

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. # 0007285 & 0008037
CSMSL-0007-00(285) &
CSAPD-0008-00(037)

OFFICE Design Policy & Support

Paulding County

GDOT District 6 - Cartersville

DATE October 24, 2012

Paulding County Technology Park Road

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:

Bobby Hilliard, Program Control Administrator
Genetha Rice-Singleton, State Program Delivery Engineer
Glenn Bowman, State Environmental Administrator
Cindy VanDyke, State Transportation Planning Administrator
Kathy Zahul, State Traffic Engineer
Angela Robinson, Financial Management Administrator
Lisa Myers, State Project Review Engineer
Charles "Chuck" Hasty, State Materials Engineer
Jeff Baker, State Utilities Engineer
Paul Tanner, Asst. State Transportation Data Administrator
Attn: Systems & Classification Branch
Ken Thompson, Statewide Location Bureau Chief
DeWayne Comer, District Engineer
Michael Haithcock, District Preconstruction Engineer
Kerry Bonner, District Utilities Engineer
Kevin Bailey, Project Manager
BOARD MEMBER - 11th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
DISTRICT 6

PROJECT CONCEPT REPORT

Project Number: CSMSL-0007-00(285), CSAPD-0008-00(037)
County: Paulding County
P. I. Number: 0007285, 0008037
Federal Route Number: N/A
State Route Number: N/A

Paulding County Business and Technology Park Roadway
and Paulding County Local Access Road

Submitted for approval:

DATE 08-09-2011

Walter J. Van Dyke RS&H
Design Consultant/Name and Firm Name

DATE 08-09-2011

Scott K. [Signature]
Local Government

DATE 3/10/11

[Signature]
Office Head (Project Manager's Office)

DATE 9-11-2011

Curt [Signature]
Project Manager

Recommendation for approval:

* DATE 1/7/2011

GENETHA RICE-SUGLETON / [Signature]
Program Control Administrator

* DATE 12/1/2011

GLEN BOWMAN / [Signature]
State Environmental Administrator

* DATE 12/15/2010

KATHY ZAHUK / [Signature]
State Traffic Engineer

* DATE 12/14/2010

TON WISHOW / [Signature]
Project Review Engineer

DATE _____

State Utilities Engineer

DATE _____

District Engineer/District Utilities Engineer

DATE _____

State Transportation Financial Management Administrator

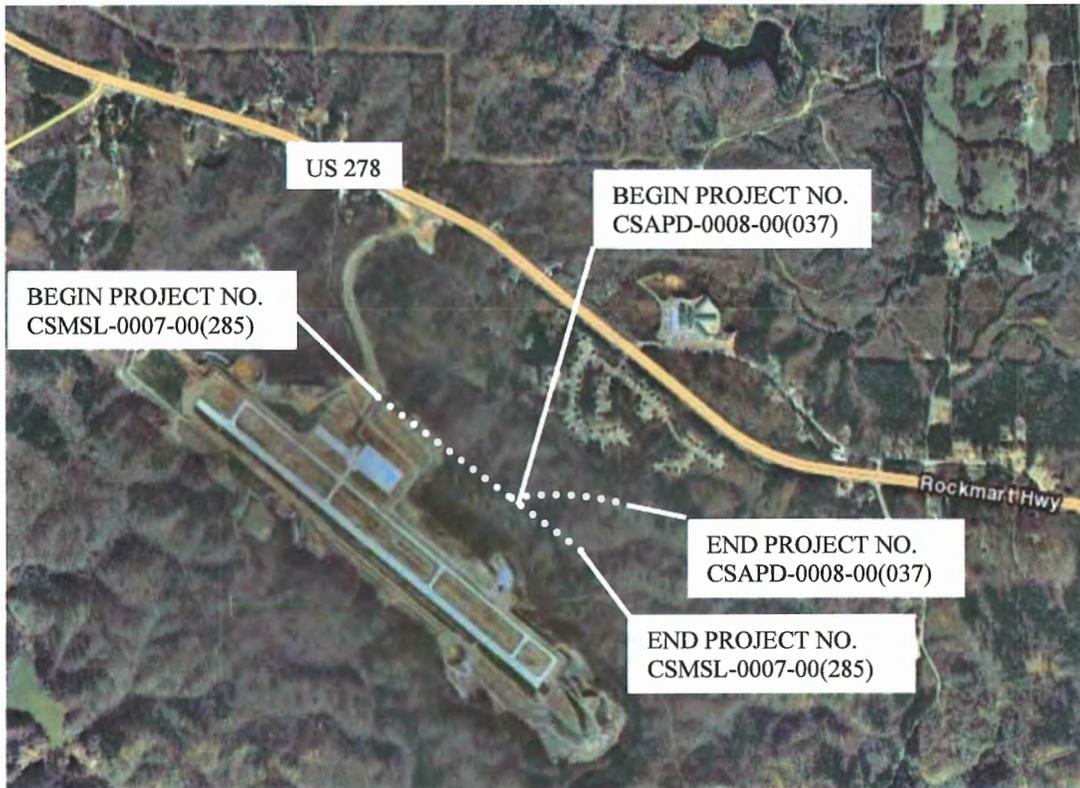
The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Improvement Program (RTP) and the State Transportation Improvement Program (STIP).

* DATE 12/14/2010

CYNTHIA YANDUKE / [Signature]
State Transportation Planning Administrator

* RECOMMENDATION ON FILE

Project Concept Report Page 2
Project Number CSMSL-0007-00(285), CSAPD-0008-00(037)
P.I. Number: 0007285, 0008037
County: Paulding



Project Location Map
Paulding County Business and Technology Park Roadway
and Paulding County Local Access Road

Need and Purpose: The proposed project would meet the need of providing a Technology Park Roadway and Local Access Road to develop the Business and Technology Park road network and provide the transportation infrastructure for anticipated future economic development as planned by Paulding County.

Description of the proposed project: The proposed Paulding County Business and Technology Park Roadway and Paulding County Local Access Road project consists of approximately 1.1 miles of two new location roadways. The Technology Park Roadway is approximately 0.6 miles in length and consists of approximately 900' of 2-lane traffic with rural shoulders separated by a 20' raised grassed median. Technology Park Roadway transitions to an undivided 2-lane section until a cul-de-sac terminus. The Local Access Road consists of 0.5 miles of undivided 2-lane roadway with rural shoulders until a cul-de-sac terminus. Each roadway is proposed to have two (2) - 11' travel lanes and 8' rural shoulders (3' paved, 5' grassed). The proposed lane and shoulder widths are intended to match the typical section of the existing Airport Parkway section.

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

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

PDP Classification: Major Minor X

OKP FHWA changed to exempt on 09/07/12

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

* APD funding requires Full Oversight

Functional Classification: Technology Park Roadway Rural Local
 Local Access Road Rural Local

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

Traffic (AADT):

Base Year (2015): 40 Design Year (2035): 5,302

Existing design features:

- This is a new location project.

Proposed Design Features:

- Proposed typical section(s):
The first 900 feet of Technology Park Roadway includes two 11-foot lanes with a 20-foot raised grassed median and 8-foot rural shoulders (3' paved, 5' grassed.) The remainder of the Technology Park Roadway and the Local Access Road will consist of two 11-foot undivided lanes with 8' foot shoulders (3' paved, 5' grassed.)
- Proposed Design Speed Mainline 35 mph
- Proposed Maximum Grade Mainline 2.4%
- Maximum grade Allowable 10.0%
- Proposed Maximum grade Side Street 7.0%

- Maximum grade Allowable 10.0%
- Proposed Maximum grade driveway 11%
- Proposed Minimum radius of curve 371 ft
- Minimum radius allowable 371 ft
- Maximum superelevation rate 4.0% (match adjacent project)
- Right of way:
 - Width: 100 ft (typical)
 - Easements: Temporary () Permanent (X) Utility () Other ()
 - Type of access control: Full () Partial () By Permit (X) Other ()
 - Number of parcels: 2 Number of displacements: 0
 - Business: 0
 - Residences: 0
 - Mobile home: 0
 - Other: 0
- Structures:
 - Bridges: N/A
 - Retaining walls: N/A
- Major intersections:
 - Airport Parkway – The Technology Park Roadway begins at the termination of Airport Parkway and the Northwest Atlanta Airport entrance.
 - Local Access Road – The Local Access Road will create a “T” Intersection with the Technology Park Roadway.
- ITS Project: N/A
- Transportation Management Plan Anticipated: Yes () No (X)
- Design Exceptions to controlling criteria anticipated:

	<u>YES</u>	<u>NO</u>	<u>UNDETERMINED</u>
HORIZONTAL ALIGNMENT:	()	(X)	()
LANE WIDTH:	()	(X)	()
SHOULDER WIDTH:	()	(X)	()
VERTICAL GRADES:	()	(X)	()
CROSS SLOPES:	()	(X)	()
STOPPING SIGHT DISTANCE:	()	(X)	()
SUPERELEVATION RATES:	()	(X)	()
VERTICAL ALIGNMENT:	()	(X)	()
SPEED DESIGN:	()	(X)	()
VERTICAL CLEARANCE:	()	(X)	()
BRIDGE WIDTH:	()	(X)	()
BRIDGE STRUCTURAL CAPACITY:	()	(X)	()
LATERAL OFFSET TO CONSTRUCTION:	()	(X)	()

- Design Variances: N/A
- Environmental concerns:
 - Impacts to waters and wetlands of the US are expected. A permit will be required from the U.S. Army Corps of Engineers (ACOE). If impacts are less than 1.0 acre, a Nationwide Permit (NWP) will be required; if impacts are greater than 1.0 acre, an Individual 404 Permit will be required. If an Individual 404 Permit is required, a Practical Alternatives Report (P.A.R.) will be completed as required.

Coordination

- Initial Concept Meeting : N/A
- Concept Meeting: July 7, 2010
- P. A. R. meetings, dates and results:
 - Pending determination of ACOE Permit type.
- FEMA, USCG, and/or TVA: N/A
- Public involvement: PIOH, PHOH
- Local government comments: See Team Coordination Meeting Minute in Attachments
- Other projects in the area:
 - No impacts or conflicts between this proposed new location roadway project and Paulding County Airport Terminal Expansion project anticipated.
- Railroads: N/A
- Other coordination meetings to date:
 - See Team Coordination Meeting Minute in Attachment

Scheduling – Responsible Parties' Estimate

Time to complete the environmental process:	Begin: [6-30-2011] End: [4-13-2013]
Time to complete preliminary construction plans:	Begin: [7-28-2011] End: [7-08-2013]
Time to complete right of way plans:	Begin: [7-09-2013] End: [9-24-2013]
Time to complete the Section 404 Permit:	Begin: [TBD] End: [TBD]
Time to complete final construction plans:	Begin: [11-01-2011] End: [4-21-2014]
Time to complete to purchase right of way:	Begin: [9-25-2013] End: [12-23-2013]
List other major items that will affect the project schedule:	Begin: [TBD] End: [TBD]

Other alternates considered:

- **No Build Alternate:**
This option does not meet the need and purpose of the proposed project.

Comments: *N/A Transportation Management Plan would consist of TTC. See Special Provision 150. [initials]*

Attachments:

1. Need and Purpose
2. Cost Estimates:
 - a. Construction Cost including E&C
 - b. Completed Fuel & Asphalt Price Adjustment forms
 - c. ROW Cost Estimate
3. Typical Sections
4. Traffic Memorandum (incl. Traffic Diagram)
5. Concept Team Meeting Minutes (07-07-2010)
6. Meeting Minutes
 - a. Kick-Off Meeting with Department of Community Affairs (DCA), Paulding County DOT, Coosa Valley Regional Development Authority (CVRDC), Federal Highway Administration (FHWA), and Georgia Department of Transportation (GDOT) (07-28-2006)
 - b. Preliminary Project Meeting with Paulding County DOT, Paulding County Airport

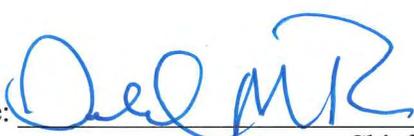
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- Authority, and RS&H (12-14-2009)
- c. Preliminary Project Coordination Meeting with LPA Group, Paulding County DOT, Paulding Airport Authority, KEA, and RS&H (01-06-2010)
- d. Project Status Meeting with Paulding County DOT and RS&H (03-26-2010)
- 7. PFA
- 8. Project Layout
- 9. Correspondence with FHWA 

Full Oversight project:

Concur: 
Director of Engineering

Approve: Federal Oversight Changed
to "Exempt" on Sept. 7, 2012 - [initials]
Division Administrator, FHWA

Approve: 
Chief Engineer

Date: 10-22-12

Attachment 1: Need and Purpose

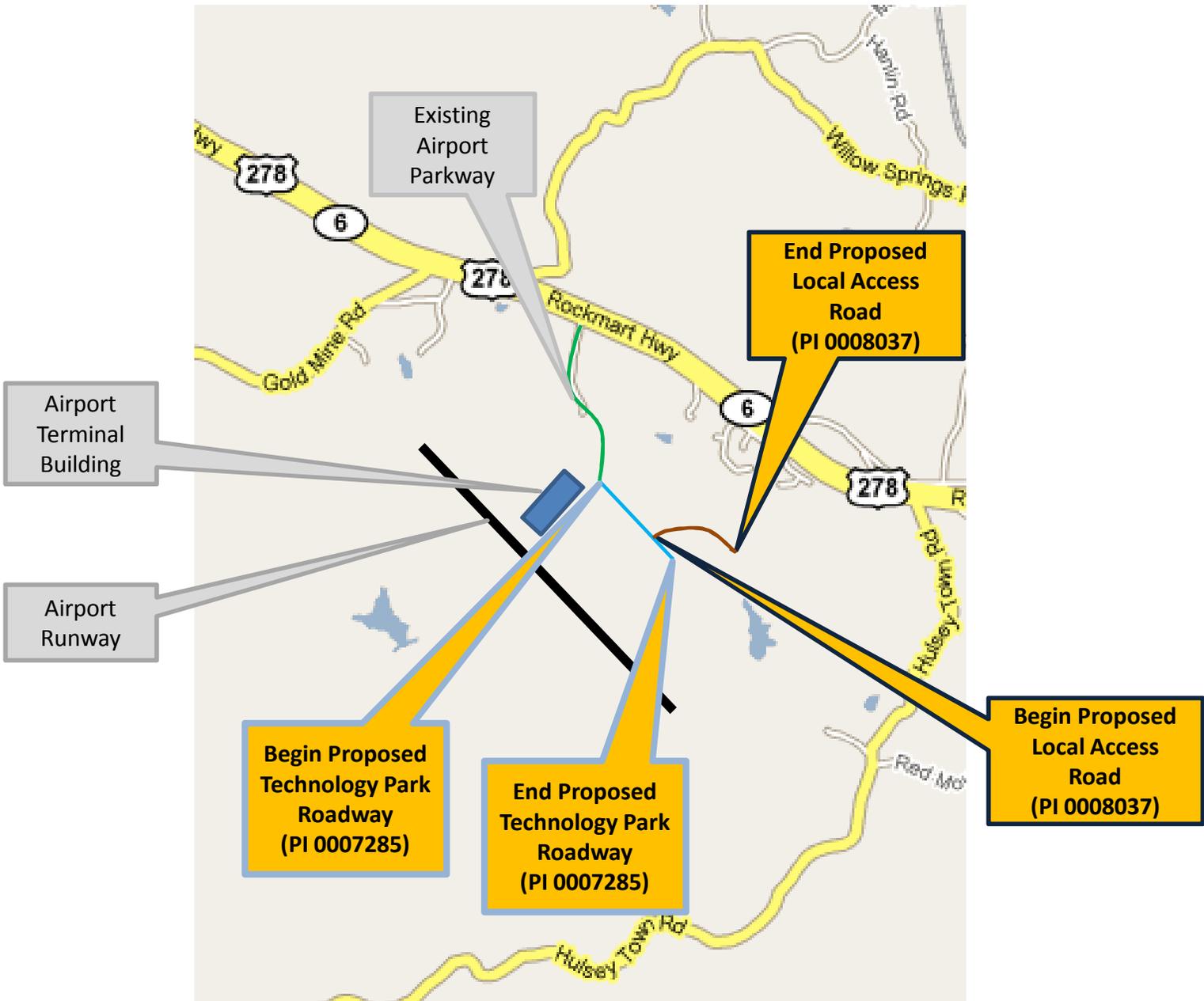
NEED AND PURPOSE

PAULDING BUSINESS AND TECHNOLOGY PARK ROADWAY IMPROVEMENTS & PAULDING COUNTY TECHNOLOGY PARK LOCAL ACCESS ROAD AT PAULDING NORTHWEST ATLANTA AIRPORT

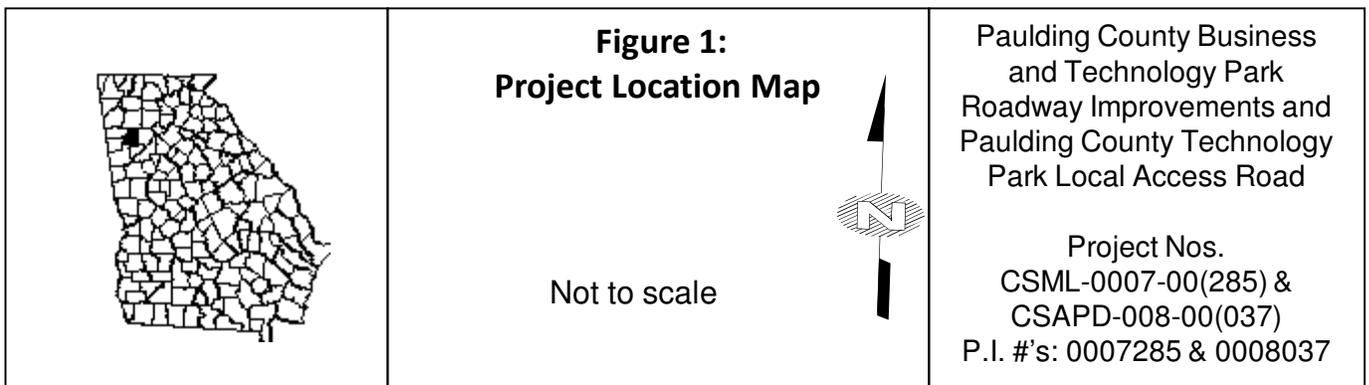
**CSMSL-0007-00(285) & CSAPD-0008-00(037), P.I. Nos. 0007285 & 0008037,
PAULDING COUNTY**

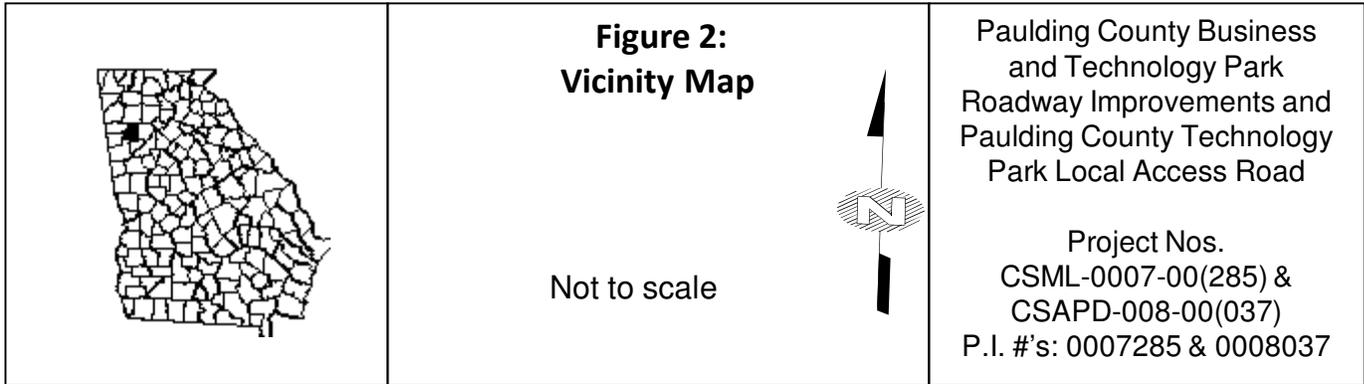
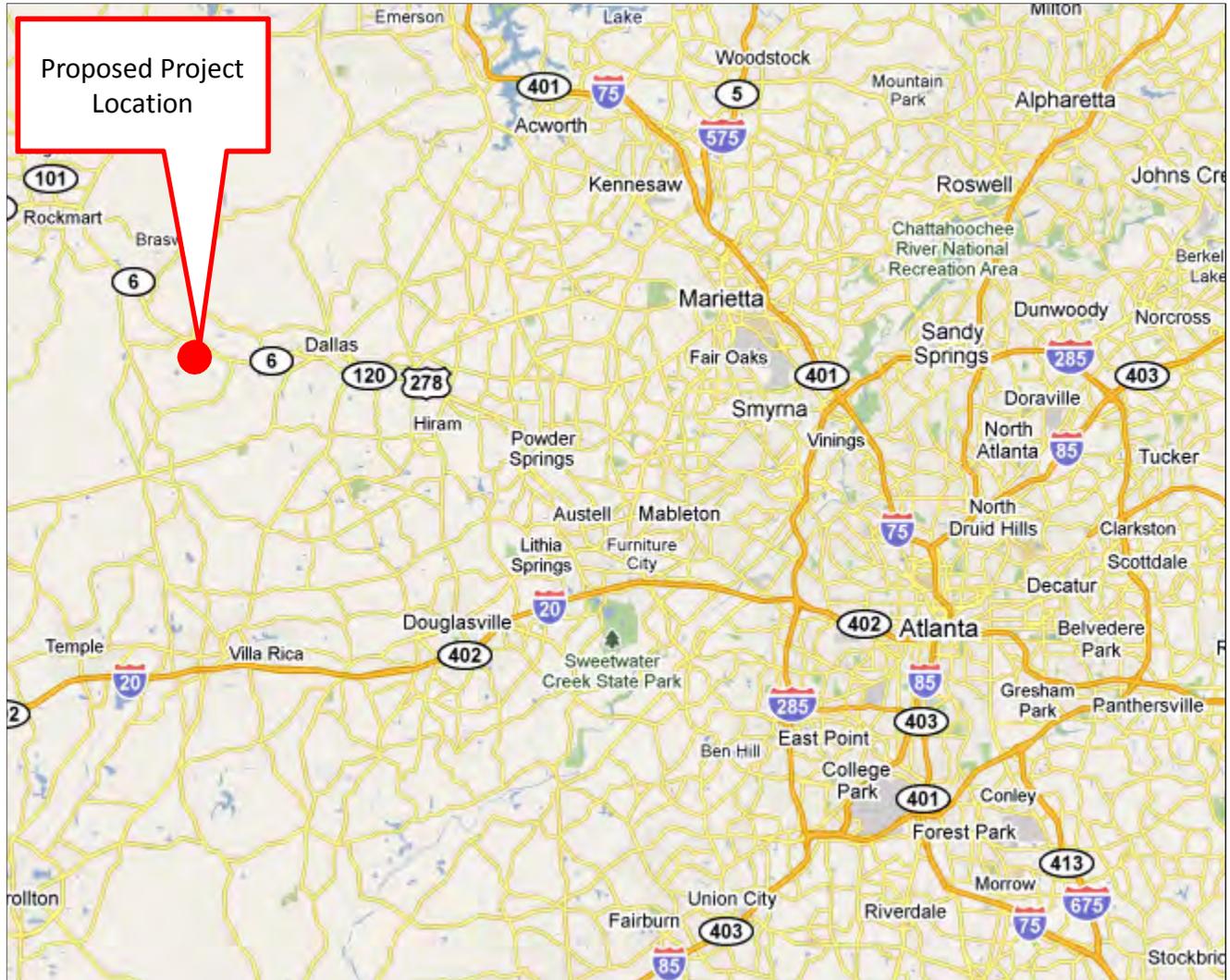
Project Description

There is a need to improve the road infrastructure at the recently open Paulding Northwest Atlanta Airport and proposed Technology Park located approximately six miles west of Dallas, Georgia for the purpose of encouraging local economic development (Figure 1, Project Location Map and Figure 2, Vicinity Map). Currently, the Airport Parkway extends approximately 0.52 mile from US 278/SR 6/Rockmart Highway and dead ends at the Paulding Northwest Atlanta Airport entrance. Specifically, the proposed project would consist of construction of Technology Park Roadway for a distance of approximately 0.69 mile, and constructing a local access road for a distance of approximately 0.42 mile. Each of these roadways would be on new location for a total project length of 1.11 miles, and would provide infrastructure and access for a proposed Paulding County Business and Technology Park to be developed as a separate project adjacent to the Paulding Northwest Atlanta Airport. The future Paulding Business and Technology Park would encourage economic development and job opportunities within Paulding County. This project is included in the Atlanta Regional Commission (ARC) Transportation Improvement Program (TIP) (Fiscal Year 2008-2013) with PI 0008037 identified as Project PA-063 and PI 0007285 identified as Project PA-062. Both PIs are exempt from the region's air quality analysis (40 CFR 93) according to the TIP.



