC PVMT MARKING, ARROW, TP 2                                   | EA          | 30         | \$76.51      | \$2,295.30   |

| Item No. | ITEMS:  | Unit | Qty   | Price   | Cost                  |
|----------|---|------|-------|---|-----------------------|
| 653-0130 | THERMOPLASTIC PVMT MARKING, ARROW, TP 3       | EA   | 20    | \$107.97  | \$2,159.40            |
| 653-1501 | THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE  | LF   | 16000 | \$0.57  | \$9,120.00            |
| 653-1502 | THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW | LF   | 16000 | \$0.64  | \$10,240.00           |
| 653-1704 | THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE | LF   | 200   | \$4.48  | \$896.00              |
| 653-1804 | THERMOPLASTIC SOLID TRAF STRIPE, 8 IN, WHITE  | LF   | 16000 | \$1.86  | \$29,760.00           |
| 653-3501 | THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE   | GLF  | 16000 | \$0.44  | \$7,040.00            |
| 653-6004 | THERMOPLASTIC TRAF STRIPING, WHITE            | SY   | 1000  | \$3.12  | \$3,120.00            |
| 653-6006 | THERMOPLASTIC TRAF STRIPING, YELLOW           | SY   | 50    | \$3.10  | \$155.00              |
| 938-0000 | ADJUST LOOP DETECTORS                         | EA   | 40    | \$500.00  | \$20,000.00           |
|          | <b>LANDSCAPING</b>                            |      |       |   |                       |
| 999-9999 | LANDSCAPING (LUMP SUM)                        | LS   | 1     | \$225,000.00                                    | \$225,000.00          |
|          |   |      |       |   |                       |
|          |   |      |       | <b>ROADWAY SUBTOTAL =</b>                       | <b>\$1,323,556.42</b> |
|          |   |      |       |   |                       |
|          |   |      |       | <b>EROSION CONTROL - PERMANENT SUBTOTAL =</b>   | <b>\$1,148.17</b>     |
|          |   |      |       |   |                       |
|          |   |      |       | <b>EROSION CONTROL - TEMPORARY SUBTOTAL =</b>   | <b>\$32,200.69</b>    |
|          |   |      |       |   |                       |
|          |   |      |       | <b>SIGNING, MARKING &amp; SIGNAL SUBTOTAL =</b> | <b>\$94,085.70</b>    |
|          |   |      |       |   |                       |
|          |   |      |       | <b>LANDSCAPING SUBTOTAL =</b>                   | <b>\$225,000.00</b>   |
|          |   |      |       |   |                       |
|          |   |      |       | <b>SUBTOTAL =</b>                               | <b>\$1,675,990.98</b> |
|          |   |      |       |   |                       |
|          |   |      |       | <b>E&amp;I RATE 5.0%</b>                        | <b>\$83,799.55</b>    |
|          |   |      |       |   |                       |
|          |   |      |       | <b>Liquid AC Cost Adjustment =</b>              | <b>\$17,573.67</b>    |
|          |   |      |       |   |                       |
|          |   |      |       | <b>TOTAL =</b>                                  | <b>\$1,777,364.20</b> |
|          |   |      |       |   |                       |
|          |   |      |       | <b>RIGHT OF WAY</b>                             | <b>\$170,000.00</b>   |
|          |   |      |       |   |                       |

PROJ. NO.

Buford Highway Medians

CALL NO.

P.I. NO.