Source: Google Maps





Crash Data

There is no crash data for the proposed project as the project would provide new location roadways and is not on an existing roadway network. A three-year history of crashes along US 278/SR 6/Rockmart Highway, which is immediately adjacent to the proposed project corridor, is provided in Table 1, Crash History with Statewide Rates for US 278/SR 6/Rockmart Highway between Wayside Lane/Clear Creek Drive and Goldmine Road (MP 3.99-2.44), Paulding County. Crash types are also shown in Table 2, Crash Types for US 278/SR 6/Rockmart Highway between Wayside Lane/Clear Creek Drive and Goldmine Road (MP 3.99-2.44), Paulding County. The proposed project would not alter the US 278/SR 6/Rockmart Highway, and these crash data are only provided as a point of reference for the adjacent corridor. This table provides the number of crashes and crash rates; the number of injuries and injury rates; and the number of fatalities and fatality rates per corridor per year for the years 2007 – 2009. For comparison, the statewide crash and injury rates for rural principal arterial for the years 2007 – 2009 are also provided. All crash, injury, and fatality rates are per 100 million vehicle miles. The proposed project, located outside the area of these crashes, is not anticipated to affect crashes along US 278/SR 6/Rockmart Highway.

Table 1, Crash History with Statewide Rates for US 278/SR 6/Rockmart Highway between Wayside Lane/Clear Creek Drive and Goldmine Road (MP 3.99-2.44), Paulding County (Rural Principal Arterial)			
Year	Total Crashes/Crash Rate*	Total Injuries/Injury Rate*	Total Fatalities/Fatality Rate*
	Statewide Crash Rate	Statewide Injury Rate	Statewide Fatality Rate
2007	10/126	4/50	1/12.55**
	145	79	2.21
2008	6/75	3/38	1/12.55**
	146	80	1.71
2009	4/5	1/4	0/0
	141	77	1.66

* All crash, injury, and fatality rates are per 100 million vehicle miles.

** Exceeds statewide average for that year.

**Table 2, Crash Types for US 278/SR 6/Rockmart Highway
between Wayside Lane/Clear Creek Drive and Goldmine Road (MP 3.99-2.44),
Paulding County
(Rural Principal Arterial)**

Year	Angle	Head On	Rear End	Not a Collision with Motor Vehicle
2007	1	0	4	5
2008	1	1	4	0
2009	1	0	1	2

Traffic Data, Capacity, and Level of Service

The intersecting roadways nearest to the proposed project are US 278/SR 6/Rockmart Highway and Airport Parkway. Airport Parkway will provide direct access to the planned project. US 278/SR 6/Rockmart Highway is currently a 4-lane divided highway with a full median access at its intersection with Airport Parkway. The Airport Parkway intersection is located approximately half-way between Stations 103 and 105 along US 278/SR 6/Rockmart Highway. Airport Parkway is the direct access to the proposed project as well as the existing Paulding Northwest Atlanta Airport general aviation airport. The existing airport is primarily designed for small private and corporate aircraft with a short runway and minimal terminal facilities. Intersection and segment levels of service (LOS) and traffic volumes in vehicles per day (VPD) along US 278/SR 6/Rockmart Highway and Airport Parkway are provided in Tables 2 thru 4.

**Table 2: Traffic Volumes and Segment Level of Service along
US 278/SR 6/Rockmart Highway between
Station 103 (approximately 1 mile west of the Airport Parkway intersection) and
Station 105 (approximately 0.75 mile east of the Airport Parkway intersection)**

	Existing (2010)	Build Year (2015)	Design Year (2035)
		No Build	No Build
Vehicles per Day (vpd)	12,179-14,423	13,446-15,924	19,981-23,662
% Trucks	8%	8%	8%
Trucks (vpd)	974-1,154	1,075-1,274	1,598-1,893
LOS	B	B	C

Table 3: Traffic Volumes and Segment Level of Service along Airport Parkway

	Existing (2010)	Build Year (2015)	Design Year (2035)
		No Build	No Build
Vehicles per Day (vpd)	1	40	140
% Trucks	8%	8%	8%
Trucks (vpd)	1	3	11
LOS	A	A	A

Table 4: Intersection Level of Service Data (LOS) at US 278/SR 6/Rockmart Highway and Airport Parkway

	Existing (2010)	Build Year (2015)	Design Year (2035)
		No Build	No Build
US 278/Airport Parkway Intersection LOS	A	A	A

Route Characteristics

The existing Airport Parkway extends from US 278/SR 6/Rockmart Highway for a distance of 0.52 mile, where it currently dead ends at the Paulding Northwest Atlanta Airport entrance. The existing typical section consists of a divided two lane section with two, 12-foot travel lanes, 2-foot paved shoulder and 6-foot unpaved outside shoulder, and a 20-foot raised median. The functional classification is rural local road. There is no existing right-of-way owned by the Georgia Department of Transportation. The remainder of the proposed project corridor is currently undeveloped.

The two new location components to the proposed project include the Technology Park Roadway (P.I. 0007285) and Local Access Road (P.I. 0008037) for a total project length of 1.11 miles (see Figure 1, Project Location Map). The proposed right-of-way is 100 feet.

1) *Paulding County Business and Technology Park and Roadway Improvements (Technology Park Roadway) – P.I. No. 0007285*

The Technology Park Roadway project would extend the existing Airport Parkway from its current end approximately 0.52 mile from US 278/SR 6/Rockmart Highway and head in a southeasterly direction and terminate in a cul-de-sac for a distance of 0.69 mile (see Figure 1, Project Location Map). The functional classification would be rural local road. The Technology Park Roadway would also provide access to the hangars and airport terminal

2) *Technology Park Local Access Road (Local Access Road)– P.I. No. 0008037*

The Local Access Road would begin approximately 1.05 miles south of US 278/SR 6/Rockmart Highway or approximately 0.53 mile south of the beginning of the proposed Technology Park Roadway, extend in a northeasterly direction for a distance of approximately 0.42 mile, and terminate in a cul-de-sac (see Figure 1, Project Location Map). The functional classification of the road would be rural local road. The Local Access Road would match the requirements of the Appalachian Regional Commission Local Access Road Project guidelines.

The details of the three elements of the proposed project are outlined in Table 5, Overview of Proposed Project.

Table 5: Overview of Proposed Project

Description	Technology Park Roadway	Local Access Road
PI/Project Number	0007285/ CSMSL-0007-00(285)	0008037/ CSAPD-0008-00(037)
Total Project Length of 1.11 miles consists of...	0.69 mile	0.42 mile
Atlanta Regional Commission (ARC) TIP	PA-062	PA-063
Schedule	PE 2006 ROW 2012 CST 2013	PE 2009 ROW 2012 CST 2013
Funding Source	TCSP * (Project Number 05GA001)	Appalachian Regional Commission

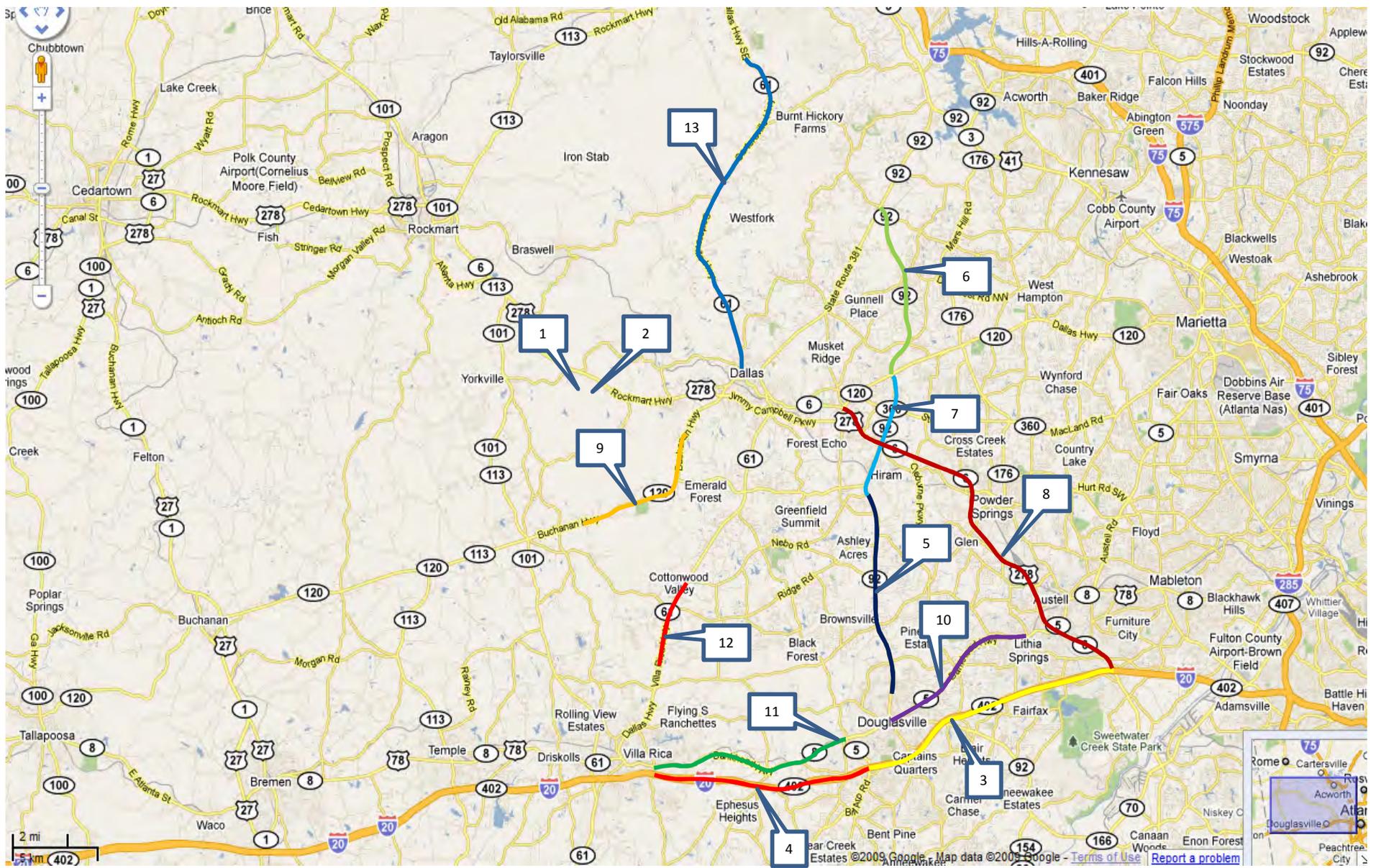
* TCSP- FHWA Transportation Community and System Preservation Program

No school bus routes are located along the Airport Parkway; however, Paulding County Schools have several bus routes along US 278/SR 6/Rockmart Highway with approximately 50 students living within a 0.5 mile of the airport. The proposed project is not located along a Statewide Bicycle Route. Paulding County is developing a Countywide Trails and Greenways Master Plan which has no routes in the vicinity of the proposed project corridor.

Although there are no adjoining transportation projects, a variety of projects are proposed in the vicinity of the project area. The Northwest Paulding Atlanta Airport expansion is currently underway for the Airport Terminal and the Terminal Area Expansion is scheduled to being at a later date. The scope of the projects in the vicinity of the proposed project encompasses an area sufficient enough to depict the proposed projects that may benefit from access to the Northwest Paulding Atlanta Airport, especially via the main I-20 artery which extends across Georgia from Alabama to South Carolina and passing through Metro Atlanta. Figure 3, Adjoining Project Map, identifies the location of these nearby regional projects and are also outlined in Table 6, Adjoining Projects.

Table 6: Adjoining Projects

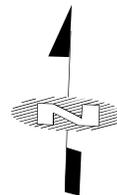
Project No.	Facility	Limits	Description	Schedule	Number shown on Figure 3
No PI	Paulding County Airport	Paulding Northwest Terminal Area Expansion	New construction	PE 2010 ROW None CST TBD (2011)	1
No PI	Paulding County Airport	Paulding Northwest Atlanta Airport Terminal construction	New construction	PE 2009 ROW None CST 2009	2
MSL00-0003-00(165), P.I. 0003165	I-20 Westside	From: SR 5/Bill Arp To: SR 6; 9.97 miles	HOV Lanes	PE: 2003 RW: 2014 & LR Construction: LR	3
MLS00-0003-00(435), P.I. 0003435	I-20 Westside	From: Liberty Road To: SR 5/Bill Arp; 8.22 miles	HOV Lanes	PE: 2015 RW: LR Construction: LR	4
CSSTP-0007-00(691), P.I. 0007691	SR 92	From: CS 502/Brown Street To: CS 519/Nebo Road; 7.14 miles	Widening	PE: 2007 RW: 2013 Construction: 2016	5
CSSTP-0007-00(692), P.I. 0007692	SR 92	From: SR 120 To: CR 473/Cedarcrest Road; 8.44 miles	Widening	PE: 2007 RW: 2014 Construction: 2015	6
STP00-0186-01(025), P.I. 621720	SR 92	From: Nebo Road South/Hiram To: SR 120; 4.45 miles	Widening	PE: 2002 RW: 2005, 2006, 2015 Construction: 2017	7
CSSTP-0007-00(826), P.I. 0007826	SR 6/ Thornton Road	From: SR 120/Paulding County To: I-20/Douglas County; 14.33 miles	Widening	PE: 2016 RW: LR Construction: LR	8
STP00-0114-01(103), P.I. 621585	SR 120	From: Billy Bullock Road To: Scoggins Creek; 5.35 miles	Passing Lanes	RW: LR Construction: LR	9
STP00-0003-01(038), P.I. 721590	SR 5 & SR8/US 78/ Bankhead Highway	From: SR 92 East To: CR 15/Sweetwater Road; 5.78 miles	Widening	PE: 1992 RW: 2007 & 2015 Construction: 2020	10
CSSTP-M004-00048, P.I. M004048	SR 8/US 78/ Bankhead Highway	From: Carroll County To: SR 5; 8.36 miles	Resurfacing	Construction: Lump	11
CSSTP-0007-00(864), P.I. 0007864	SR 61/Villa Rica Highway	From: Douglas County To: CR 277/Nebo Road; 3.19 miles	Widening	PE: LR RW: LR Construction: LR	12
CSSTP-0007-00(866), P.I. 0007866	SR 61	From: SR 6/Memorial Drive To: Bartow County; 24.3 miles	Widening	PE: Local RW: Local Construction: LR	13



**Figure 3:
Adjoining Projects Map**

Project Numbers Reference
Adjoining Projects Table
In Need and Purpose

0 2 miles 4 miles



Paulding Business Technology Park and
Roadway Improvements & Paulding County
Technology Park Local Access Road
Paulding County
Project Numbers: CSMSL-0007-00(285) &
CSAPD-0008-00(037)
Paulding County
P. I. Nos. 0007285 & 0008037



Social/Economic Characteristics

The United States Environmental Protection Agency's (US EPA) Environmental Justice Geographic Assessment Tool (<http://www.epa.gov/enviro/ej/>) was used to perform a preliminary environmental justice (EJ) analysis for the proposed project. Using this tool, the area of the proposed study area was digitized on a map and compared to county and state data. In accordance with Executive Order 12898, the proposed project has been analyzed to avoid disproportional high and adverse effects to minority and low income populations and communities. The project is split onto two properties, Paulding County Airport Authority and Warren McClendon Jr. parcels, which do not contain any residences or businesses; therefore, the Study Area for assessing EJ was expanded to include the area immediately adjacent to the proposed project. For purposes of the EJ analysis, the Study Area consists of a 0.5-mile buffer along a 1-mile corridor of US 278/Rockmart Highway with the Airport Parkway as the mid-point. For this project, disproportionate adverse impacts to low-income or minority communities are not anticipated. A detailed analysis will be provided in the Community Impacts/Environmental Justice section of the environmental document.

A summary of the Poverty and Racial Composition in the project area is provided in Table 7, Poverty/Racial Composition in Study Area. Of the 116 residents within a 0.5 mile buffer along the existing US 278/SR 6/Rockmart Highway corridor adjacent to the proposed project area, the ethnic groups consist of 95.9% White, 2.4% African-American, 0.0% Asian/Pacific Islander, 0.0% American Indian, 1.7% Other Race, and 0.0% Multiracial. The population consists of 1.6% Hispanic persons, which is calculated regardless of race, and so may include someone who identifies themselves as white Hispanic. The percentage of the Hispanic population in the Study Area is approximately the same as Paulding County, but less than the State of Georgia. The minority population along the proposed project corridor is less than that of Paulding County and the State of Georgia. Approximately 9% of the population along the proposed project corridor is below the poverty level, which is greater than Paulding County, but

less than the State of Georgia. There is one out of 44 households on public assistance in the Study Area. Although there is a greater percentage of people living below the poverty level in the Study Area as compared to the county, there are no anticipated displacements or change in access to any residents regardless of race or income level. As such, there are no anticipated disproportionate adverse impacts to low income or minority communities. The proposed project is located in a site development for the airport. Any temporary inconveniences such as additional truck traffic in and out of the project area as a result of the construction of the proposed project would not be new to residents of the area, and would be for a short duration. The ultimate benefit for the minority and low income residents in the Study Area would be the potential for employment as the airport as a county economic engine gains momentum.

Table 7: Poverty/Racial Composition in Study Area

	Study Area	Paulding County	State of Georgia
Total Persons:	121	81,662	8,186,453
Poverty			
Persons Below Poverty Level:	11 (9%)	4454 (5.4%)	1,033,793 (12.6%)
Race Breakdown			
African-American:	3 (2.4%)	5906 (7.2%)	2,342,110 (28.6%)
American Indian:	0 (0.0%)	224 (0.3%)	23,688 (0.3%)
Asian/Pacific Islander:	0 (0.0%)	403 (0.4%)	171,463 (2.1%)
Other Race:	2 (1.7%)	514 (0.6%)	193,934 (2.4%)
Multiracial:	0 (0.0%)	969 (1.1%)	124,217 (1.5%)
White:	116 (95.9%)	73,646 (90.1%)	5,327,175 (65.1%)
Hispanic Population			
Hispanic-Origin:*	2 (1.6%)	1,207 (1.5%)	429,976 (5.3%)

*Hispanic-Origin numbers do not contribute to the Race breakdown and have been determined regardless of race.

Land Use

The proposed project corridor primarily consists of undeveloped lands on the Paulding Northwest Atlanta Airport parcel located in a rural area of Paulding County just west of Dallas, Georgia. The land use of the proposed project corridor is designated as residential and undeveloped/unused according to the Paulding County Existing Land Use Map from the Paulding County Comprehensive Plan (2007-2027). According to the Comprehensive Plan, in the

immediate vicinity of the Paulding Northwest Atlanta Airport along US 278/SR 6/Rockmart Highway, existing land use is designated as Scenic Corridor. The US 278/SR 6/Rockmart Highway Scenic Corridor-designated lands are predominantly rural and undeveloped with few driveways. The existing lands within the proposed project corridor would change from undeveloped to paved to accommodate the proposed typical section for industrial purposes associated with the airport and the business and technology park.

In 2007, Paulding County purchased 162 acres of the City of Atlanta's Paulding Forest tract to aid in the development of its new regional general aviation airport, now known as the Paulding Northwest Atlanta Airport. Immediately adjacent to the Paulding Northwest Atlanta Airport parcel is the remainder of Paulding Forest.

The proposed project is consistent with the future land use plans, where the Paulding Northwest Atlanta Airport Business and Technology Park proposed project site is designated as Industrial land use and adjacent areas are designated as green space and rural residential land uses. The county expects industrial and technology park development at the airport to continue over the next 20 years as discussed in the Paulding County Comprehensive Plan (2007-2027). The proposed project would support the county's anticipated land use change by constructing an access road extension and two local access roads that would provide access between US 278/SR 6/Rockmart Highway and proposed future site developments at the Paulding Northwest Atlanta Airport Business and Technology Park. The Business and Technology Park is anticipated to be completed through the Paulding County Industrial Building Authority.

Logical Termini

The Federal Highway Administration (FHWA) regulations outline three general principles at 23 CRF 771.111(f) to be used to frame the project's logical termini discussion; including data to support the project's need and purpose to connect logical termini and be of sufficient length to address environmental matters on a broad scope; independent utility; and not restrict consideration of alternatives for other reasonably foreseeable transportation

improvements. As stated above, the need is to provide a Technology Park Roadway and local access road in order to meet the purpose of developing the proposed Business and Technology Park road network for future site development.

The proposed project is of sufficient length to bring vehicles from the existing Airport Parkway to access parcels within the proposed site development. These rational end points include beginning the project where the existing Airport Parkway currently dead ends and terminating the project in two cul de sacs to best maximize space and utility of any proposed future development. The proposed project does have independent utility in that it would be completely usable even if no additional transportation improvements were made. The proposed alignment meets the proposed site development plan and would provide the complete transportation infrastructure for the future development of the parcel.

The proposed project would not restrict the consideration of reasonably foreseeable transportation improvements. One potential reasonably foreseeable improvement would be the signalization of the intersection between Airport Parkway and US 278/SR 6/Rockmart Highway. This traffic signal may possibly be required based on traffic projects which show that in 2015 under the No Build condition LOS A and under the Build condition there is LOS A; whereas in 2035 under the No Build condition there is LOS B and under the Build condition there is LOS F. This intersection LOS F is based on a side street stop control condition and not a signalized intersection. The LOS F is caused by the northbound Airport Parkway left turn onto westbound US 278/SR 6/Rockmart Highway. An intersection analysis for the un-signalized intersection at US 278/SR 6/Rockmart Highway and Airport Parkway was completed for the full build-out of the project in year 2035. This analysis shows that the intersection fails due to extensive queuing and unacceptable delays for vehicles traveling from Airport Parkway left onto westbound/northbound US 278/SR 6/Rockmart Highway. Improvements to this intersection should be based on pace at which this project is developed in the future and the project would not preclude this from

occurring. In conclusion, the proposed project has logical termini in extending from the end of the existing Airport Parkway and terminating in two cul de sacs within the parcel.

Need & Purpose

The proposed project would meet the need of providing a Technology Park Roadway and local access road to develop the Business and Technology Park road network and provide the transportation infrastructure for anticipated future economic development as planned by Paulding County.

Attachment 2: Cost Estimate

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**
 DATE

P.I. No.

FROM

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER

MNGT LET DATE

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

LAST ESTIMATE UPDATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 1,619,183	(Base Estimate)
Engineering and Inspection:	\$ 80,959	(Base Estimate x 5 %)
Total Liquid AC Adjustment	\$ 84,871	(From attached worksheet)
Construction Total:	\$ 1,785,013	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00

Attachments

JOB DETAIL ESTIMATE

JOB NUMBER : 0007285 SPEC YEAR: 01
 DESCRIPTION: PAULDING COUNTY BUSINESS AND TECHNOLOGY PARK

ITEMS FOR JOB 0007285

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	310-5080		SY	GR AGGR BS CRS 8IN INCL MATL	11762.000	11.33	133312.86
0010	402-3100		TN	REC AC 9.5 MM SP,TPI,GP1ORBL1,INCL BM&HL	794.000	66.06	52451.64
0015	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	2588.000	65.46	169432.92
0020	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	1294.000	70.03	90621.98
0025	413-1000		GL	BITUM TACK COAT	823.000	2.94	2425.35
0030	441-6740		LF	CONC CURB & GUTTER/ 8"X30" TP7	1430.000	16.14	23092.33
0035	500-3200		CY	CL B CONC	102.000	161.20	16443.14
0040	634-1200		EA	RIGHT OF WAY MARKERS	3.000	99.52	298.56
0045	636-1020		SF	HWY SGN,TP1MAT,REFL SH TP3	15.000	15.29	229.46
0046	653-6006		SY	THERM TRAF STRIPING, YELLOW	430.000	3.17	1365.07
0050	636-2070		LF	GALV STEEL POSTS, TP 7	30.000	9.44	283.34
0055	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	6.000	72.41	434.48
0060	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	7800.000	0.46	3657.11
0065	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	5700.000	0.45	2567.91
0070	653-1704		LF	THERM SOLID TRAF STRIPE,24",WH	11.000	4.57	50.34
0075	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	100.000	0.51	51.07
0080	654-1001		EA	RAISED PVMT MARKERS TP 1	60.000	4.28	256.88
0085	654-1003		EA	RAISED PVMT MARKERS TP 3	15.000	4.27	64.14
0090	150-1000		LS	TRAFFIC CONTROL - MAINTENANCE OF TRAFFIC	1.000	19000.00	19000.00
0100	153-1300		EA	FIELD ENGINEERS OFFICE TP 3	1.000	67008.48	67008.48
0105	550-1180		LF	STM DR PIPE 18",H 1-10	80.000	39.74	3179.28
0110	550-1240		LF	STM DR PIPE 24",H 1-10	60.000	40.51	2430.67
0115	550-1241		LF	STM DR PIPE 24",H 10-15	12.000	42.65	511.84
0120	550-1360		LF	STM DR PIPE 36",H 1-10	30.000	63.41	1902.54
0125	550-3518		EA	SAFETY END SECTION 18",STD,6:1	2.000	590.14	1180.28
0130	550-3524		EA	SAFETY END SECTION 24",STD,6:1	2.000	846.68	1693.37
0135	550-3536		EA	SAFETY END SECTION 36",STD,6:1	2.000	1575.62	3151.25
0140	210-0100		LS	GRADING COMPLETE - INCL C&G, UNCLASS & BORROW EXCAVA	1.000	679965.00	679965.00
0155	163-0232		AC	TEMPORARY GRASSING	17.000	438.33	7451.66
0160	163-0240		TN	MULCH	80.000	195.88	15670.44
0165	163-0300		EA	CONSTRUCTION EXIT	1.000	1052.83	1052.83
0170	163-0501		EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 1	3.000	524.60	1573.81
0175	163-0520		LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	4000.000	12.74	50970.44
0180	163-0525		EA	CONSTR AND REMOVE TEMP EROSION CTRL STR	1.000	2040.66	2040.66
0185	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	850.000	230.54	195959.00

JOB DETAIL ESTIMATE

Item No	Code	Category	Description	Quantity	Unit Price	Total Price
0190	163-0531	EA	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- EROSION CONTROL MEASURES	3.000	7326.54	21979.65
0195	165-0010	LF	MAINT OF TEMP SILT FENCE, TP A	1000.000	0.91	918.09
0200	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	1800.000	0.86	1564.61
0205	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	425.000	3.08	1309.00
0210	165-0060	EA	MAINT OF TEMP SEDIMENT BASIN,STA NO -	3.000	1082.35	3247.06
0215	165-0085	EA	MAINT OF SILT CONTROL GATE, TP 1	3.000	119.25	357.75
0220	165-0101	EA	MAINT OF CONST EXIT	1.000	478.22	478.22
0225	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	6.000	72.11	432.68
0230	167-1500	MO	WATER QUALITY INSPECTIONS	12.000	384.05	4608.64
0235	171-0010	LF	TEMPORARY SILT FENCE, TYPE A	2000.000	1.58	3173.46
0240	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	3570.000	2.69	9622.08
0245	700-6910	AC	PERMANENT GRASSING	17.000	755.05	12836.00
0250	700-7000	TN	AGRICULTURAL LIME	77.000	58.55	4508.94
0260	700-8000	TN	FERTILIZER MIXED GRADE	2.000	414.77	829.55
0265	700-8100	LB	FERTILIZER NITROGEN CONTENT	850.000	1.80	1537.22

ITEM TOTAL 1619183.05
 INFLATED ITEM TOTAL 1619183.05

TOTALS FOR JOB 0007285

ESTIMATED COST: 1619183.08
 CONTINGENCY PERCENT (0.0): 0.00
 ESTIMATED TOTAL: 1619183.08

Department of Transportation State of Georgia

Interdepartmental Correspondence

FILE R/W Cost Estimate **OFFICE** Atlanta
DATE August 13, 2012
FROM Phil Copeland, Right of Way Administrator
LaShone Alexander, Right of Way Cost Estimator
TO Tommy Terrell
SUBJECT **Preliminary Right of Way Cost Estimate**
Project: CSML-0007-00(285); CSAPD-0008-00(037) Paulding County
P.I. No.: 0007285; 0008037
Description: Divided Roadway W/Median and 8' Shoulders

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308, Right of Way Office at (478) 553-1569 or (478) 232-4045.

,
PC:LA
Attachments
c: File

**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 7/19/2012 Project: CSML-0007-00(285)
 Revised: County: Paulding
 PI: 7285

Description: Paulding County Business and Technology Roadway
 Project Termini: Airport Parkway/New Location

Existing ROW: None
 Required ROW: 100'
 Parcels: 2

Land and Improvements \$1,347,468.75

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$0.00

Valuation Services \$8,000.00

Legal Services \$38,850.00

Relocation \$4,000.00

Demolition \$0.00

Administrative \$21,500.00

TOTAL ESTIMATED COSTS \$1,419,818.75

TOTAL ESTIMATED COSTS (ROUNDED) \$1,420,000.00

Preparation Credits	Hours	Signature

Prepared By: Charles A. DeLuca CG#: _____ (DATE) 7/20/12
 Approved By: Salma Alexander CG#: 2886999 (DATE) 8/13/12

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate



Scott K. Greene, P.E.
Director

Paulding County Board of Commissioners

Department of Transportation
Watson Government Complex
240 Constitution Boulevard, Dallas, Georgia 30132
770-445-4759 • www.paulding.gov

TO Kerry Bonner, District 6 Utilities

FROM Erica Parish, Paulding County DOT

FILE Paulding County Business and Technology Park Roadway
CSMSL-0007-00(285); P. I. No. 0007285

DATE August 3, 2012

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimates for utilities that are located around the surrounding area of our new location cul-de-sac for the Paulding County Business and Technology Park.

FACILITY OWNER

REIMBURSABLE

Atlanta Gas Light Co.	\$0.00
Greystone Power Corp	\$0.00
ATT	\$0.00
Paulding Water	\$0.00
Comcast	\$0.00
Totals	\$0.00

The total preliminary utility cost reimbursable for the above project is \$0.00

Please contact me at 770-445-4759 if you have any questions regarding this estimate.

Sincerely,

Erica Parish
Preconstruction Manager
Paulding County DOT

PROJ. NO.: CSMSL-0007-00(285)

P.I. NO. 0007285

DATE: 8/15/2012

Base Construction Cost		\$	1,619,183.00
E & I	5%	\$	80,959.15
Construction Contingency	0	\$	-
Subtotal Construction Cost		\$	1,700,142.15
Liquid AC Adjustment (50 % cap)		\$	84,870.95
Total Construction Cost		\$	1,785,013.10

PROJ. NO.	CSMSL-0007-00(285)
P.I. NO.	0007285
DATE	8/15/2012

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Aug-12	\$ 3.431
DIESEL		\$ 3.786
LIQUID AC		\$ 596.00

22297429 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)				83606.88	\$	83,606.88
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60		
Monthly Asphalt Cement Price month project let (APL)			\$	596.00		
Total Monthly Tonnage of asphalt cement (TMT)				233.8		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	794	5.0%	39.7
25 mm SP	2588	5.0%	129.4
19 mm SP	1294	5.0%	64.7
	4676		233.8

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$	1,264.07	\$	1,264.07
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60			
Monthly Asphalt Cement Price month project let (APL)			\$	596.00			
Total Monthly Tonnage of asphalt cement (TMT)				3.534868059			

Bitum Tack

Gals	gals/ton	tons
823	232.8234	3.53486806

BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60		
Monthly Asphalt Cement Price month project let (APL)			\$	596.00		
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

TOTAL LIQUID AC ADJUSTMENT \$ **84,870.95**

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. , **OFFICE**
 DATE

P.I. No.

FROM

TO Lisa L. Myers, Project Review Engineer

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER

MNGT LET DATE

MNGT R/W DATE

PROGRAMMED COST (TPro W/OUT INFLATION)

LAST ESTIMATE UPDATE

CONSTRUCTION \$

DATE

RIGHT OF WAY \$

DATE

UTILITIES \$

DATE

REVISED COST ESTIMATES

CONSTRUCTION* \$

RIGHT OF WAY \$

UTILITIES \$

* Costs contain % Engineering and Inspection

REASON FOR COST INCREASE

CONTINGENCY SUMMARY

Construction Cost Estimate:	\$ 2,297,429	(Base Estimate)
Engineering and Inspection:	\$ 114,872	(Base Estimate x 5 %)
Total Liquid AC Adjustment	\$ 44,661	(From attached worksheet)
Construction Total:	\$ 2,456,962	

REIMBURSABLE UTILITY COST

Utility Owner

Reimbursable Cost

	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00
	\$0.00

Attachments

JOB DETAIL ESTIMATE

JOB NUMBER : 0008037 SPEC YEAR: 01
 DESCRIPTION: PAULDING COUNTY LOCAL ACCESS ROAD

ITEMS FOR JOB 0008037

LINE	ITEM	ALT	UNITS	DESCRIPTION	QUANTITY	PRICE	AMOUNT
0005	310-5080		SY	GR AGGR BS CRS 8IN INCL MATL	6175.000	12.24	75583.36
0010	402-3100		TN	REC AC 9.5 MM SP,TPI,GP1ORBL1,INCL BM&HL	420.000	66.06	27745.20
0015	402-3121		TN	RECYL AC 25MM SP,GP1/2,BM&HL	1360.000	68.02	92515.17
0020	402-3190		TN	RECYL AC 19 MM SP,GP 1 OR 2 ,INC BM&HL	680.000	73.33	49868.34
0025	413-1000		GL	BITUM TACK COAT	440.000	3.09	1361.22
0030	441-6740		LF	CONC CURB & GUTTER/ 8"X30" TP7	0.000		
0035	500-3200		CY	CL B CONC	0.000		
0040	634-1200		EA	RIGHT OF WAY MARKERS	3.000	99.52	298.56
0045	636-1020		SF	HWY SGN,TP1MAT,REFL SH TP3	15.000	15.29	229.46
0050	636-2070		LF	GALV STEEL POSTS, TP 7	30.000	9.44	283.34
0055	653-0120		EA	THERM PVMT MARK, ARROW, TP 2	0.000		
0060	653-1501		LF	THERMO SOLID TRAF ST 5 IN, WHI	4500.000	0.50	2289.24
0065	653-1502		LF	THERMO SOLID TRAF ST, 5 IN YEL	4500.000	0.46	2089.35
0070	653-1704		LF	THERM SOLID TRAF STRIPE,24",WH	11.000	4.57	50.34
0075	653-3501		GLF	THERMO SKIP TRAF ST, 5 IN, WHI	0.000		
0080	654-1001		EA	RAISED PVMT MARKERS TP 1	60.000	4.28	256.88
0085	654-1003		EA	RAISED PVMT MARKERS TP 3	0.000		
0090	150-1000		LS	TRAFFIC CONTROL - MAINTENANCE OF TRAFFIC CONTROL	1.000	13500.00	13500.00
0105	550-1180		LF	STM DR PIPE 18",H 1-10	80.000	39.74	3179.28
0110	550-1240		LF	STM DR PIPE 24",H 1-10	60.000	40.51	2430.67
0115	550-1241		LF	STM DR PIPE 24",H 10-15	120.000	42.65	5118.37
0120	550-1360		LF	STM DR PIPE 36",H 1-10	30.000	63.41	1902.54
0125	550-3518		EA	SAFETY END SECTION 18",STD,6:1	0.000		
0130	550-3524		EA	SAFETY END SECTION 24",STD,6:1	2.000	846.68	1693.37
0135	550-3536		EA	SAFETY END SECTION 36",STD,6:1	0.000		
0140	210-0100		LS	GRADING COMPLETE - INCLUDES CLEAR&GRUBB, EMBANK, EXCAVA	1.000	1858964.00	1858964.00
0155	163-0232		AC	TEMPORARY GRASSING	4.000	516.71	2066.87
0160	163-0240		TN	MULCH	36.000	218.41	7862.98
0165	163-0300		EA	CONSTRUCTION EXIT	1.000	1052.83	1052.83
0170	163-0501		EA	CONSTR AND REMOVE SILT CONTROL GATE,TP 1	1.000	612.20	612.20
0175	163-0520		LF	CONSTR AND REMOVE TEMP PIPE SLOPE DRAIN	4000.000	12.74	50970.44
0180	163-0525		EA	CONSTR AND REMOVE TEMP EROSION CTRL STR	1.000	2040.66	2040.66
0185	163-0527		EA	CNST/REM RIP RAP CKDM,STN P RIPRAP/SN BG	160.000	230.54	36886.40
0190	163-0531		EA	CONSTR & REM SEDIMENT BASIN,TP 1,STA NO- EROSION CONTROL MEASURE	3.000	7326.54	21979.65

JOB DETAIL ESTIMATE

ITEM NO	PROJECT NO	TYPE	DESCRIPTION	EST. QUANTITY	UNIT PRICE	TOTAL
0195	165-0010	LF	MAINT OF TEMP SILT FENCE, TP A	1000.000	0.91	918.09
0200	165-0030	LF	MAINT OF TEMP SILT FENCE, TP C	1800.000	0.86	1564.61
0205	165-0041	LF	MAINT OF CHECK DAMS - ALL TYPES	160.000	3.08	492.80
0210	165-0060	EA	MAINT OF TEMP SEDIMENT BASIN,STA NO -	3.000	1082.35	3247.06
0215	165-0085	EA	MAINT OF SILT CONTROL GATE, TP 1	1.000	160.32	160.33
0220	165-0101	EA	MAINT OF CONST EXIT	1.000	478.22	478.22
0225	167-1000	EA	WATER QUALITY MONITORING AND SAMPLING	6.000	72.11	432.68
0230	167-1500	MO	WATER QUALITY INSPECTIONS	12.000	384.05	4608.64
0235	171-0010	LF	TEMPORARY SILT FENCE, TYPE A	2000.000	1.58	3173.46
0240	171-0030	LF	TEMPORARY SILT FENCE, TYPE C	3600.000	2.69	9700.67
0245	700-6910	AC	PERMANENT GRASSING	8.000	795.41	6363.33
0250	700-7000	TN	AGRICULTURAL LIME	36.000	62.64	2255.35
0260	700-8000	TN	FERTILIZER MIXED GRADE	1.000	425.77	425.77
0265	700-8100	LB	FERTILIZER NITROGEN CONTENT	400.000	1.94	776.51

 ITEM TOTAL 2297428.25
 INFLATED ITEM TOTAL 2297428.24

TOTALS FOR JOB 0008037

 ESTIMATED COST: 2297428.24
 CONTINGENCY PERCENT (0.0): 0.00
 ESTIMATED TOTAL: 2297428.24

Department of Transportation State of Georgia

Interdepartmental Correspondence

FILE R/W Cost Estimate **OFFICE** Atlanta
DATE August 13, 2012
FROM Phil Copeland, Right of Way Administrator
LaShone Alexander, Right of Way Cost Estimator
TO Tommy Terrell
SUBJECT **Preliminary Right of Way Cost Estimate**
Project: CSML-0007-00(285); CSAPD-0008-00(037) Paulding County
P.I. No.: 0007285; 0008037
Description: Divided Roadway W/Median and 8' Shoulders

As per your request, attached is a copy of the approved Preliminary Right of Way Cost Estimates on the above referenced projects.

If you have any questions, please contact LaShone Alexander at One Georgia Center 600 West Parkway Street, NW Atlanta, GA 30308, Right of Way Office at (478) 553-1569 or (478) 232-4045.

,
PC:LA
Attachments
c: File

**GEORGIA DEPARTMENT OF TRANSPORTATION
PRELIMINARY ROW COST ESTIMATE SUMMARY**

Date: 7/19/2012 Project: CSAPD-0008-00(037)
 Revised: County: Paulding
 PI: 8037

Description: Paulding County Local Access Road
 Project Termini: New Location/New Location

Existing ROW: None
 Required ROW: 100'
 Parcels: 1

Land and Improvements \$954,281.25

Proximity Damage	\$0.00
Consequential Damage	\$0.00
Cost to Cures	\$0.00
Trade Fixtures	\$0.00
Improvements	\$0.00

Valuation Services \$4,000.00

Legal Services \$38,175.00

Relocation \$2,000.00

Demolition \$0.00

Administrative \$14,500.00

TOTAL ESTIMATED COSTS \$1,012,956.25

TOTAL ESTIMATED COSTS (ROUNDED) \$1,013,000.00

Preparation Credits	Hours	Signature

Prepared By: Characo A. Daulton CG#: _____ (DATE) 7/20/12
 Approved By: Salvador Aleman CG#: 286999 (DATE) 8/13/12

NOTE: No Market Appreciation is included in this Preliminary Cost Estimate



Scott K. Greene, P.E.
Director

Paulding County Board of Commissioners

Department of Transportation
Watson Government Complex
240 Constitution Boulevard, Dallas, Georgia 30132
770-445-4759 • www.paulding.gov

TO Kerry Bonner, District Six Utilities

FROM Erica Parish, Paulding County DOT

FILE Paulding County Technology Park Local Access Road
CSAPD-0008-00(037); P. L. No. 0008037

DATE August 3, 2012

SUBJECT PRELIMINARY UTILITY COST ESTIMATE

As requested by your office, we are furnishing you with a Preliminary Utility Cost estimates for utilities that are located around the surrounding area of our new location cul-de-sac for the Paulding County Technology Park Local Access Road.

FACILITY OWNER

REIMBURSABLE

Atlanta Gas Light Co.	\$0.00
Greystone Power Corp	\$0.00
ATT	\$0.00
Paulding Water	\$0.00
Comcast	\$0.00
<hr/>	
Totals	\$0.00

The total preliminary utility cost reimbursable for the above project is \$0.00

Please contact me at 770-445-4759 if you have any questions regarding this estimate.