0010330

DATE

2/2/2012

INDEX (TYPE)

DATE INDEX

REG. UNLEADED

Jan. 2012 \$ 3.297

DIESEL

\$ 3.818

LIQUID AC

\$ 578.00

Link to Fuel and AC Index:

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

LIQUID AC ADJUSTMENTS

PA=[((APM-APL)/APL)]xTMTxAPL

Asphalt

Price Adjustment (PA)

17201.28

\$

17,201.28

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 924.80

Monthly Asphalt Cement Price month project let (APL)

\$ 578.00

Total Monthly Tonnage of asphalt cement (TMT)

49.6

| ASPHALT   | Tons       | %AC  | AC ton      |
|-----------|------------|------|-------------|
| Leveling  |            | 5.0% | 0           |
| 12.5 OGFC |            | 5.0% | 0           |
| 12.5 mm   | 842        | 5.0% | 42.1        |
| 9.5 mm SP |            | 5.0% | 0           |
| 25 mm SP  | 100        | 5.0% | 5           |
| 19 mm SP  | 50         | 5.0% | 2.5         |
|           | <b>992</b> |      | <b>49.6</b> |

BITUMINOUS TACK COAT

Price Adjustment (PA)

\$ 372.39

\$

372.39

Monthly Asphalt Cement Price month placed (APM)

Max. Cap

60%

\$ 924.80

Monthly Asphalt Cement Price month project let (APL)

\$ 578.00

Total Monthly Tonnage of asphalt cement (TMT)

1.07377523

Bitum Tack

| Gals | gals/ton | tons       |
|------|----------|------------|
| 250  | 232.8234 | 1.07377523 |

PROJ. NO.

Buford Highway Medians

CALL NO.

P.I. NO.

0010330

DATE

2/2/2012

**BITUMINOUS TACK COAT (surface treatment)**

|  |  |          |     |    |        |          |    |   |
|--|--|----------|-----|----|--------|----------|----|---|
| Price Adjustment (PA)                                |  |          |     |    |        | <b>0</b> | \$ | - |
| Monthly Asphalt Cement Price month placed (APM)      |  | Max. Cap | 60% | \$ | 924.80 |          |    |   |
| Monthly Asphalt Cement Price month project let (APL) |  |          |     | \$ | 578.00 |          |    |   |
| Total Monthly Tonnage of asphalt cement (TMT)        |  |          |     |    | 0      |          |    |   |

| Bitum Tack         | SY | Gals/SY | Gals | gals/ton | tons |
|--------------------|----|---------|------|----------|------|
| Single Surf. Trmt. |    | 0.20    | 0    | 232.8234 | 0    |
| Double Surf.Trmt.  |    | 0.44    | 0    | 232.8234 | 0    |
| Triple Surf. Trmt  |    | 0.71    | 0    | 232.8234 | 0    |
|                    |    |         |      |          | 0    |

|                                   |    |                  |
|-----------------------------------|----|------------------|
| <b>TOTAL LIQUID AC ADJUSTMENT</b> | \$ | <b>17,573.67</b> |
|-----------------------------------|----|------------------|

GEORGIA DEPARTMENT OF TRANSPORTATION  
 LOCAL ACQUISITION - DETAILED ROW COST ESTIMATE SUMMARY

Date (MM/YYYY): April-12      Project: LCI0010330  
 Revised: April-12      County: Gwinnett  
    PI: -10330

Description: Buford Highway Median - Norcross

Parcels: 5      R/W Plan Date: 1/1/2013

FOR FUNDING ONLY

CONTRACT

|                       |                     |
|-----------------------|---------------------|
| Land and Improvements | \$61,310.14         |
| Valuation Services    | \$12,500.00         |
| Legal Services        | \$40,875.00         |
| Relocation            | \$0.00              |
| Demolition            | \$0.00              |
| <b>TOTAL CONTRACT</b> | <b>\$114,685.14</b> |

IN-HOUSE

|                              |                     |
|------------------------------|---------------------|
| Sponsor In-house             | \$43,500.00         |
| Sponsor Estimated Costs      | \$158,185.14        |
| Agency Oversight In-house    | \$10,000.00         |
| <b>TOTAL ESTIMATED COSTS</b> | <b>\$168,185.14</b> |

**TOTAL ESTIMATED COSTS (ROUNDED)      \$170,000.00**

| Preparation Credits | Hours | Signature  |
|---------------------|-------|--|
|                     |       |  |
|                     |       |  |

\*CG#:

\*CG#:

\*CG required only if used for Negotiations

Attachment(s): **Project Location Map; Subject/Comp Location Map; Comparable Sales Data**

**Attachment 4a:  
Accident History/Crash Summary**

**Table 1**  
**Summary of Crashes On Study Area Roadways - 2007 through 2009 (three years)**

| Crash Analysis Section                                    | Distance (mile) | Year  | # of Crashes | # of Injury Crashes | # of Fatality Crashes | AADT   | Annual VMT | Crash Rate (100MVMT) | Injury Crash Rate (100MVMT) | Fatal Crash Rate (100MVMT) |
|---|-----------------|-------|--------------|---------------------|-----------------------|--------|------------|----------------------|-----------------------------|----------------------------|
| Buford Highway from Jimmy Carter Blvd to Beaver Ruin Road | 1.41            | 2007  | 310          | 54                  | 0                     | 35,200 | 18,115,680 | 1,711                | 298                         | 0                          |
|   | 1.41            | 2008  | 218          | 46                  | 0                     | 35,200 | 18,115,680 | 1,203                | 254                         | 0                          |
|   | 1.41            | 2009* | 146          | 41                  | 1                     | 35,200 | 18,115,680 | 806                  | 226                         | 6                          |
|   | 1.41            | 2009* | 175          | 49                  | 1                     | 35,200 | 18,115,680 | 967                  | 272                         | 6                          |

Note: Statewide Urban Minor Arterial Non-NHS Average: 469 crashes, 117 injury crashes, and 1.33 fatal crashes per 100 million vehicle miles of travel (100MVMT), based on 2008 data.

\*Note: 2009 data only includes crashes from January through October of 2009. Summary of this data is shown in the first row of 2009 data. The second row of 2009 data projects a full year of data based on the crash rates of the first 10 months of data.

**Attachment 4b:  
Pedestrian Count Summary**

# TRAFFIC DATA SERVICES

Phone: (678) 687-8266 Fax: (404) 294-6122

## PEDESTRIAN COUNT SUMMARY

CLIENT: POND AND COMPANY  
 PROJECT: NORCROSS, GA TRAFFIC COUNTS  
 DATE: THURSDAY, NOVEMBER 17TH 2011  
 PERIODS: 4:00 PM TO 6:00 PM  
 INTERSECTION: BUFORD HIGHWAY

| 4:00 PM TO 6:00 PM |       |    |       |       |    |       |       |    |       |   |   |   |
|--------------------|-------|----|-------|-------|----|-------|-------|----|-------|---|---|---|
| 15 MIN<br>COUNTS   | LOC A |    |       | LOC B |    |       | LOC C |    |       |   |   |   |
|                    | EB    | WB | TOTAL | NB    | SB | TOTAL | EB    | WB | TOTAL |   |   |   |
| 400-415            | 5     | 6  | 11    | 3     | 1  | 4     | 3     | 1  | 4     | 0 | 0 | 0 |
| 415-430            | 4     | 1  | 5     | 2     | 3  | 5     | 0     | 4  | 4     | 0 | 0 | 0 |
| 430-445            | 2     | 7  | 9     | 4     | 3  | 7     | 2     | 4  | 6     | 0 | 0 | 0 |
| 445-500            | 9     | 16 | 25    | 3     | 1  | 4     | 0     | 3  | 3     | 0 | 0 | 0 |
| 500-515            | 1     | 9  | 10    | 1     | 2  | 3     | 2     | 3  | 5     | 0 | 0 | 0 |
| 515-530            | 6     | 8  | 14    | 0     | 2  | 2     | 2     | 4  | 6     | 0 | 0 | 0 |
| 530-545            | 1     | 7  | 8     | 0     | 1  | 1     | 0     | 1  | 1     | 0 | 0 | 0 |
| 545-600            | 1     | 12 | 13    | 0     | 3  | 3     | 0     | 0  | 0     | 0 | 0 | 0 |
| <b>HOUR TOTALS</b> |       |    |       |       |    |       |       |    |       |   |   |   |
| 400-500            | 20    | 30 | 50    | 12    | 8  | 20    | 5     | 12 | 17    | 0 | 0 | 0 |
| 415-515            | 16    | 33 | 49    | 10    | 9  | 19    | 4     | 14 | 18    | 0 | 0 | 0 |
| 430-530            | 18    | 40 | 58    | 8     | 8  | 16    | 6     | 14 | 20    | 0 | 0 | 0 |
| 445-545            | 17    | 40 | 57    | 4     | 6  | 10    | 4     | 11 | 15    | 0 | 0 | 0 |
| 500-600            | 9     | 36 | 45    | 1     | 8  | 9     | 4     | 8  | 12    | 0 | 0 | 0 |