Sincerely,

Erica Parish
Preconstruction Manager
Paulding County DOT

PROJ. NO.: CSAPD-0008-00(037)
P.I. NO. 0008037
DATE: 8/15/2012

Base Construction Cost	\$	2,297,429.00
E & I	5% \$	114,871.45
Construction Contingency	0 \$	-
Subtotal Construction Cost	\$	<u>2,412,300.45</u>
Liquid AC Adjustment (50 % cap)	\$	<u>44,660.61</u>
Total Construction Cost	\$	<u>2,456,961.06</u>

PROJ. NO.	CSAPD-0008-00(037)
P.I. NO.	0008037
DATE	8/15/2012

CALL NO.

INDEX (TYPE)	DATE	INDEX
REG. UNLEADED	Aug-12	\$ 3.431
DIESEL		\$ 3.786
LIQUID AC		\$ 596.00

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)				43984.8	\$	43,984.80
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60		
Monthly Asphalt Cement Price month project let (APL)			\$	596.00		
Total Monthly Tonnage of asphalt cement (TMT)				123		

ASPHALT	Tons	%AC	AC ton
Leveling		5.0%	0
12.5 OGFC		5.0%	0
12.5 mm		5.0%	0
9.5 mm SP	420	5.0%	21
25 mm SP	1360	5.0%	68
19 mm SP	680	5.0%	34
	2460		123

BITUMINOUS TACK COAT

Price Adjustment (PA)				\$ 675.81	\$	675.81
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60		
Monthly Asphalt Cement Price month project let (APL)			\$	596.00		
Total Monthly Tonnage of asphalt cement (TMT)				1.889844406		

Bitum Tack

Gals	gals/ton	tons
440	232.8234	1.88984441

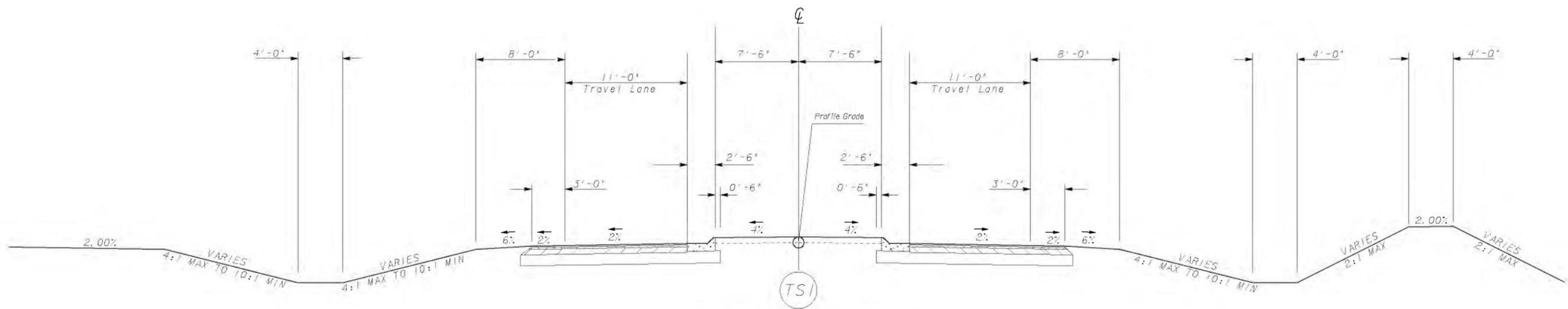
BITUMINOUS TACK COAT (surface treatment)

Price Adjustment (PA)				0	\$	-
Monthly Asphalt Cement Price month placed (APM)	Max. Cap	60%	\$	953.60		
Monthly Asphalt Cement Price month project let (APL)			\$	596.00		
Total Monthly Tonnage of asphalt cement (TMT)				0		

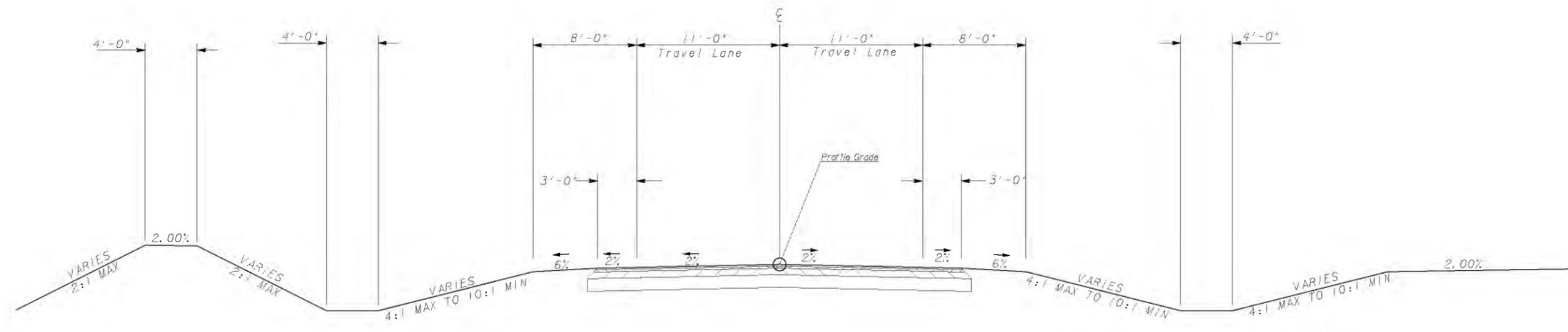
Bitum Tack	SY	Gals/SY	Gals	gals/ton	tons
Single Surf. Trmt.		0.20	0	232.8234	0
Double Surf.Trmt.		0.44	0	232.8234	0
Triple Surf. Trmt		0.71	0	232.8234	0
					0

TOTAL LIQUID AC ADJUSTMENT **\$ 44,660.61**

Attachment 3: Typical Sections



TANGENT SECTION
 TECHNOLOGY PARK ROADWAY #1
 STA 130+00.00 TO STA 140+59.99



TANGENT SECTION
 TECHNOLOGY PARK ROADWAY #2
 LOCAL ACCESS ROAD
 STA 100+59.99 TO STA 167+12.68
 STA 200+00.00 TO STA 222+59.74

REVISION DATES	

PAULDING COUNTY
 DEPARTMENT OF TRANSPORTATION
 OFFICE:
TYPICAL SECTIONS

**Attachment 4: Traffic Memorandum with Attached
Diagram**

Memorandum

Date: August 1, 2011

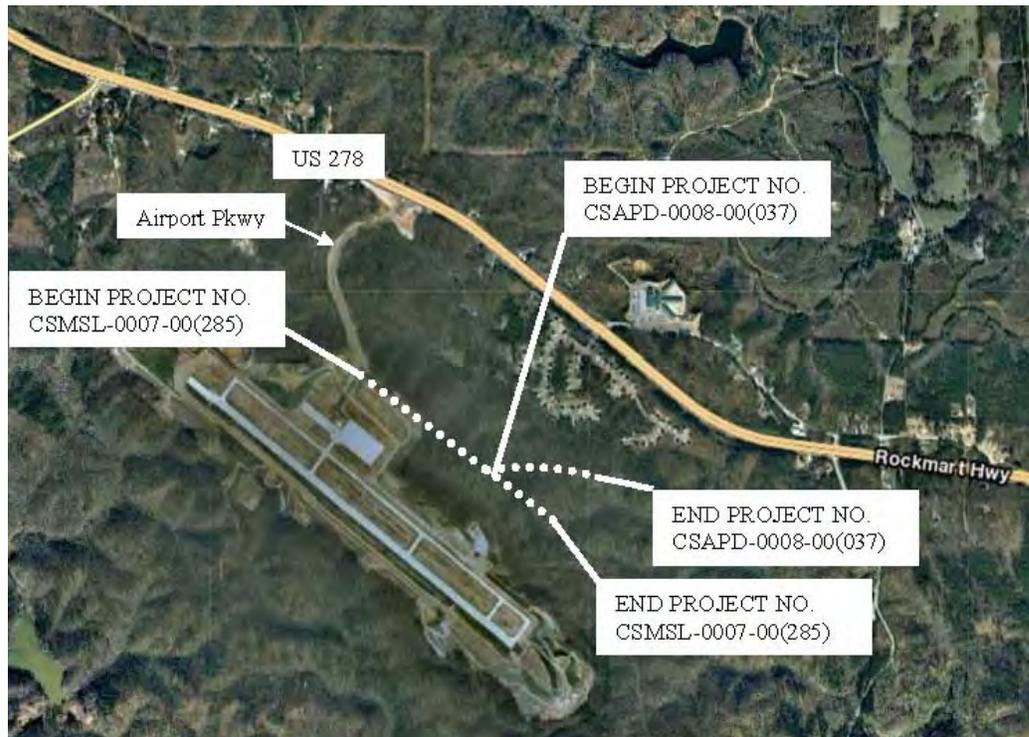
To: Jeff VanDyke, PE

From: Nicholi Arnio, PE, PTOE

Subject: Paulding County Business and Technology Park Roadway and Paulding County Local Access Road
CSMSL – 0007 – 00(285) Paulding County
CSAPD – 0008 – 00(037) Paulding County
PI #'s: 0007285 & 0008037

This *Traffic Memorandum* has been prepared to document the possible traffic impacts and traffic generated by a planned industrial park located approximately 6 miles west of Dallas, Georgia on U.S. 278 (Rockmart Highway). The figure below shows the general project area.

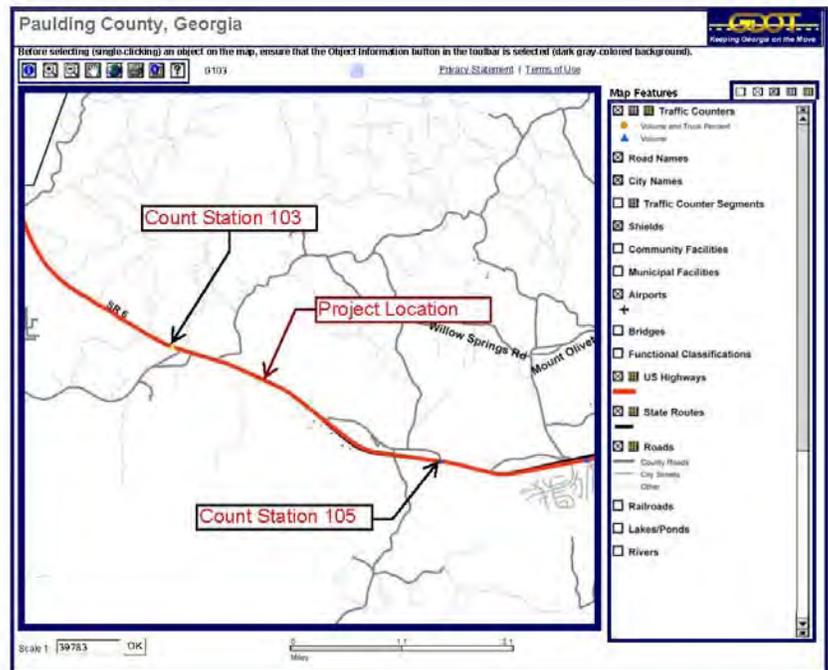
The intersecting roadways nearest to the project are U.S. 278 (Rockmart Highway) and Airport Parkway. Airport Parkway will provide direct access to the planned project. U.S. 278 is currently a 4-lane divided



highway with a full median access located directly across from the entrance to Airport Parkway. The existing turn lanes (eastbound and westbound) measure approximately 200 feet in each direction of U.S. 278. The capacity of the existing left turn lane allows for 8 passenger vehicles

to queue while waiting for an acceptable gap in the approaching traffic flow on U.S. 278. The existing turn lane configuration should allow for acceptable queuing based on the speed and volumes expected along the corridor. A more detailed analysis of turn lane storage should be considered if future volumes increase to warrant a signalized intersection at this location. Future turn lane lengths shall be based on the current edition of the Georgia Department of Transportation (GDOT) Regulations for Driveway and Encroachment Control Manual.

Existing traffic volumes on U.S. 278 were referenced from GDOT's State Traffic and Report Statistics (STARS) website. The Paulding County count stations 103 and 105 were used to establish existing traffic volumes along U.S. 278. The entrance to the planned project, Airport Parkway, is approximately half way between these count locations. The annual average daily traffic (AADT) over the past 5 years was tabulated for count



stations 103 and 105. An average of these historic traffic counts was taken to approximate the traffic volume at the planned project access point. Historic traffic data was plotted for the past five years and then extrapolated to the build-out year, 2035. An average linear growth rate of 2% per annum was utilized to account for local development and to project existing traffic volumes to the build-out year of 2035. This data can be seen in Appendix A, Traffic Projections. Known developments in the area include the build-out of the airport with 28 hangars designed. The Institute of Transportation Engineer's (ITE's) *Trip Generation Handbook* suggests that a general aviation airport of this size would generate approximately 140 trips per day (14 pm peak hour trips). The 2% growth rate applied to the existing traffic is expected to incorporate the future growth directly related to the airport.

Airport Parkway is the direct access to the proposed project as well as the existing general aviation airport. The existing airport is primarily designed for small private and corporate aircraft with a short runway and minimal terminal facilities. ITE's *Trip Generation Handbook* suggests

that general aviation facilities normally experience light traffic, usually ranging from 3% to 5% of the weekday traffic. Due to the small number of aircraft currently based at this facility, the existing traffic on Airport Parkway is negligible. There is a small amount of traffic observed on Airport Parkway, but most trips are related to the physical construction of the airport and will not add to the congestion of the roadway in the future.

The existing and projected AADT's were converted into design hourly volumes (DHV) using the K_{30} factor, which is the proportion of the AADT occurring during the 30th highest hour of the year. A K_{30} factor of 10% was used as GDOT historical traffic data at the Paulding County traffic count locations show K-factors between 9% and 10%. The directional distribution of traffic for U.S. 278 was established from the traffic count stations to be 55% in the pm peak direction (westbound). *ITE's Traffic Engineering Handbook* states that normally, the directional split of traffic (D-factor) is between 55 and 70 percent. The directional design hourly volume and AADT's for each forecasted year and can be found in Appendix B.

The project is a planned industrial park development with approximately 890,000 square feet of gross floor area. The trip generation based on *ITE Trip Generation, 8th Edition*, states that for the pm peak hour of generation for an Industrial Park (ITE Code 130), approximately 0.86 trips will be generated per 1,000 square feet of gross floor area. This yields 766 pm peak hour trips. The daily trip rate equation yields about 6 trips per 1,000 feet of gross floor area, or 5,162 daily project related trips. The directional distribution during the pm peak hour is 21% (161 trips) entering and 79% (605 trips) exiting. ITE further states that truck trips usually account for between 1 and 22 percent of the total traffic with an average of 8% trucks. Based on the GDOT Flexible Pavement Design - 18-kip worksheet, US 278 is a heavy state route (greater than 4,000 vpd), which typically experiences 40% single unit (S.U.) trucks and 60% multi unit (M.U.) trucks. The Trip Generation is graphically shown in Appendix C.

The project trips were distributed based on the prior established directional factor. Fifty-five percent (55%) of project trips were assigned to the westbound movement (peak direction) and 45% distributed eastbound on U.S. 278. Appendix D graphically depicts how the planned project's traffic related impacts affect the opening year 2015 traffic. The no-build traffic for 2015 is also shown in Appendix D. The "no-build" and "build" traffic projections for 2035 at the intersection of U.S. 278 and Airport Parkway can be seen in Appendix E.

A planning Level of Service (LOS) analysis was completed for the section of U.S. 278 near the project using McTrans Traffic Software, HCS+. Level of service is a quantitative stratification of

quality of service into six letter grade levels, A through F. The LOS analysis was conducted for the 2011 existing conditions, 2035 “no-build” scenario and the 2035 build year using the AADT projections in Appendix A.

The planning level of service analysis assumed the peak directional distribution of traffic was 55% in the westbound lane, as previously stated. The LOS for the existing conditions was LOS B with an estimated 394 vehicles per hour per lane (vphpl). The access road is proposed to be finished in 2015, but no project related development is expected to occur at this time. The traffic corresponding to the year 2015 can be seen in Table 1 below.

The future no-build traffic for the year 2035 is projected to be 600 vphpl which is LOS B. The 2035 build-out scenario traffic was compiled from the background traffic projected in 2035 (21,821 vehicles) and adding the project’s daily traffic (5,162 vehicles). The daily project traffic was derived using the *ITE Trip Generation, 8th Edition* equation for ITE Code 130. The background and project related traffic for 2035 is then calculated (21,821 + 5,162) for a total AADT of 26,948 vehicles. The full build-out of the project site coupled with future year traffic projections yields 742 vphpl which is an LOS of “C” for a 4-lane facility, as shown in Table 1 below. The HCS+ reports can be seen in Appendix F of this memorandum.

Scenario	Background AADT	Project AADT	Total Vehicles per Hour per Lane (vphpl)	LOS
2011 Existing	13,567	0	373	A
2015 No-Build	14,685	0	404	B
2015 Build (Technology Park Roadway & Local Access Road, No Buildings)	14,685	0	404	B
2035 No-Build	21,821	0	600	B
2035 Build (Technology Park Roadway & Local Access Road, 890,000 sq. ft. Industrial Park)	26,984	5,162	742	C

Table 1 – LOS Analysis for U.S. 278

An intersection analysis for the un-signalized intersection at U.S. 278 and Airport Parkway was completed for the full build-out of the project in year 2035 (Appendix G). This analysis shows that the intersection fails due to extensive queuing and unacceptable delays for vehicles traveling from Airport Parkway left onto westbound/northbound U.S. 278. Improvements to this intersection should be based on pace at which this project is developed in the future.

For questions or comments concerning this memorandum, please contact me at (850) 558-2800 or Nicholi.arnio@rsand.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nicholi Arnio". The signature is fluid and cursive, with a long horizontal stroke at the end.

Nicholi Arnio, PE, PTOE
Traffic Engineer

Appendix A

Traffic Projections

		Location		
Year		Station 103	US 278 & Airport Pkwy	Station 105
Traffic Counts	2003	8,918	12,748	16,577
	2004	9,080	12,387	15,694
	2005	14,610	14,891	15,172
	2006	14,350	14,500	14,650
	2007	14,080	14,465	14,850
	2008	13,290	13,660	14,030
	2009	11,940	13,040	14,140
Projected Traffic	2010	12,179	13,301	14,423
	2011	12,422	13,567	14,711
	2012	12,671	13,838	15,005
	2013	12,924	14,115	15,306
	2014	13,183	14,397	15,612
	2015	13,446	14,685	15,924
	2016	13,715	14,979	16,242
	2017	13,990	15,278	16,567
	2018	14,269	15,584	16,899
	2019	14,555	15,896	17,237
	2020	14,846	16,214	17,581
	2021	15,143	16,538	17,933
	2022	15,446	16,869	18,292
	2023	15,755	17,206	18,657
	2024	16,070	17,550	19,031
	2025	16,391	17,901	19,411
	2026	16,719	18,259	19,799
	2027	17,053	18,624	20,195
	2028	17,394	18,997	20,599
	2029	17,742	19,377	21,011
	2030	18,097	19,764	21,432
	2031	18,459	20,160	21,860
	2032	18,828	20,563	22,297
	2033	19,205	20,974	22,743
	2034	19,589	21,394	23,198
	2035	19,981	21,821	23,662

Notes:

Project Intersection location is an average of the two nearest count locations

Traffic Data was taken from:

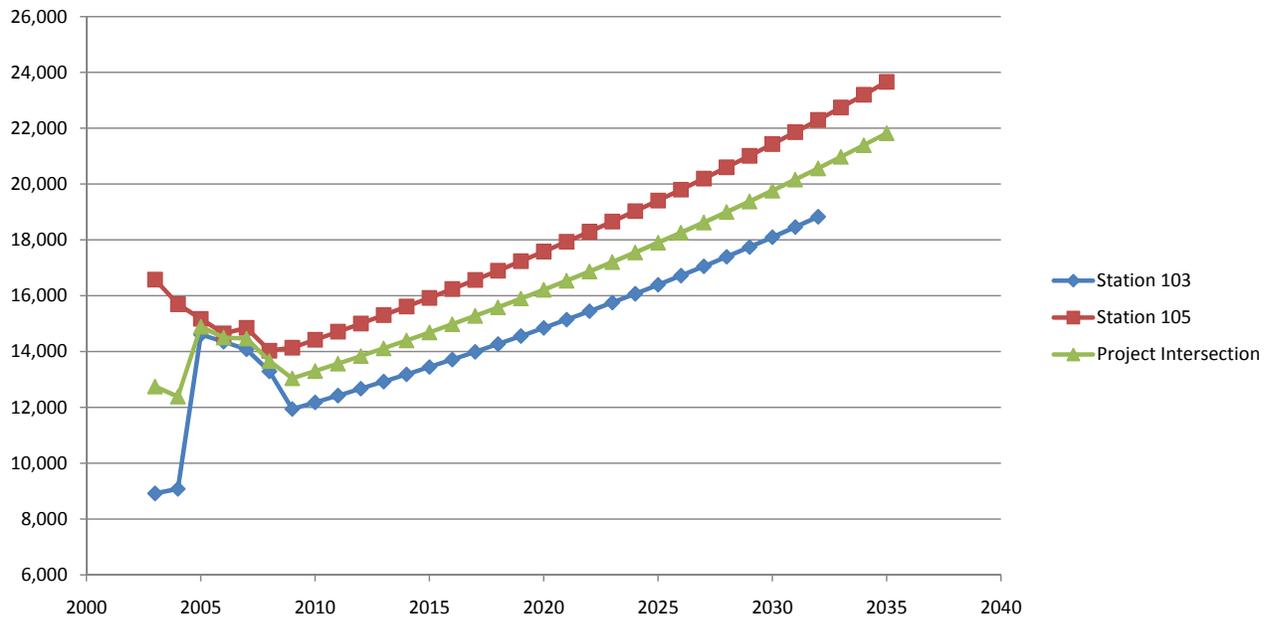
http://wwwb.dot.ga.gov/dot/plan-prog/transportation_data/TrafficCD/2008_GA_STARS/paulding/index.html

Station 103 is approximately 1 mile west of the Project Intersection

Station 105 is approximately 3/4 mile east of the Project Intersection

The growth rate was estimated using a 2% linear growth rate per year

US 278 at Airport Pkwy: Traffic Data Projected AADT (Linear Growth)



Appendix B

PM Peak Hour Peak Direction Traffic

US 278 & Airport Pkwy Intersection				
	Year	Volume AADT	Peak Hour K=0.10	Peak Direction D=0.55
Traffic Counts	2003	12,748	1,275	701
	2004	12,387	1,239	681
	2005	14,891	1,489	819
	2006	14,500	1,450	798
	2007	14,465	1,447	796
	2008	13,660	1,366	751
	2009	13,040	1,304	717
Projected Traffic	2010	13,301	1,330	732
	2011	13,567	1,357	746
	2012	13,838	1,384	761
	2013	14,115	1,411	776
	2014	14,397	1,440	792
	2015	14,685	1,469	808
	2016	14,979	1,498	824
	2017	15,278	1,528	840
	2018	15,584	1,558	857
	2019	15,896	1,590	874
	2020	16,214	1,621	892
	2021	16,538	1,654	910
	2022	16,869	1,687	928
	2023	17,206	1,721	946
	2024	17,550	1,755	965
	2025	17,901	1,790	985
	2026	18,259	1,826	1,004
	2027	18,624	1,862	1,024
	2028	18,997	1,900	1,045
	2029	19,377	1,938	1,066
	2030	19,764	1,976	1,087
	2031	20,160	2,016	1,109
	2032	20,563	2,056	1,131
	2033	20,974	2,097	1,154
	2034	21,394	2,139	1,177
	2035	21,821	2,182	1,200

Notes:

Assuming K=10% of daily traffic and peak direction is Westbound with 55/45% split

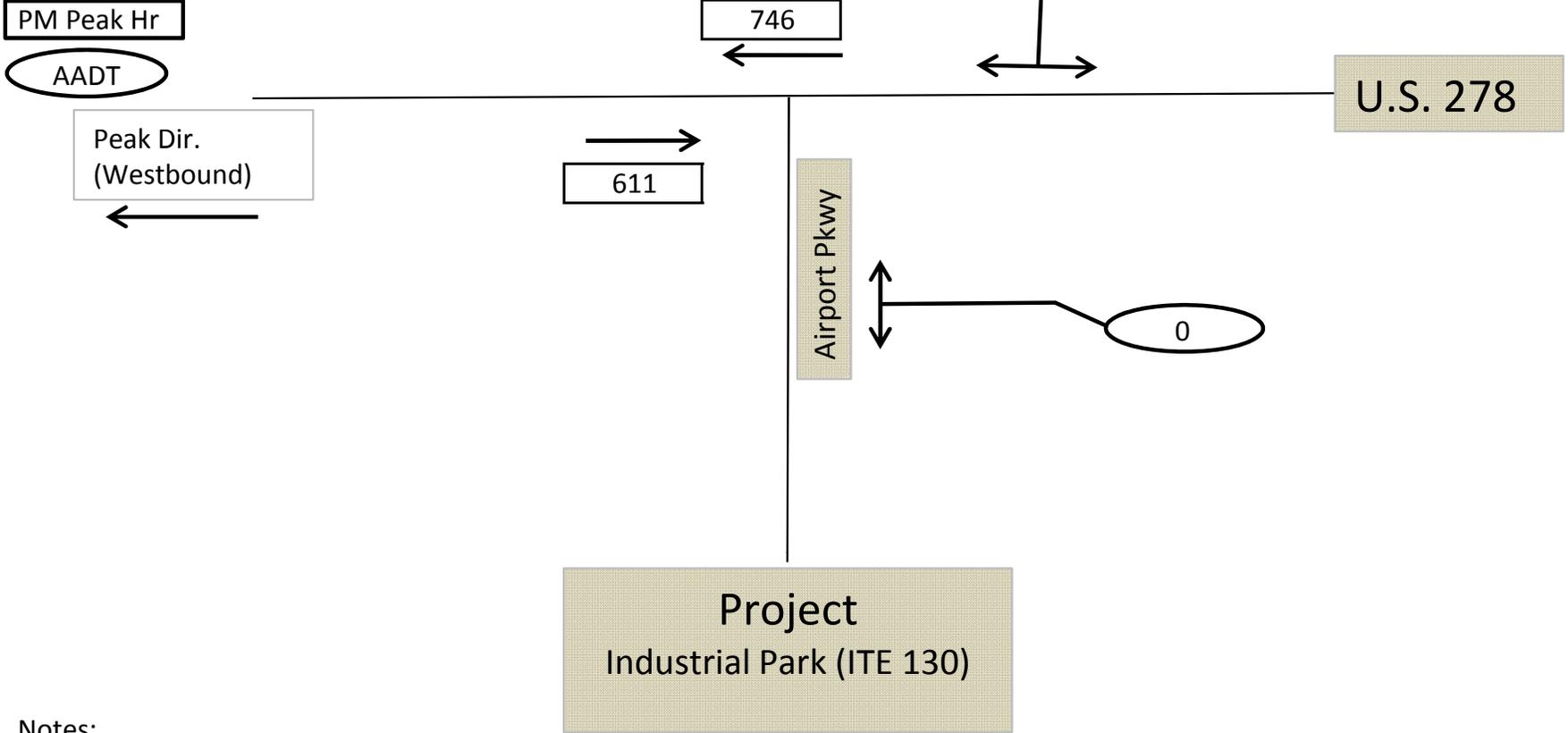
Traffic count stations report K values between 9% and 10%

ITE Traffic Engineering HB recommends D factors between 55 and 70%

Appendix C

2011 No-Build Traffic

Traffic Volumes



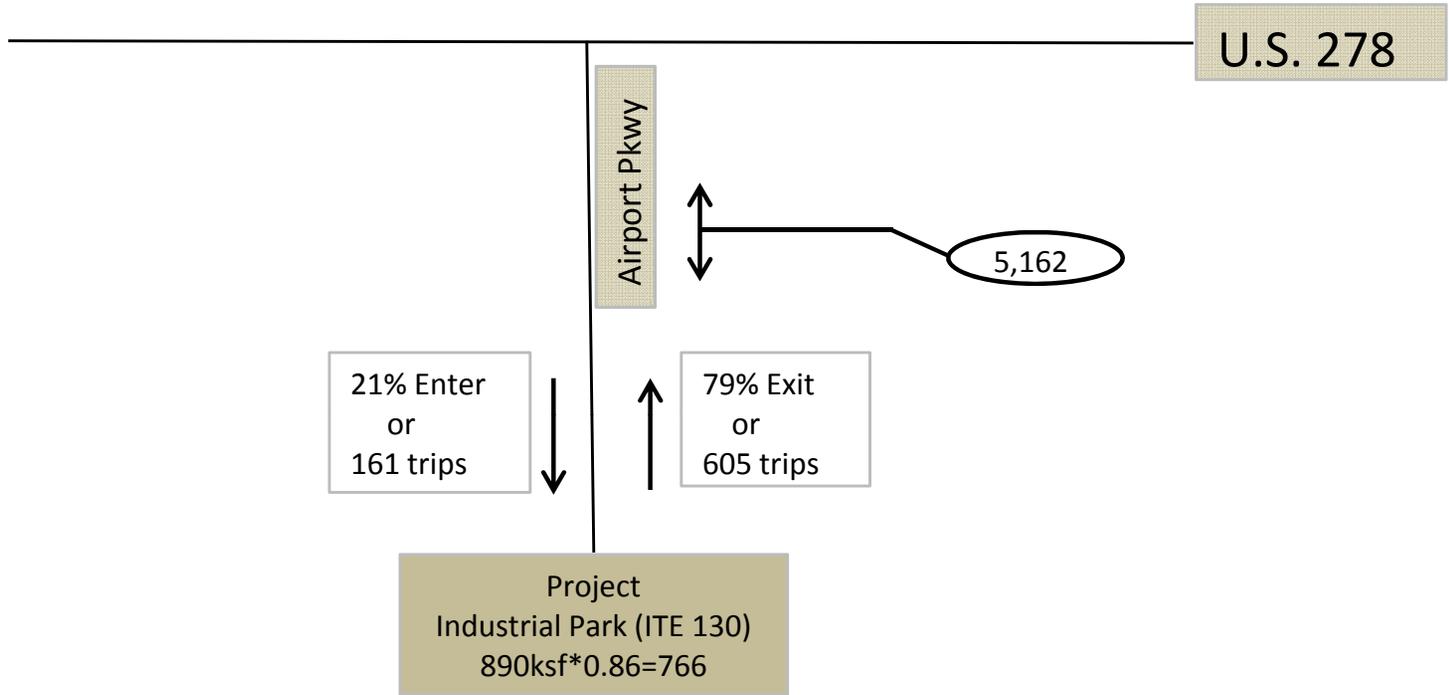
Notes:

- Average of 8% Trucks for the PM Peak Hour
- PM Peak Direction is assumed Westbound with 55/45% split
- Volumes are expressed as PM Peak Hour Volumes
- Peak Direction was assumed Westbound
- AADT: Average Annual Daily Traffic

Trip Generation

PM Peak Hour

AADT



Notes:

ITE 130 (Industrial Park) page 146 of ITE 8th Edition

Average Trip Generation Rate is 0.86 trips per 1,000 sf gross area

Peak Direction was assumed Westbound

AADT: Average Annual Daily Traffic

Estimated Average Daily Traffic

US 278 & Airport Parkway Intersection					
		Background Traffic	Project Area	Project Traffic	Total Traffic
	Year	AADT	Square Feet	AADT	AADT
Traffic Counts	2003	12,748	0	0	12,748
	2004	12,387	0	0	12,387
	2005	14,891	0	0	14,891
	2006	14,500	0	0	14,500
	2007	14,465	0	0	14,465
	2008	13,660	0	0	13,660
	2009	13,040	0	0	13,040
Projected Traffic	2010	13,301	0	0	13,301
	2011	13,567	0	0	13,567
	2012	13,838	0	0	13,838
	2013	14,115	0	0	14,115
	2014	14,397	0	0	14,397
	2015	14,685	0	0	14,685
	2016	14,979	25,000	174	15,153
	2017	15,278	50,000	348	15,626
	2018	15,584	75,000	522	16,106
	2019	15,896	100,000	696	16,592
	2020	16,214	150,000	1,044	17,258
	2021	16,538	200,000	1,392	17,930
	2022	16,869	250,000	1,740	18,609
	2023	17,206	300,000	2,088	19,294
	2024	17,550	350,000	2,436	19,986
	2025	17,901	400,000	2,732	20,633
	2026	18,259	450,000	2,980	21,239
	2027	18,624	500,000	3,228	21,852
	2028	18,997	550,000	3,476	22,473
	2029	19,377	600,000	3,724	23,101
2030	19,764	650,000	3,972	23,736	
2031	20,160	700,000	4,220	24,379	
2032	20,563	750,000	4,468	25,031	
2033	20,974	800,000	4,716	25,690	
2034	21,394	850,000	4,964	26,357	
2035	21,821	890,000	5,162	26,984	

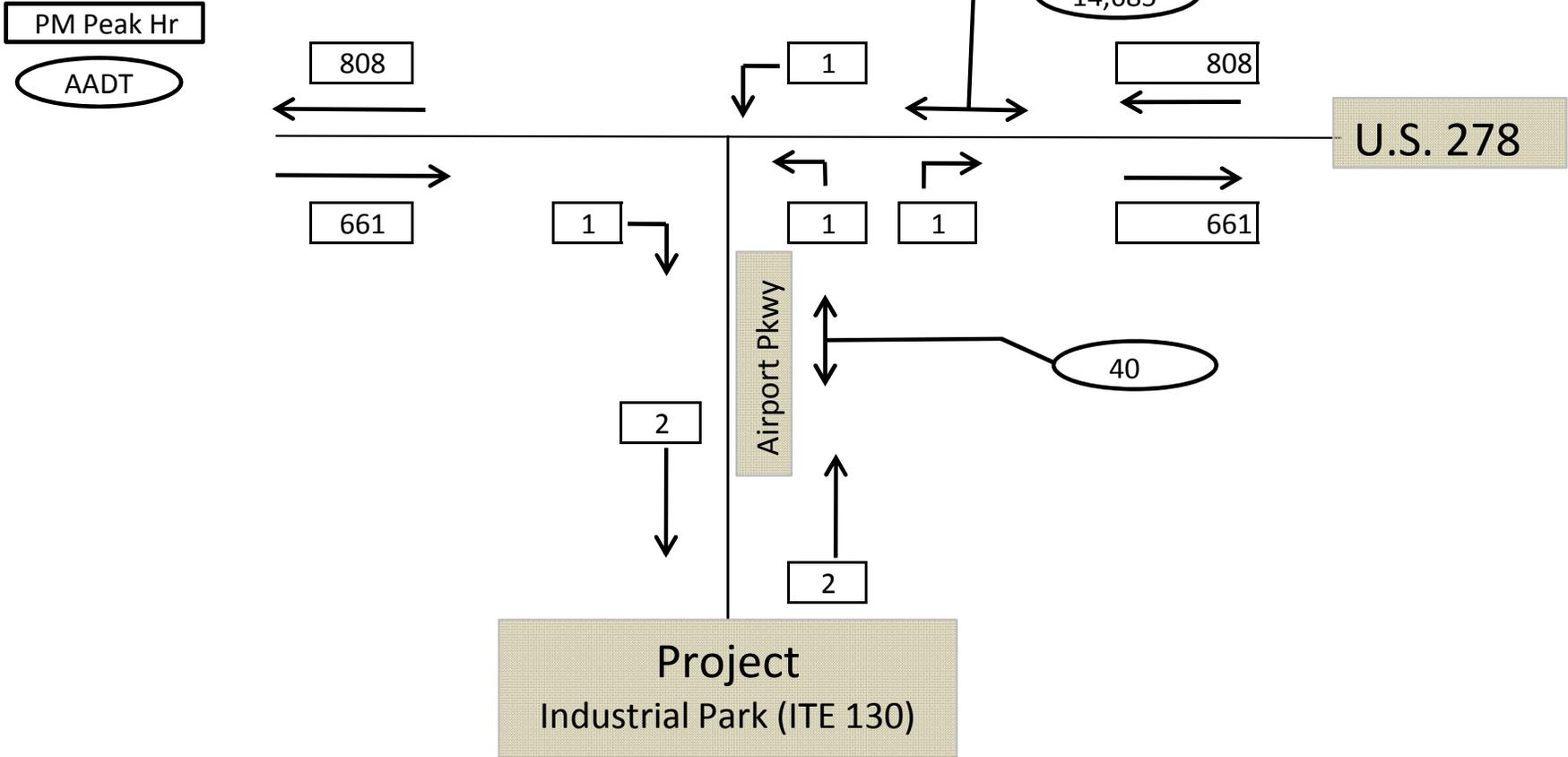
Notes:

AADT: Average Annual Daily Traffic

ITE Trip Generation, 8th Edition, states 6.96 trips per day per 1,000 gross square feet area

Appendix D

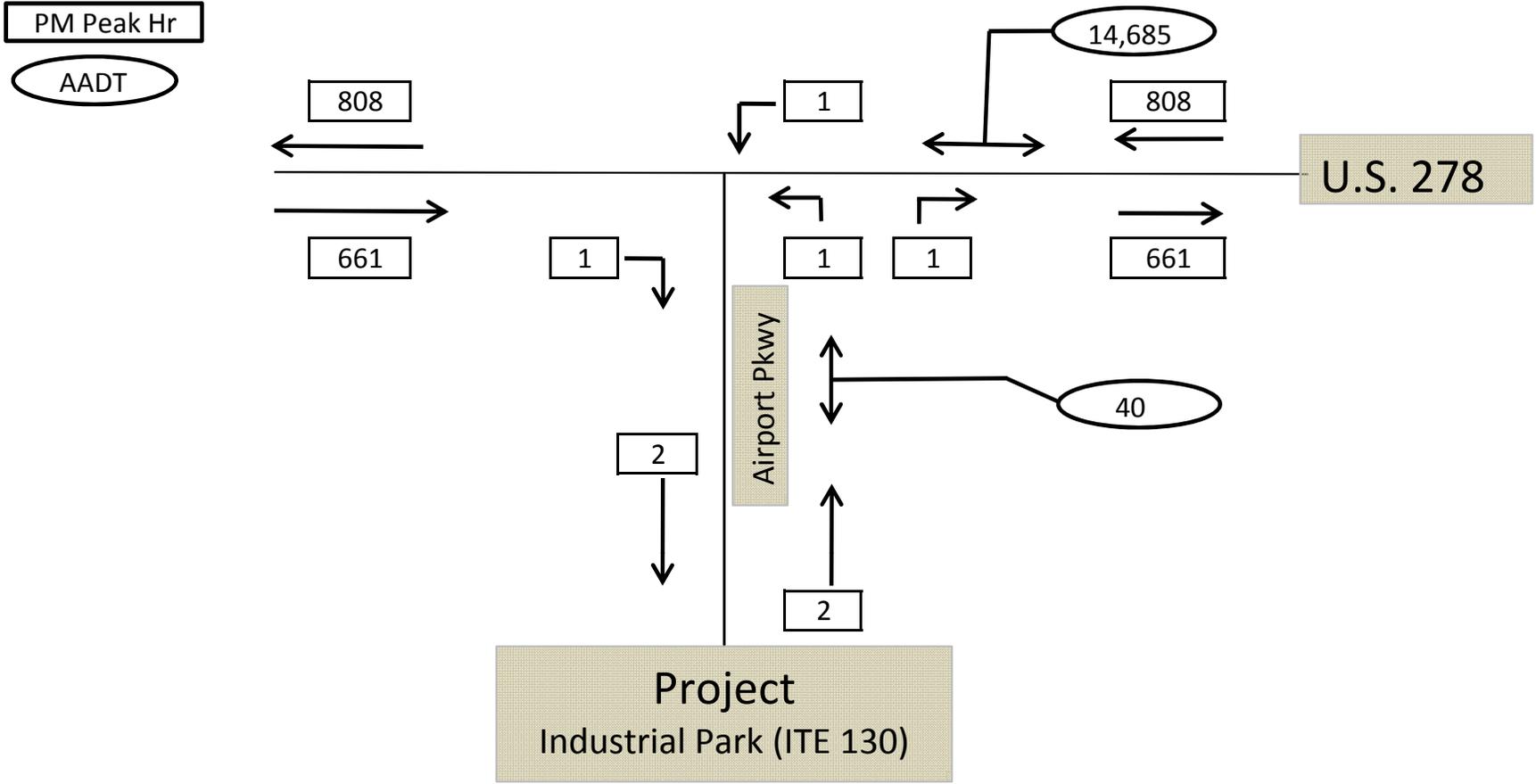
2015 No-Build
PM Peak Hour Traffic Volumes



- Notes:
- Average of 8% Trucks for the PM Peak Hour
 - All volumes are expressed as PM Peak Hour Volumes
 - Peak Direction was assumed Westbound
 - AAADT: Annual Average Daily Traffic

2015 Build

PM Peak Hour Traffic Volumes



Notes:

- Average of 8% Trucks for the PM Peak Hour
- All volumes are expressed as PM Peak Hour Volumes
- Peak Direction was assumed Westbound
- The Project consists of 0 sq. ft. of gross floor area in 2015
- AADT: Annual Average Daily Traffic

Appendix E

2035 No-Build Traffic

PM Peak Hour Volumes

PM Peak Hr

AADT

Peak Dir.
(Westbound)

1,200

21,821

U.S. 278

982

7

Airport Pkwy

3

4

7

140

General Use Aviation
28 Hangers

Notes:

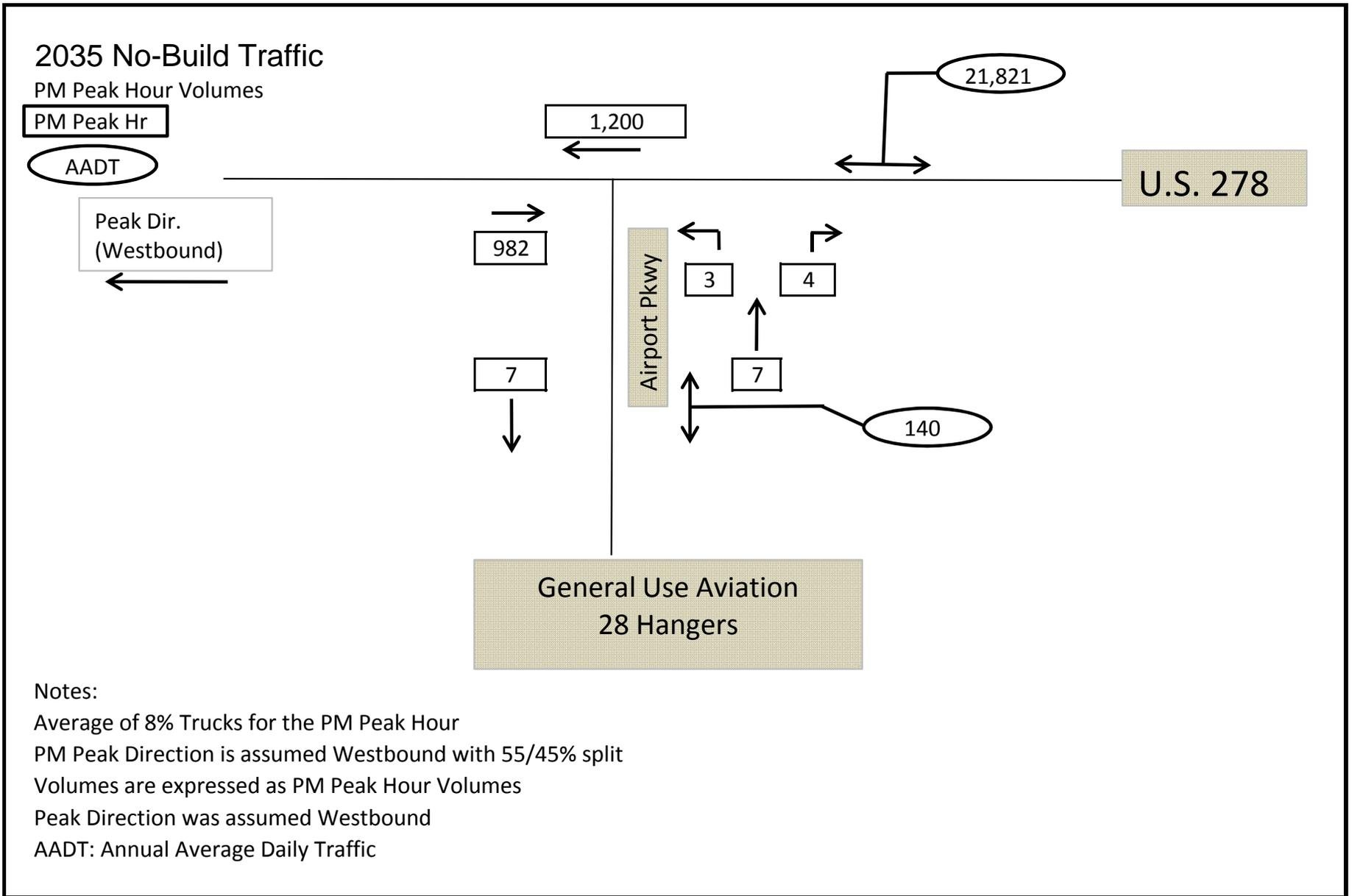
Average of 8% Trucks for the PM Peak Hour