LOC A = BETWEEN JIMMY CARTER BLVD AND N. NORCROSS TUCKER ROAD

LOC B = BETWEEN HOLCOMB BRIDGE AND MITCHELL ROAD

LOC C = BETWEEN SUMMEROURS STREET AND BEAVER RUINS ROAD

**Attachment 5:  
Stakeholder Meeting**



MAYOR **BUCKY JOHNSON** · MAYOR PRO TEM **CRAIG NEWTON** · COUNCILMAN **DAVID MCLEROY** · COUNCILMAN **CHARLIE RIEHM** ·  
COUNCILMAN **ROSS KAUL** · COUNCILMAN **ANDREW HIXSON** · CITY MANAGER **RUDOLPH SMITH** · CITY CLERK **SUSAN B. WUERZNER**

---

Burger King Corporation  
P.O. Box 20783  
Miami, FL 33102-0783

Stakeholder 1

July 23, 2010

**RE: Buford Highway Median Project**

Dear Stakeholder:

The City of Norcross has recently initiated a Conceptual Study for the placement of a raised median along Buford Highway through the City. The placement of a raised, planted median along Buford Highway was a project recommendation of the Norcross Activity Center Livable Centers Initiative (LCI) Study completed in 2008. More information about the LCI study can be found within the Community Development section under the Municipal tab of the City of Norcross website – [www.norcrossga.net](http://www.norcrossga.net).

This project was recommended in the LCI study to address congestion and safety concerns on Buford Highway. This segment of Buford Highway has experienced a steady increase in traffic volumes and congestion over the past 20 years. Between 2004 and 2006, this segment of Buford Highway experienced an average of 389 accidents, 109 injuries, and one fatality per year. These rates far exceed statewide averages for similar facilities. Furthermore, in this same period, this segment of Buford Highway experienced six pedestrian injury accidents and one pedestrian fatality.

The proposed median project would add a raised median along Buford Highway between Jimmy Carter Boulevard and Beaver Run Road. By channelizing traffic flows, the raised center median would reduce congestion and improve mobility on Buford Highway. By removing the center two-way left turn lane, the raised median would also provide refuge for pedestrians crossing Buford Highway at midblock locations. In addition to the mobility and safety benefits, the planted median along Buford Highway would also aid with the beautification of this corridor.

As a stakeholder on this corridor, you are invited to attend a stakeholder meeting to learn more about the project and provide input and feedback at this concept stage. In order to accommodate all residents and business owners along the corridor, we are holding two meetings. The dates are Tuesday, August 17, 2010 from 4:00 pm -6:00 pm, and Wednesday, August 18, 2010 from 4:00 pm – 6:00 pm. Both meetings will be in the Banquet Room of the Norcross Cultural Arts and Community Center, 10 Britt Avenue, Norcross, GA 30071. Design professionals, traffic engineers, and city staff will be available to answer your questions. We encourage you to attend one of these meetings as this project is in the early conceptual planning stages and this is an important time for stakeholder input.

We hope to see you at one of the two meetings. If you cannot attend either of the meetings and have questions, please contact me at 678-421-2032.

Sincerely,

CITY OF NORCROSS  
Jeffrey W. Mueller, P.E., City Engineer