PM Peak Direction is assumed Westbound with 55/45% split

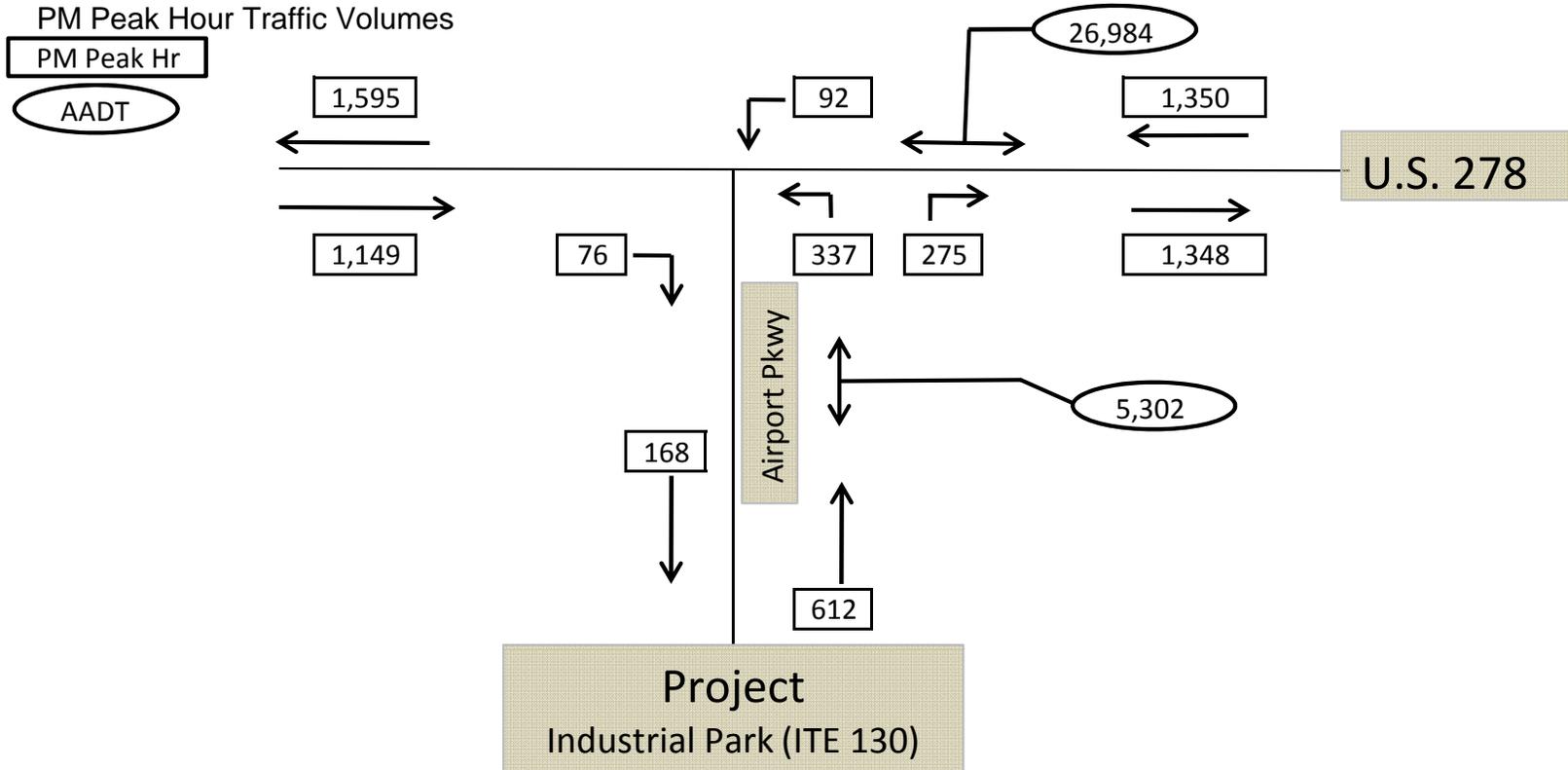
Volumes are expressed as PM Peak Hour Volumes

Peak Direction was assumed Westbound

AADT: Annual Average Daily Traffic



2035 Project Build-Out
PM Peak Hour Traffic Volumes



Notes:

Average of 8% Trucks

All volumes are expressed as PM Peak Hour Volumes

Peak Direction was assumed Westbound

The Project consists of 890,000 sq. ft. of gross floor area in 2035

AAADT: Annual Average Daily Traffic

Airport Pkwy traffic consists of 140 trips from airport hangers and 5,162 trips from proposed project

Daily traffic from 28 hangers is assumed to be captured by the 2% growth rate applied to U.S. 278

Appendix F

Phone: Fax:
E-mail:

-----PLANNING ANALYSIS-----

Analyst: NA
Agency/Co: RS&H
Date: 8/01/2011
Analysis Period: Daily
Highway: U.S. 278
From/To: Gold Mine Rd to Hulsey Town Rd
Jurisdiction:
Analysis Year: 2011
Project ID: Existing Conditions

-----INPUT DATA-----

Total AADT volume, AADT	13567	vpd
Proportion AADT during peak hour, K	0.10	
Percent peak-hour traffic in heaviest direction, D	55	%
Trucks	8	%
Terrain type	Rolling	
Base free-flow speed, BFFS	50.0	mph

-----ANALYSIS-----

DDHV = AADT x D x K
DDHV = 13567 x 0.55 x 0.10 = 746

Volume for :			LOS
4-lane highway = 746	vph/2 lanes = 373	vphpl	A
6-lane highway = 746	vph/3 lanes = 248	vphpl	A

-----LEVEL OF SERVICE-----

		Free-Flow Speed = 60 mph					Free-Flow Speed = 50 mph				
		Percent Trucks					Percent Trucks				
	LOS	0	5	10	15	20	0	5	10	15	20
Terrain Level	A	560	550	530	520	510	440	430	420	410	400
	B	920	900	870	850	840	710	700	680	660	650
	C	1310	1280	1250	1220	1190	1030	1000	980	960	940
	D	1680	1640	1600	1570	1530	1350	1320	1290	1260	1230
	E	1870	1820	1780	1740	1700	1610	1570	1530	1500	1460
Rolling	A	560	520	490	460	430	440	410	380	360	340
	B	920	850	800	750	710	710	660	620	580	550
	C	1310	1220	1140	1070	1010	1030	960	900	840	790
	D	1680	1570	1470	1380	1300	1350	1260	1180	1100	1040
	E	1870	1740	1620	1520	1440	1610	1500	1400	1310	1240
Mountain	A	560	480	420	370	330	440	370	320	290	260

B	920	780	680	600	540	710	610	530	470	420
C	1310	1120	970	860	770	1030	880	760	680	610
D	1680	1430	1250	1100	990	1350	1150	1000	890	800
E	1870	1590	1380	1220	1100	1610	1370	1190	1050	950

Assumptions: highway with 60 mi/h FFS has 8 access points/mi; highway with 50 mi/h FFS has 25 access points/mi; lane width = 12 ft; shoulder width > 6 ft; divided highway; PHF = 0.88; all heavy vehicles are trucks and regular commuters

Phone: Fax:
E-mail:

-----PLANNING ANALYSIS-----

Analyst: NA
Agency/Co: RS&H
Date: 8/01/2011
Analysis Period: Daily
Highway: U.S. 278
From/To: Gold Mine Rd to Hulsey Town Rd
Jurisdiction:
Analysis Year: 2015
Project ID: 2015 No Build

-----INPUT DATA-----

Total AADT volume, AADT	14685	vpd
Proportion AADT during peak hour, K	0.10	
Percent peak-hour traffic in heaviest direction, D	55	%
Trucks	8	%
Terrain type	Rolling	
Base free-flow speed, BFFS	50.0	mph

-----ANALYSIS-----

DDHV = AADT x D x K
DDHV = 14685 x 0.55 x 0.10 = 808

Volume for :			LOS
4-lane highway = 808	vph/2 lanes = 404	vphpl	B
6-lane highway = 808	vph/3 lanes = 269	vphpl	A

-----LEVEL OF SERVICE-----

		Free-Flow Speed = 60 mph					Free-Flow Speed = 50 mph				
		Percent Trucks					Percent Trucks				
	LOS	0	5	10	15	20	0	5	10	15	20
Terrain Level	A	560	550	530	520	510	440	430	420	410	400
	B	920	900	870	850	840	710	700	680	660	650
	C	1310	1280	1250	1220	1190	1030	1000	980	960	940
	D	1680	1640	1600	1570	1530	1350	1320	1290	1260	1230
	E	1870	1820	1780	1740	1700	1610	1570	1530	1500	1460
Rolling	A	560	520	490	460	430	440	410	380	360	340
	B	920	850	800	750	710	710	660	620	580	550
	C	1310	1220	1140	1070	1010	1030	960	900	840	790
	D	1680	1570	1470	1380	1300	1350	1260	1180	1100	1040
	E	1870	1740	1620	1520	1440	1610	1500	1400	1310	1240
Mountain	A	560	480	420	370	330	440	370	320	290	260

B	920	780	680	600	540	710	610	530	470	420
C	1310	1120	970	860	770	1030	880	760	680	610
D	1680	1430	1250	1100	990	1350	1150	1000	890	800
E	1870	1590	1380	1220	1100	1610	1370	1190	1050	950

Assumptions: highway with 60 mi/h FFS has 8 access points/mi; highway with 50 mi/h FFS has 25 access points/mi; lane width = 12 ft; shoulder width > 6 ft; divided highway; PHF = 0.88; all heavy vehicles are trucks and regular commuters

Phone: Fax:
E-mail:

-----PLANNING ANALYSIS-----

Analyst: NA
Agency/Co: RS&H
Date: 8/01/2011
Analysis Period: Daily
Highway: U.S. 278
From/To: Gold Mine Rd to Hulsey Town Rd
Jurisdiction:
Analysis Year: 2035
Project ID: No-Build Scenario

-----INPUT DATA-----

Total AADT volume, AADT	21821	vpd
Proportion AADT during peak hour, K	0.10	
Percent peak-hour traffic in heaviest direction, D	55	%
Trucks	8	%
Terrain type	Rolling	
Base free-flow speed, BFFS	50.0	mph

-----ANALYSIS-----

DDHV = AADT x D x K
DDHV = 21821 x 0.55 x 0.10 = 1200

Volume for : LOS
 4-lane highway = 1200 vph/2 lanes = 600 vphpl B
 6-lane highway = 1200 vph/3 lanes = 400 vphpl B

-----LEVEL OF SERVICE-----

		Free-Flow Speed = 60 mph					Free-Flow Speed = 50 mph				
		Percent Trucks					Percent Trucks				
	LOS	0	5	10	15	20	0	5	10	15	20
Terrain Level	A	560	550	530	520	510	440	430	420	410	400
	B	920	900	870	850	840	710	700	680	660	650
	C	1310	1280	1250	1220	1190	1030	1000	980	960	940
	D	1680	1640	1600	1570	1530	1350	1320	1290	1260	1230
	E	1870	1820	1780	1740	1700	1610	1570	1530	1500	1460
Rolling	A	560	520	490	460	430	440	410	380	360	340
	B	920	850	800	750	710	710	660	620	580	550
	C	1310	1220	1140	1070	1010	1030	960	900	840	790
	D	1680	1570	1470	1380	1300	1350	1260	1180	1100	1040
	E	1870	1740	1620	1520	1440	1610	1500	1400	1310	1240
Mountain	A	560	480	420	370	330	440	370	320	290	260

B	920	780	680	600	540	710	610	530	470	420
C	1310	1120	970	860	770	1030	880	760	680	610
D	1680	1430	1250	1100	990	1350	1150	1000	890	800
E	1870	1590	1380	1220	1100	1610	1370	1190	1050	950

Assumptions: highway with 60 mi/h FFS has 8 access points/mi; highway with 50 mi/h FFS has 25 access points/mi; lane width = 12 ft; shoulder width > 6 ft; divided highway; PHF = 0.88; all heavy vehicles are trucks and regular commuters

Phone: Fax:
E-mail:

-----PLANNING ANALYSIS-----

Analyst: NA
Agency/Co: RS&H
Date: 8/01/2011
Analysis Period: Daily
Highway: U.S. 278
From/To: Gold Mine Rd to Hulsey Town Rd
Jurisdiction:
Analysis Year: 2035
Project ID: Industrial Park (Build-out)

-----INPUT DATA-----

Total AADT volume, AADT	26984	vpd
Proportion AADT during peak hour, K	0.10	
Percent peak-hour traffic in heaviest direction, D	55	%
Trucks	8	%
Terrain type	Rolling	
Base free-flow speed, BFFS	50.0	mph

-----ANALYSIS-----

DDHV = AADT x D x K
DDHV = 26984 x 0.55 x 0.10 = 1484

Volume for :		LOS
4-lane highway = 1484	vph/2 lanes = 742	vphpl C
6-lane highway = 1484	vph/3 lanes = 494	vphpl B

-----LEVEL OF SERVICE-----

		Free-Flow Speed = 60 mph					Free-Flow Speed = 50 mph				
		Percent Trucks					Percent Trucks				
	LOS	0	5	10	15	20	0	5	10	15	20
Terrain Level	A	560	550	530	520	510	440	430	420	410	400
	B	920	900	870	850	840	710	700	680	660	650
	C	1310	1280	1250	1220	1190	1030	1000	980	960	940
	D	1680	1640	1600	1570	1530	1350	1320	1290	1260	1230
	E	1870	1820	1780	1740	1700	1610	1570	1530	1500	1460
Rolling	A	560	520	490	460	430	440	410	380	360	340
	B	920	850	800	750	710	710	660	620	580	550
	C	1310	1220	1140	1070	1010	1030	960	900	840	790
	D	1680	1570	1470	1380	1300	1350	1260	1180	1100	1040
	E	1870	1740	1620	1520	1440	1610	1500	1400	1310	1240
Mountain	A	560	480	420	370	330	440	370	320	290	260

B	920	780	680	600	540	710	610	530	470	420
C	1310	1120	970	860	770	1030	880	760	680	610
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E	1870	1590	1380	1220	1100	1610	1370	1190	1050	950

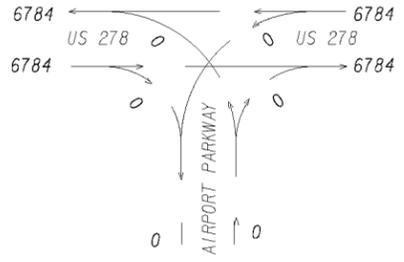
Assumptions: highway with 60 mi/h FFS has 8 access points/mi; highway with 50 mi/h FFS has 25 access points/mi; lane width = 12 ft; shoulder width > 6 ft; divided highway; PHF = 0.88; all heavy vehicles are trucks and regular commuters

Appendix G

TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	NA			Intersection	U.S. 278 & Airport		
Agency/Co.	RS&H			Jurisdiction			
Date Performed	7/29/2011			Analysis Year	2035		
Analysis Time Period	PM Pk Hr						
Project Description 2035 Build							
East/West Street: U.S. 278				North/South Street: Airport Parkway			
Intersection Orientation: East-West				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Eastbound			Westbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)		1154	76	92	1410		
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	
Hourly Flow Rate, HFR (veh/h)	0	1154	76	92	1410	0	
Percent Heavy Vehicles	0	--	--	0	--	--	
Median Type	Raised curb						
RT Channelized			0			0	
Lanes	0	2	1	1	2	0	
Configuration		T	R	L	T		
Upstream Signal		0			0		
Minor Street	Northbound			Southbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	337		275				
Peak-Hour Factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	
Hourly Flow Rate, HFR (veh/h)	337	0	275	0	0	0	
Percent Heavy Vehicles	0	0	0	0	0	0	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	1	0	1	0	0	0	
Configuration	L		R				
Delay, Queue Length, and Level of Service							
Approach	Eastbound	Westbound	Northbound			Southbound	
Movement	1	4	7	8	9	10	11
Lane Configuration		L	L		R		
v (veh/h)		92	337		275		
C (m) (veh/h)		574	230		520		
v/c		0.16	1.47		0.53		
95% queue length		0.57	19.77		3.06		
Control Delay (s/veh)		12.5	271.2		19.4		
LOS		B	F		C		
Approach Delay (s/veh)	--	--	158.1				
Approach LOS	--	--	F				

Appendix H

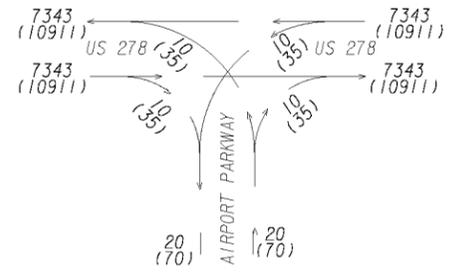
US 278
24 T = 8%
S.U. = 3%
COMB. = 5%



AIRPORT PARKWAY
24 T = 0%
S.U. = 0%
COMB. = 0%

CSMSL-0007-00(285)
CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
2011 ADT = 000

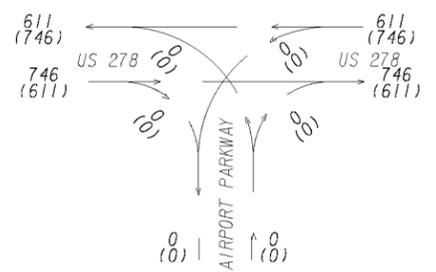
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S.U. = 3%
COMB. = 5%



AIRPORT PARKWAY
24 T = 4%
S.U. = 3%
COMB. = 1%

CSMSL-0007-00(285)
CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
NO BUILD
2015 ADT = 000
2035 ADT = (000)

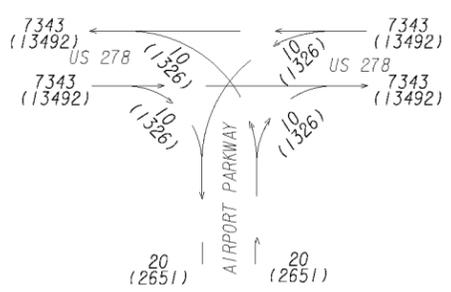
US 278
T = 8%
S.U. = 3%
COMB. = 5%



AIRPORT PARKWAY
T = 4%
S.U. = 3%
COMB. = 1%

CSMSL-0007-00(285)
CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
2011 AM DHV = 000
2011 PM DHV = (000)

US 278
24 T = 8%
S.U. = 3%
COMB. = 5%



AIRPORT PARKWAY
24 T = 8%
S.U. = 7%
COMB. = 1%

CSMSL-0007-00(285)
CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
BUILD
2015 ADT = 000
2035 ADT = (000)

RS&H
IMPROVING YOUR WORLD
730 PEACHTREE STREET, SUITE 430
ATLANTA, GA 30308-1238
678-528-7200 (TEL) 404-347-9522 (FAX)

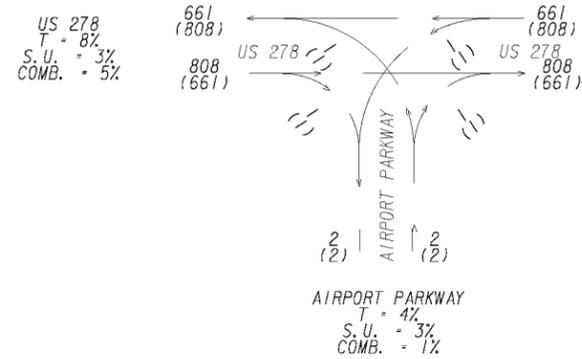
REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

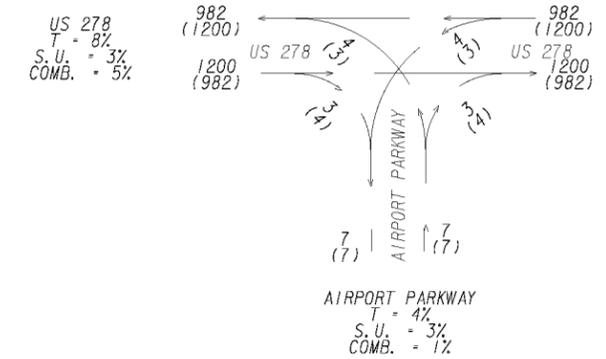
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PAULDING COUNTY BUSINESS AND TECHNOLOGY PARK

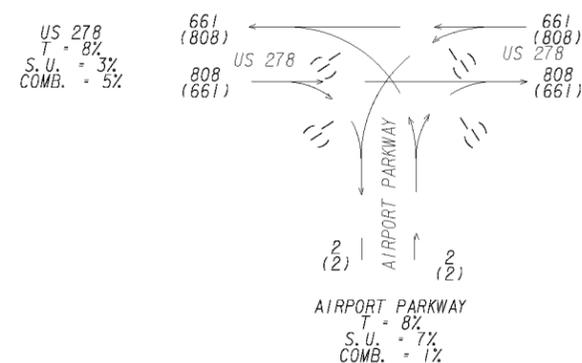
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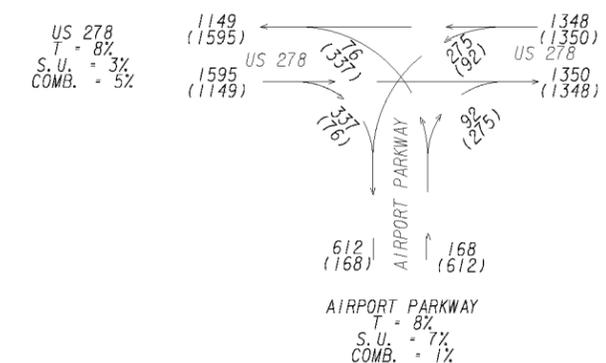
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CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
NO BUILD
2015 AM DHV = 000
2015 PM DHV = (000)



CSMSL-0007-00(285)
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P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
NO BUILD
2035 AM DHV = 000
2035 PM DHV = (000)



CSMSL-0007-00(285)
CSAPD-0008-00(037)
P. I. NO. 0007285
P. I. NO. 0008037
PAULDING COUNTY
BUSINESS AND TECHNOLOGY PARK
BUILD
2015 AM DHV = 000
2015 PM DHV = (000)



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BUILD
2035 AM DHV = 000
2035 PM DHV = (000)

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ATLANTA, GA 30308-1238
678-528-7200 (TEL) 404-347-9522 (FAX)

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE:
TRAFFIC DIAGRAM
PAULDING COUNTY BUSINESS AND TECHNOLOGY PARK

Attachment 5: Concept Team Meeting Minutes

Meeting Minutes

Project:	Paulding County Business and Technology Park
Type of Meeting:	Concept Team Meeting
Meeting Date:	July 7, 2010
Meeting Requested By:	RS&H / Paulding DOT
Attendees:	Scott Greene – Paulding County Department of Transportation (PCDOT) Erica Parish – PCDOT Jacob Hughes – PCDOT Cherie Marsh – GDOT Pre-construction Claudette Sams – GDOT R/W Mick Workman – GDOT R/W Steve Carter – GDOT Engineering Services Dee Corson – GDOT Traffic Ops K. Mertz – GDOT Planning Jennifer Deems – GDOT D6 Utilities Nabil Raad – GDOT Traffic Ops Greg Hood – GDOT D6 Jeff Woodward – GDOT Const. Bobby Dollar – GDOT OES Kerry Bonner – GDOT Utilities Kendra Bunker – FHWA Jeff VanDyke – RS&H Highway Design Manager Eric Seckinger – RS&H Project Engineer Michelle Hirose – RS&H Project Engineer Laura Dawood – KEA Group Stony Anderson – AT&T Roy Padgett – AT&T Maxime Laurenceau – Comcast Wade George – Greystone Power James Sticner – Greystone Power
Time:	10:00 a.m. to 11:00 a.m.
Minutes Prepared By:	Eric Seckinger July 9, 2010

Agenda

- I. Welcome**
- II. Introduction of Each Attendee**
- III. Project Identification**
- IV. Need and Purpose Statement**
- V. Proposed Project Description**
- VI. PDP Classification and Functional Classification**
- VII. Traffic Projections**
- VIII. Existing & Proposed Design Features**
 - IX. Right of Way**
 - X. Structures**
 - XI. Major Intersections / ITS / TMP**
 - XII. Design Variances and Exceptions**
- XIII. Environmental Concerns/Level of Environmental Analysis**
- XIV. Staging/Maintenance of Traffic**
 - XV. Utilities / VE Study / BC**
- XVI. Funding Responsibilities**
- XVII. Project Activities Responsibilities**
- XVIII. Coordination**
 - XIX. Scheduling**
 - XX. Alternates Considered**
 - XXI. Cost Estimate**
- XXII. Comments from Attendees**
 - a. Local Government Representatives
 - b. Engineering Services
 - c. Office of Financial Management
 - d. Traffic Safety and Design
 - e. Environmental/Location
 - f. Planning
 - g. District
 - h. Right of Way
 - i. Utilities
- XXIII. Other Comments or Concerns – Open Discussion**

Meeting Summary:

The purpose of the meeting is to present and discuss the concept for the Paulding County Business and Technology Park roadway project. The critical items discussed included the project design, environmental issues, coordination efforts and the project's schedule. The meeting took place in the GDOT District 6 Conference Room on July 7, 2010 at 10:00 a.m.

I. Welcome

Jeff VanDyke introduced RS&H to the attendees and asked Scott Greene of Paulding DOT to give an opening statement to introduce the project. Scott describes the importance of this project to Paulding County as a future employment center intended to slow the out commuting of Paulding residents to other counties for high paying jobs.

II. Introduction of Each Attendee

See attendee list.

III. Project Identification

The Paulding County Business and Technology Park roadway projects are funded as CSMSL-0007-00(285), P.I. No. 0007285 from the end of Airport Parkway to the end of the roadway; and CSAPD-0008-00(037), P.I. No. 0008037 from the intersection with the before mentioned project to the end of the road.

IV. Need and Purpose Statement

The need and purpose statement was approved on June 30, 2010.

V. Proposed Project Description

Eric Seckinger described the two projects as consisting of approximately 1.2 miles of two new location roadways. P.I. No. 0007285 is approximately 0.7 miles in length and consists of approximately 900' of 2-lane traffic with rural shoulders separated by a 15' raised grassed median. It then transitions to an undivided 2-lane section until a cul-de-sac terminus. P.I. No. 0008037 consists of 0.5 miles of undivided 2-lane roadway with rural shoulders until a cul-de-sac terminus. Each roadway is proposed to have two (2) - 11' travel lanes and 8' rural shoulders (3' paved, 5' grassed).

These projects are adjacent to the newly constructed Paulding Northwest Atlanta Airport. RS&H is closely coordinating with the Airport Authority's consultant to ensure that the roadway project is compatible with the airside developments currently under design. The most important point of coordination is to ensure that our roadway profiles adjacent to the Airport's planned development are compatible with its grading plan and stormwater treatment facilities.

These projects have unique and specific stormwater treatment requirements since both are within the Etowah Habitat Conservation Plan. The basic requirements of the plan are that all stormwater runoff must be adequately treated before discharged, the first 1.2" of rainfall must be treated and 80% of the suspended solids removed, and the volumes of stormwater runoff are limited to those that would occur under forested conditions.

Another important issue for this project, is the amount of earthwork required to build the road at the proposed grades. Currently the cost estimate assumes that these projects will be able to use all of the available excavated material from the hill adjacent to the end of Airport Parkway as fill material. It is likely that if the airside development is let prior to the roadway projects that the material will have to be hauled in from other onsite sources.

VI. PDP Classification and Functional Classification

These projects are classified as minor projects and both roadways are Rural Local roads. Originally, the projects were given the functional classification of Industrial Collector. However, this is not a functional classification used by AASHTO. Rural Local is the correct classification.

VII. Traffic Projections

The traffic projections are included in a Traffic Memo submitted to GDOT on July 6, 2010.

VIII. Existing & Proposed Design Features

Jeff VanDyke reviewed the proposed design features as listed in the Draft Concept Report. He also reviewed proposed changes that resulted from changing the functional classification from Industrial Collector to Rural Local.

IX. Right of Way

The project crosses two parcels. One parcel is owned by the Paulding County Airport Authority and will be deeded, at no cost, to the Paulding County Board of Commissioners. The other parcel is owned by a private landowner and will be acquired by Paulding County during the Right of Way Phase.

X. Structures

No bridges or walls are anticipated on this project.

XI. Major Intersections / ITS / TMP

The two major intersections are with Airport Parkway and the Local Access road included with these projects.

XII. Design Variances and Exceptions

None anticipated.

XIII. Environmental Concerns/Level of Environmental Analysis/Public Involvement

These projects will require a Categorical Exclusion. Although impacts to waters and wetlands of the US are expected, the amount should not exceed 1 acre, so a Nationwide Permit will be required. A field survey for historic and archaeological resources will be conducted

These projects fall within the Etowah Habitat Conservation Plan as mentioned in Section V. The stormwater plan will comply with the requirements of the conservation plan. Scott Greene will provide the consultant with the stormwater monitoring plan from the airport.

A supplement to the approved airport environmental document has been submitted for the airside project that is adjacent to the Technology Park roadway.

Formal public involvement meetings are not required as part of a categorical exclusion and a minor PDP project. GDOT and FHWA agreed that the level of public involvement on these projects will be left up to the County. Paulding County suggested that key stakeholders, including elected officials, residents of the adjacent subdivision and large nearby property owners, be invited to a stakeholder meeting.

Overall there is little opposition to the project, with the exception of some residents of the adjacent subdivision concerned about noise. Paulding County DOT believes that the only notable impacts will occur during construction and that impacts after construction will be minimal.

XIV. Staging/Maintenance of Traffic

These projects are on new location and very few staging or maintenance of traffic issues should arise.

XV. Utilities / VE Study / BC

This project is on new location and no utility conflicts are anticipated. The construction funds available will dictate how much water and sewer infrastructure will be constructed along the corridor. This area is included in a sewer study sponsored by the County.

AT&T, Comcast and Greystone Power were the only representatives from the private utility sector. AT&T has facilities at the intersection of Airport Parkway and U.S. 278 which it could extend to the new roadway.

Greystone Power, the electric utility, will extend its utility along these projects. Greystone Power noted that a roadway connection to Hulseytown Road was discussed in initial planning for the area. Greystone had planned to use this connection to improve electrical redundancy. Paulding County noted that the roadway connection was not likely. However, a utility connection was possible since the property was owned by the Airport.

The total cost estimate for design, right of way and construction is estimated to be well below the threshold required for a formal VE study.

The BC ratio for this project is difficult to calculate since most BC ratios are developed based on a project's effect on congestion in terms of delay or on an assumed safety benefit. The consensus of the group was to leave the BC ratio line in the Concept Report as N/A.

XVI. Funding Responsibilities

The specific funding responsibilities are listed on page 5 of the concept report. In general, Paulding County is paying for Preliminary Engineering and some Right of Way, and GDOT is paying for construction and the remainder of the Right of Way. Note that Paulding County will seek to modify the PFA to transfer most of the programmed money for right of way to construction in the TIP.

XVII. Project Activities Responsibilities

The project activities responsibilities are listed on page 5 of the concept report. Paulding County DOT is directly responsible for Right of Way acquisition, Right of Way funding,

letting to contract, and supervision of construction. Paulding County is responsible, through its consultant, for design and environmental studies, documents and permits.

The utility companies are responsible for relocation and construction of utilities. The construction contractor is responsible for providing material pits.

XVIII. Coordination

The required concept report coordination items are listed on pages 5 and 6 of the concept report. Additional coordination is required between RS&H and another consultant on the adjacent airside development project. The key elements of coordination required are in the areas of stormwater treatment, grading and fill material availability.

XIX. Scheduling

The specific task durations for this project are on page 6 of the concept report. Currently, the key dates for this project are the following: Approved CE – April 2011, PFPR – May 2011, R/W Approval – August 2011, FFPR – November 2011, Construction Letting – January 2012.

XX. Alternates Considered

No Build option; however, it does not meet the need and purpose of this proposed project.

XXI. Cost Estimate

The initial project cost estimate is \$4,365,731.03. The vast majority of the construction cost is attributed to paving and earthwork costs. While the paving quantities associated with the cost are relatively fixed, the earthwork quantities could vary greatly, depending on whether the airside project or this roadway project proceeds first.

XXII. Comments from Attendees

a. Local Government Representatives

No local government representatives attended

b. Engineering Services

Steve Carter of engineering services inquired as to who will review the project, the district or downtown? Scott Greene of Paulding DOT said that the standard review process will be required.

c. Office of Financial Management

No representative present

d. Traffic Safety and Design

A representative from GDOT Traffic Ops asked if a signal may be warranted anywhere on the project. Jeff VanDyke summarized the findings of the Draft Traffic Memo, which states that a signal will not be warranted at the opening year of the project, but at some point may be warranted at the intersection of Airport Parkway and U.S. 278.

Scott Greene responded that the right turn movement off of Airport Parkway to Eastbound U.S. 278 would be the predominant movement. The County will be responsible for monitoring the traffic at that intersection and determining when the warrants for a signal are met.

e. Environmental

The representative from OES reminded the group that this project is on schedule for a meeting with FHWA in August to discuss the environmental document.

f. Planning

No comments or questions

g. District

No comments or questions

h. Right of Way

There are two parcels on these projects. One is owned by the Airport Authority and will be deeded to the County. The other parcel is privately held and will be acquired during the right of way acquisition phase. A representative from GDOT R/W suggested that the acquisition schedule should be increased from 2 months to 6 months for the one parcel.

i. Utilities

No comments or responses from the GDOT Utilities Office. The comments from the specific utility companies and Paulding DOT are included above in section XV.

j. Other Comments or Concerns – Open Discussion

Other key discussion topics included the following:

- Justification of 11' lanes since little truck traffic is expected
- Paulding County needs to determine which project will have priority over the available fill material
- The consultant needs to split the quantities into different detail estimates based on the two different funding sources
- Paulding County wishes to have redundancy available with its electric utility.

Attachment 6: Meeting Minutes

Kick-Off Meeting
Paulding County Technology Park
Local Access Road
July 28, 2006

Meeting Notes

Attendees:

James Thompson, DCA	jthompso@dca.state.ga.us
Blake Swafford, Paulding Co.	bswafford@paulding.gov
Scott Greene, Paulding Co.	sgreene@paulding.gov
Lloyd Frasier, CVRDC	lfrasier@cvrdc.org
George Merritt, FHWA	george.merritt@fhwa.dot.gov
Cindy VanDyke, GDOT	cindy.vandyke@dot.state.ga.us
David Moore, GDOT	david.moore@dot.state.ga.us
Ulysses Mitchell, GDOT	ulysses.mitchell@dot.state.ga.us
Danny Roberson, GDOT	danny.roberson@dot.state.ga.us

Project Description:

The project is the construction of a roadway to service a Technology Park. The Technology Park is to be located on land currently owned by the City of Atlanta across from the proposed airport. Land is to be purchased from current owners by IBA and deeded/sold to the county.

Agenda:

* Federal Requirements

- Project Full Oversight- Has to be reviewed by FHWA before going out for bid. FHWA should be invited to all meetings, and Letting needs to be modeled after the state's process.
- PE and ROW acquisition must meet federal requirements- Consultants used for NEPA work and PE must be pre-qualified. If sponsor wants to use federal money for PE work they must follow the Brooks Act. FHWA will review PS&E and approve before going out to bid.

* ARC Requirements

- Work to begin within 18 months- Work does not have to be completed during this time, but ARC would like to see the start of construction within 18 months.
- Design must meet State Standards- Design must meet Green Book requirements. It is preferred that design meets "desirable standards".

- Change in Scope must be approved by ARC- If location of project is changed an application modification must be submitted to ARC for approval.

- Project elements that are not eligible for funding-Fire hydrants and the installation and upgrade of utilities are not eligible for funding. However, utility relocation is eligible. Plan development, ROW acquisition and Construction are strictly for roadway work, no site development or infrastructural work is eligible for funding.

* DOT Requirements

- Invoicing and 20% match- County will pay 100% of PE and ROW cost. All federal funds will go toward construction cost, with county paying the 20% match toward construction.

- Review of plans- To be handled by District Six.

- Project letting- County would like to have local let. Planning will check to see if this is possible.

- Project agreement- District six will develop Project Framework Agreement (PFA) for County's signature.

- District contacts- David Ray 770-387-362

* Other Concerns

Paulding County has to be in control of the project.

There needs to be a clear documentation of project cost separating cost of Technology park from that of IBA work.

GDOT needs to ensure the roadway will be maintained by Paulding Co.

Follow-up:

District Six and FHWA to check to see if ROW acquisition by IBA needs to follow federal requirements, Uniform Act.

Planning to see if project can be done as local let.

Planning to have federal funds moved to construction with PE and ROW as locally funded.

Meeting called
by:
Paulding DOT
RS&H

Type of meeting:
Preliminary
Project Meeting

Attendees: Scott Greene – Paulding County DOT
 Erica Parish – Paulding County DOT
 Blake Swafford – Paulding County Airport Authority
 Jim Hullett – RS&H Project Manager
 Eric Seckinger – RS&H Project Engineer

Date: 12-14-2009
Time: 2:30 p.m. to 4:30 p.m.

Agenda

- 1) Discuss contract NTP/Contract Status
- 2) Discuss project

Purpose of meeting:

The purpose of the meeting is to discuss the overall status of the project. The discussions included an update of the contract and NTP status, project design criteria, work performed to date (primarily environmental), project schedule, and to share information critical to designing a successful project.

Issue 1: Contract/Additional NTP

History: RS&H is currently not under contract with Paulding County; however a conditional NTP to begin environmental work was issued in September 2009. This conditional NTP limited the project team to only performing \$49,999 worth of effort. Currently, the project team has performed most of the tasks that can be performed before beginning concept and database tasks.

Discussion: Paulding County is still awaiting a PFA with GDOT prior to signing the contract. Paulding will issue an NTP for Phases I-III for the full amount contracted for those phases.

Action Items:

- 1) Issue NTP for Phases I-III – Paulding County
- 2) Check on PFA status – Paulding County

Issue 2: Discuss Project

Discussion: To date, the RS&H Team has completed several time sensitive environmental tasks, and has begun to develop typical sections, preliminary horizontal and vertical layouts to approximate limits of construction. The approximate limits of construction are critical to beginning the next series of required tasks to move the project forward.

RS&H's goal for the meeting was to determine and verify the design criteria and to determine the project requirements to design a facility that accomplishes the goals of Paulding DOT and the Industrial Building Authority.

Issues: The key project issues are listed below.

- 1) Determine design speed/criteria.
- 2) Design constraints/requirements
 - a. Keep roadway higher than terminal (for view)
 - i. Review need for retaining wall
 - ii. Max driveway for terminal (8-9% per Blake)
 - iii. Keep grade near hangars west of terminal
 - b. LPA has rough grading plan for airside (south of main roadway)
 - i. Schedule meeting with LPA
 - ii. Develop profile slightly higher than airside development
 - iii. Determine if LPA has newer mapping
 - c. Typical sections
 - i. Use 14' paved (12' travel, 2' paved shoulder)
 - ii. Full depth shoulder
 - iii. Use flatter front slopes than 4:1
 - iv. Use same roadside criteria for both typical sections
 - v. Grade roadside to provide developable parcels
 1. Use excess fill in applicable areas
 2. Avoid environmentally sensitive areas
 - d. Stormwater
 - i. LPA has designed a series of linear stormwater ponds along airside development
 - ii. Determine pond requirements for areas that are below the LPA linear ponds
 - iii. Treat equivalent volume or treat all runoff
- 3) Parcel acquisition (Parcel #9449)
 - a. Paulding to either acquire the entire parcel or only what's required for construction
 - i. If only required area is acquired, then RS&H will supply worst case construction limits
- 4) Need for Value Engineering (VE)
 - a. VE is likely required, although not scoped
- 5) Determine proper invoice format. (GDOT/RS&H)
 - a. RS&H will supply an invoice in their format for Paulding to determine if the RS&H format is acceptable.
 - b. If not, RS&H will use GDOT format.

Action Items: The action items are listed below.

- 1) Determine design speed (likely 25 or 35 mph) – Erica Parish
- 2) Review retaining wall cost versus benefit – Eric Seckinger (wall not required, the proposed roadway is far enough away from the parking lot so that even at 6'-8' higher a wall is not required)
- 3) Redesign profile based on new design constraints (after LPA meeting) – Eric Seckinger (redesigned per files from LPA, additional tweaking will be required after 1-6-10 meeting)
- 4) Schedule project meeting with LPA – Blake Swafford to coordinate with LPA, Jim Hullett/Eric Seckinger to coordinate with RS&H design team
- 5) Redesign typical sections – Eric Seckinger (complete)
- 6) Determine stormwater treatment requirements – Eric Seckinger (researching)

Paulding County Business and Technology Park: 12-14-2009 Preliminary Project Meeting

- 7) Provide Paulding with limits of construction for parcel acquisition – Eric Seckinger (will provide after 1-6-10 meeting)
- 8) Determine requirements for VE – Erica Parish
- 9) Provide RS&H invoice format to Paulding for approval – Eric Seckinger/Jim Hullett
- 10) Determine preferred invoice format – Erica Parish
- 11) Give Agility Surveying NTP to begin survey – Eric Seckinger
 - a. Provide updated files after meeting with LPA

Meeting called by:
Paulding DOT

Type of meeting: Preliminary Project Coordination Meeting

Attendees:

- Scott Greene – Paulding County DOT
- Erica Parish – Paulding County DOT
- Jacob Hughes – Paulding County DOT
- Blake Swafford – Paulding County Airport Authority
- Jim Hullett – RS&H Project Manager
- Eric Seckinger – RS&H Project Engineer
- Lori Kennedy – KEA Environmental Lead
- Bruce Hart – KEA Ecologist
- Gordon Murphy – LPA Environmental Lead
- David Skurky – LPA Project Engineer

Date: 01-06-2010

Time: 2:00 p.m. to 3:30 p.m.

Agenda

OPEN DISCUSSION

Project Coordination

- Ensure that RS&H and LPA deliver projects that are compatible with Paulding's requirements.
- Discuss how the two projects will affect the environmental document.
- Discuss stormwater treatment requirements.

Purpose of meeting:

The purpose of the meeting is to coordinate between the airside development project and the industrial park roadway project. The discussions included descriptions of the airside and roadway projects, the status of the airside environmental document, coordination between the two projects, and the progress of the industrial park roadway project.

Project Coordination

History: RS&H is currently developing concept plans and performing environmental studies for the Paulding County Business and Technology Park. The LPA Group is also currently developing plans for additional airside development at the site of the existing airport. In the interest of delivering a roadway project that is complementary to the airside development, it is critical that RS&H, LPA Group, and Paulding County coordinate frequently and often.

Key Discussion Items:

- 1) The LPA Group is currently working to submit a supplemental EA for approval of the proposed airside development.
 - a. Will likely be submitted within one month
 - b. EA area includes roadway access to terminal
 - c. EA does not include industrial park access for the airside development.
 - d. EA includes filling small creek between the airport and the roadway project
- 2) RS&H inquired if there were existing plans for development in the business and technology park because of the additional environmental coordination required to determine impacts from development
 - a. Paulding County does not have existing plans for development outside of marketing brochures.
 - b. RS&H will use excess excavated material to flatten the roadside slopes which will provide roughly grades sites for future development
 - c. The excess fill material will not be placed in environmentally sensitive areas such as streams or wetlands.
- 3) RS&H and LPA discussed stormwater treatment requirements
 - a. This area is classified as a priority area 2 in the Etowah Conservation Habitat Plan area
 - b. This area requires detention and treatment as outlined in the Etowah HCP Stormwater Treatment manual
 - c. LPA stated that the last pond in the linear pond sequence will be adequately sized for detention of the airside and roadway stormwater.
 - d. LPA stated that their infiltration pond would not be able to treat any of the roadway runoff, therefore the roadway project will have to include its own infiltration BMP's
- 4) RS&H, Paulding County and LPA discussed several design issues
 - a. At an earlier meeting Blake Swafford of Paulding County requested that the roadway in front of the terminal be +8-9' above the terminal elevation. This design was difficult to achieve since the first stormwater pond is immediately east of the terminal and at an elevation 8' below the terminal elevation.
 - b. The grade differences between the road, terminal parking lot and the first pond make the roadway grade requirements infeasible.
 - c. Blake stated that the 8-9' was his preference, but gave RS&H the latitude to lower the grade, while still staying above the terminal parking lot.
 - d. LPA stated that they can make some adjustments to the pond elevations.
 - e. The preliminary profile has been adjusted and is approximately 4-5' above the terminal parking lot..
- 5) Potential ARRA (stimulus) project
 - a. Blake Swafford is attempting to secure ARRA monies to construct the roadway to the terminal access
 - b. This part of the roadway is permitted through the airport EA
 - c. Blake will know by Friday 1-8-10 if this project will be funded
 - d. RS&H will have to develop construction plans within 90 days

Action Items:

- 1) Provide airport and airside EA limits – LPA Group
- 2) Provide copy of airport EA – LPA Group
- 3) Provide concept level hydraulic report – LPA Group
- 4) Check and provide references to future land use in the EA – LPA Group
- 5) Provide survey to RS&H – LPA Group

Meeting Minutes

Project:	Paulding County Business and Technology Park
Type of Meeting:	Project Status Meeting
Meeting Date:	March 26, 2010
Meeting Requested By:	RS&H / Paulding DOT
Attendees:	Scott Greene – Paulding County Department of Transportation (PCDOT) Erica Parish – PCDOT Eric Seckinger – RS&H Project Engineer Jeff VanDyke – RS&H Highway Design Manager
Time:	2:30 p.m. to 4:15 p.m.
Minutes Prepared By:	Jeff VanDyke
Agenda	
<ul style="list-style-type: none">• PFA Status• LPA Coordination• Design Criteria.	

Purpose of Meeting:

The purpose of the meeting is to update Paulding County DOT on the status of the Paulding County Business and Technology Park project and coordination efforts to date. In addition, RS&H would like to review some of the project design criteria.

Project Framework Agreement (PFA)

- The PFA has not been executed. PCDOT is continuing to work with GDOT to sort out funding reallocation issues.
- RS&H noted that there are only a few items remaining without GDOT participation. The traffic memo will likely be one of the last items for RS&H until GDOT begins participation.
- PCDOT is planning on a meeting with GDOT to discuss the PFA status.

Coordination with The LPA Group

- RS&H received the airport environmental data from LPA.
- LPA appears to be ahead of the Technology Park with their designs for the hanger, terminal, and pond area. Therefore, RS&H will match the LPA work.
- LPA plans to design the ponds to accommodate the treatment of the roadway runoff.

Design Criteria

- **Typical Section** – Eric Seckinger submitted a new typical section for review and comment. PCDOT feels the new typical is acceptable. It will get additional review at the Concept Meeting.
- **Super Elevation** – The group discussed using 0.04 or 0.06 SE tables. Using the 0.06 max table, while not exceeding 0.04 SE, limits 35 mph curves to a 1070 foot radius. This large curve will not fit within the constraints of the first project curve. Using 0.04 max tables may be a conflict with the roadway classification. RS&H agreed to continue to review the situations and discuss at the concept meeting.
- **Profile** – The maximum grades and were discussed. Preliminary profiles with 5%, 6%, and 7% max were reviewed. PCDOT preferred the steeper grades to reduce earthwork. The steeper grades are a consideration for roadway classification. RS&H agreed to continue to review the situations and discuss at the concept meeting.

General Discussion

- Eric Seckinger noted that he encountered a contractor while on a site visit. The contractor was looking at the hanger / terminal area expansion work. They are planning on using the large earthwork mound at the start of the Technology Park project for fill in the hanger area. RS&H anticipated that the earthwork would be available for the Technology Park. PCDOT will investigate with the Airport Authority.

Action Items

- RS&H – Continue to study SE and profile issues in preparation for discussion at Concept Meeting
- RS&H – Prepare Traffic memo.
- PCDOT – Contact Airport Authority to determine the status of earthwork along the project.
- PCDOT – Continue coordination with GDOT on PFA

Attachment 7: PFA



JANA,
C: FILE
ERICA

April 1, 2010

Paulding County Department of Transportation
240 Constitution Blvd
Dallas, Georgia 30132

Attn: Mr. Scott Green, Director Paulding County Department of Transportation

SUBJECT: Notice to Proceed

RE: CSMSL-0007-00(285), PI# 0007285, Paulding County
Paulding Business Technology Park & Roadway Improvements
CSAPD-0008-00(037), PI#0008037, Paulding County
Paulding County Technology Park Local Access Road

Dear Mr. Green,

The Department of Transportation hereby issues you a "Notice to Proceed," effective April 1, 2010, to begin Phases 1, 2, 3, and 4 on this project. Mr. Greg Hood, District Planning & Program Engineer, will coordinate with the County on the Project Frame Agreement once the funds transfer process is completed.

All liaison coordination will be made through Cherie Marsh of the District Six Design Office. The phone number for the office is (770) 387-3618.

Yours truly,

A handwritten signature in cursive script that reads "Curtis D. Comer".

Curtis D. Comer, P.E.
Asst. District Engineer – District Six

CDC:CLM

CC: Erica Parish, Preconstruction Manager, Paulding County
File

Erica hand
delivered to
GDOT
10/13/09

AGREEMENT
BETWEEN
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
AND
PAULDING COUNTY
FOR
TRANSPORTATION FACILITY IMPROVEMENTS

This Framework Agreement is made and entered into this ____ day of _____, 20__, by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and Paulding County, acting by and through its Mayor and City Council or Board of Commissioners, hereinafter called the "LOCAL GOVERNMENT".

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to improve the transportation facility described in Attachment A, attached and incorporated herein by reference and hereinafter referred to as the "PROJECT"; and

WHEREAS, the LOCAL GOVERNMENT has represented to the DEPARTMENT a desire to participate in certain activities including the funding of certain portions of the PROJECT and the DEPARTMENT has relied upon such representations; and

WHEREAS, the DEPARTMENT has expressed a willingness to participate in certain activities of the PROJECT as set forth in this Agreement; and

WHEREAS, the Constitution authorizes intergovernmental agreements whereby state and local entities may contract with one another "for joint services, for the provision of services, or for the joint or separate use of facilities or equipment; but such contracts must deal with activities, services or facilities which the parties are authorized by law to undertake or provide." Ga. Constitution Article IX, §III, ¶I(a).

NOW THEREFORE, in consideration of the mutual promises made and of the benefits to flow from one to the other, the DEPARTMENT and the LOCAL GOVERNMENT hereby agree each with the other as follows:

1. The LOCAL GOVERNMENT shall by following the procedures in the DEPARTMENT's Local Administered Project Manual contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the preconstruction engineering (design) activities, hereinafter referred to as "PE", all reimburseable utility relocations, all non-reimburseable utilities owned by the LOCAL GOVERNMENT, railroad costs, right of way acquisitions and construction, as specified in Attachment A, attached hereto and incorporated herein by reference. Expenditures incurred by the LOCAL GOVERNMENT prior to the execution of this AGREEMENT or subsequent funding agreements shall not be considered for reimbursement by the DEPARTMENT. PE expenditures incurred by the LOCAL GOVERNMENT after execution of this AGREEMENT shall be reimbursed by the DEPARTMENT once a written notice to proceed is given by the DEPARTMENT.

2. The DEPARTMENT shall contribute to the PROJECT by funding all or certain portions of the PROJECT costs for the PE, right of way acquisitions, reimbursable utility relocations, railroad costs, or construction as specified in Attachment A.

3. It is understood and agreed by the DEPARTMENT and the LOCAL GOVERNMENT that the funding portion as identified in Attachment "A" of this Agreement only applies to the PE. The Right of Way and Construction funding estimate levels as specified in Attachment "A" are provided herein for planning purposes and do not constitute a funding commitment for right of way and construction. The DEPARTMENT will prepare LOCAL GOVERNMENT Specific Activity Agreements for funding applicable to Right of Way or Construction when appropriate.

Further, the LOCAL GOVERNMENT shall be responsible for repayment of any expended federal funds if the PROJECT does not proceed forward to completion due to a lack of available funding in future PROJECT phases, changes in local priorities or cancellation of the PROJECT by the LOCAL GOVERNMENT without concurrence by the DEPARTMENT.

4. The LOCAL GOVERNMENT shall be responsible for all costs for the continual maintenance and operations of any and all sidewalks and the grass strip between the curb and sidewalk within the PROJECT limits.

5. Both the LOCAL GOVERNMENT and the DEPARTMENT hereby acknowledge that Time is of the Essence. It is agreed that both parties shall adhere to the schedule of activities currently established in the approved Transportation Improvement Program/State Transportation Improvement Program, hereinafter referred to as "TIP/STIP". Furthermore, all parties shall adhere to the detailed project schedule as approved by the DEPARTMENT, attached as Attachment B and incorporated herein by reference. In the completion of respective commitments contained herein, if a change in the schedule is needed, the LOCAL GOVERNMENT shall notify the DEPARTMENT in writing of the proposed schedule change and the DEPARTMENT shall acknowledge the change through written response letter; provided that the DEPARTMENT shall have final authority for approving any change.

If, for any reason, the LOCAL GOVERNMENT does not produce acceptable deliverables in accordance with the approved schedule, the DEPARTMENT reserves the right to delay the PROJECT's implementation until funds can be re-identified for right of way or construction, as applicable.

6. The LOCAL GOVERNMENT shall certify that the regulations for "CERTIFICATION OF COMPLIANCES WITH FEDERAL PROCUREMENT REQUIREMENTS, STATE AUDIT REQUIREMENTS, and FEDERAL AUDIT REQUIREMENTS" are understood and will comply in full with said provisions.

7. The LOCAL GOVERNMENT shall accomplish the PE activities for the PROJECT. The PE activities shall be accomplished in accordance with the DEPARTMENT's Plan Development Process hereinafter referred to as "PDP", the applicable guidelines of the American Association of State Highway and Transportation Officials, hereinafter referred to as "AASHTO", the DEPARTMENT's Standard Specifications Construction of Transportation Systems, and all applicable design guidelines and policies of the DEPARTMENT to produce a cost effective PROJECT. Failure to follow the PDP and all applicable guidelines and policies will jeopardize the use of Federal Funds in some or all categories outlined in this agreement, and it shall be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. The LOCAL GOVERNMENT's responsibility for PE activities shall include, but is not limited to the following items:

a. Prepare the PROJECT Concept Report and Design Data Book in accordance with the format used by the DEPARTMENT. The concept for the PROJECT shall be developed to accommodate the future traffic volumes as generated by the LOCAL GOVERNMENT as provided for in paragraph 7b and approved by the DEPARTMENT. The concept report shall be approved by the DEPARTMENT prior to the LOCAL GOVERNMENT beginning further development of the PROJECT plans. It is recognized by the parties that the approved concept may be updated or modified by the LOCAL GOVERNMENT as required by the DEPARTMENT and re-approved by the DEPARTMENT during the course of PE due to updated guidelines, public input, environmental requirements, Value Engineering recommendations,

Public Interest Determination (PID) for utilities, utility/railroad conflicts, or right of way considerations.

b. Prepare a Traffic Study for the PROJECT that includes Average Daily Traffic, hereinafter referred to as "ADT", volumes for the base year (year the PROJECT is expected to be open to traffic) and design year (base year plus 20 years) along with Design Hour Volumes, hereinafter referred to as "DHV", for the design year. DHV includes morning (AM) and evening (PM) peaks and other significant peak times. The Study shall show all through and turning movement volumes at intersections for the ADT and DHV volumes and shall indicate the percentage of trucks on the facility. The Study shall also include signal warrant evaluations for any additional proposed signals on the PROJECT.

c. Prepare environmental studies, documentation, reports and complete Environmental Document for the PROJECT along with all environmental re-evaluations required that show the PROJECT is in compliance with the provisions of the National Environmental Policy Act or the Georgia Environmental Policy Act as per the DEPARTMENT's Environmental Procedures Manual, as appropriate to the PROJECT funding. This shall include any and all archaeological, historical, ecological, air, noise, community involvement, environmental justice, flood plains, underground storage tanks, and hazardous waste site studies required. The completed Environmental Document approval shall occur prior to Right of Way funding authorization. A re-evaluation is required for any design change as described in Chapter 7 of the Environmental Procedures Manual. In addition, a re-

evaluation document approval shall occur prior to any Federal funding authorizations if the latest approved document is more than 6 months old. The LOCAL GOVERNMENT shall submit to the DEPARTMENT all studies, documents and reports for review and approval by the DEPARTMENT, the FHWA and other environmental resource agencies. The LOCAL GOVERNMENT shall provide Environmental staff to attend all PROJECT related meetings where Environmental issues are discussed. Meetings include, but are not limited to, concept, field plan reviews and value engineering studies.

d. Prepare all PROJECT public hearing and public information displays and conduct all required public hearings and public information meetings with appropriate staff in accordance with DEPARTMENT practice.

e. Perform all surveys, mapping, soil investigations and pavement evaluations needed for design of the PROJECT as per the appropriate DEPARTMENT Manual.

f. Perform all work required to obtain all applicable PROJECT permits, including, but not limited to, Cemetery, TVA and US Army Corps of Engineers permits, Stream Buffer Variances and Federal Emergency Management Agency (FEMA) approvals. The LOCAL GOVERNMENT shall provide all mitigation required for the project, including but not limited to permit related mitigation. All mitigation costs are considered PE costs. PROJECT permits and non-construction related mitigation must be obtained and completed 3 months prior to the scheduled let date. These efforts shall be coordinated with the DEPARTMENT.

g. Prepare the storm water drainage design for the PROJECT and any required hydraulic studies for FEMA Floodways within the PROJECT limits. Acquire of all necessary permits associated with the Hydraulic Study or drainage design.

h. Prepare utility relocation plans for the PROJECT following the DEPARTMENT's policies and procedures for identification, coordination and conflict resolution of existing and proposed utility facilities on the PROJECT. These policies and procedures, in part, require the Local Government to submit all requests for existing, proposed, and relocated facilities to each utility owner within the project area. Copies of all such correspondence, including executed agreements for reimbursable utility/railroad relocations, shall be forwarded to the DEPARTMENT's Project Manager and the District Utilities Engineer and require that any conflicts with the PROJECT be resolved by the LOCAL GOVERNMENT. If it is determined that the PROJECT is located on an on-system route or is a DEPARTMENT LET PROJECT, the LOCAL GOVERNMENT and the District Utilities Engineer shall ensure that permit applications are approved for each utility company in conflict with the project. If it is determined through the DEPARTMENT's Project Manager and State Utilities Office during the concept or design phases the need to utilize Overhead/Subsurface Utility Engineering, hereinafter referred to as "SUE", to obtain the existing utilities, the LOCAL GOVERNMENT shall be responsible for acquiring those services. SUE costs are considered PE costs.

i. Prepare, in English units, Preliminary Construction plans, Right of Way plans and Final Construction plans that include the appropriate sections listed in the Plan Presentation Guide, hereinafter referred to as "PPG", for all phases of the PDP. All drafting and design work performed on the project shall be done utilizing Microstation and CAiCE software respectively using the DEPARTMENT's Electronic Data Guidelines. The LOCAL GOVERNMENT shall further be responsible for making all revisions to the final right of way plans and construction plans, as deemed necessary by the DEPARTMENT, for whatever reason, as needed to acquire the right of way and construct the PROJECT.

j. Prepare PROJECT cost estimates for construction, Right of Way and Utility/railroad relocation along with a Benefit Cost, hereinafter referred to as "B/C ratio" at the following project stages: Concept, Preliminary Field Plan Review, Right of Way plan approval (Right of Way cost only), Final Field Plan Review and Final Plan submission using the applicable method approved by the DEPARTMENT. The cost estimates and B/C ratio shall also be updated yearly if the noted project stages occur at a longer frequency. Failure of the LOCAL GOVERNMENT to provide timely and accurate cost estimates and B/C ratio may delay the PROJECT's implementation until additional funds can be identified for right of way or construction, as applicable.

k. Provide certification, by a Georgia Registered Professional Engineer, that the Design and Construction plans have been prepared under the guidance of the professional engineer and are in accordance with AASHTO and DEPARTMENT Design Policies.

l. Provide certification, by a Level II Certified Design Professional that the Erosion Control Plans have been prepared under the guidance of the certified professional in accordance with the current Georgia National Pollutant Discharge Elimination System.

m. Provide a written certification that all appropriate staff (employees and consultants) involved in the PROJECT have attended or are scheduled to attend the Department's PDP Training Course and Local Administered Project Training. The written certification shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

8. The Primary Consultant firm or subconsultants hired by the LOCAL GOVERNMENT to provide services on the PROJECT shall be prequalified with the DEPARTMENT in the appropriate area-classes. The DEPARTMENT shall, on request, furnish the LOCAL GOVERNMENT with a list of prequalified consultant firms in the appropriate area-classes. The LOCAL GOVERNMENT shall comply with all applicable state and federal regulations for the procurement of design services and in accordance with the Brooks Architect-Engineers Act of 1972, better known as the Brooks Act, for any consultant hired to perform work on the PROJECT.

9. The DEPARTMENT shall review and has approval authority for all aspects of the PROJECT provided however this review and approval does not relieve the LOCAL GOVERNMENT of its responsibilities under the terms of this agreement. The DEPARTMENT will work with the FHWA to obtain all needed approvals as deemed necessary with information furnished by the LOCAL GOVERNMENT.

10. The LOCAL GOVERNMENT shall be responsible for the design of all bridge(s) and preparation of any required hydraulic and hydrological studies within the limits of this PROJECT in accordance with the DEPARTMENT's policies and guidelines. The LOCAL GOVERNMENT shall perform all necessary survey efforts in order to complete the hydraulic and hydrological studies and the design of the bridge(s). The final bridge plans shall be incorporated into this PROJECT as a part of this Agreement.

11. The LOCAL GOVERNMENT unless otherwise noted in attachment "A" shall be responsible for funding all LOCAL GOVERNMENT owned utility relocations and all other reimbursable utility/railroad costs. The costs include but are not limited to PE, easement acquisition, and construction activities necessary for the utility/railroad to accommodate the PROJECT. The terms for any such reimbursable relocations shall be laid out in an agreement that is supported by plans, specifications, and itemized costs of the work agreed upon and shall be executed prior to certification by the DEPARTMENT. The LOCAL GOVERNMENT shall certify via written letter to the DEPARTMENT's Project Manager and District Utilities Engineer that all Utility owners' existing and proposed facilities are shown on the plans with no conflicts 3 months prior to advertising the PROJECT for bids and that any required agreements for reimbursable utility/railroad costs have been fully

executed. Further, this certification letter shall state that the LOCAL GOVERNMENT understands that it is responsible for the costs of any additional reimbursable utility/railroad conflicts that arise on construction.

12. The DEPARTMENT will be responsible for all railroad coordination on DEPARTMENT Let and/or State Route (On-System) projects; the LOCAL GOVERNMENT shall address concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT. If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A" on off-system routes, the LOCAL GOVERNMENT shall be responsible for all railroad coordination and addressing concerns, comments, and requirements to the satisfaction of the Railroad and the DEPARTMENT for PROJECT.

13. The LOCAL GOVERNMENT shall be responsible for acquiring a Value Engineering Consultant for the DEPARTMENT to conduct a Value Engineering Study if the total estimated PROJECT cost is \$10 million or more. The Value Engineering Study cost is considered a PE cost. The LOCAL GOVERNMENT shall provide project related design data and plans to be evaluated in the study along with appropriate staff to present and answer questions about the PROJECT to the study team. The LOCAL GOVERNMENT shall provide responses to the study recommendations indicating whether they will be implemented or not. If not, a valid response for not implementing shall be provided. Total project costs include PE, right of way, and construction, reimbursable utility/railroad costs.

14. The LOCAL GOVERNMENT, unless shown otherwise on Attachment A, shall acquire the Right of way in accordance with the law and the rules and regulations of the FHWA including, but not limited to, Title 23, United States Code; 23 CFR 710, et. Seq., and 49 CFR Part 24 and the rules and regulations of the DEPARTMENT. Upon the DEPARTMENT's approval of the PROJECT right of way plans, verification that the approved environmental document is valid and current, a written notice to proceed will be provided by the DEPARTMENT for the LOCAL GOVERNMENT to stake the right of way and proceed with all pre-acquisition right of way activities. The LOCAL GOVERNMENT shall not proceed to property negotiation and acquisition whether or not the right of way funding is Federal, State or Local, until the right of way agreement named "Contract for the Acquisition of Right of Way" prepared by the DEPARTMENT's Office of Right of Way is executed between the LOCAL GOVERNMENT and the DEPARTMENT. Failure of the LOCAL GOVERNMENT to adhere to the provisions and requirements specified in the acquisition contract may result in the loss of Federal funding for the PROJECT and it will be the responsibility of the LOCAL GOVERNMENT to make up the loss of that funding. Right of way costs eligible for reimbursement include land and improvement costs, property damage values, relocation assistance expenses and contracted property management costs. Non reimbursable right of way costs include administrative expenses such as appraisal, consultant, attorney fees and any in-house property management or staff expenses. The LOCAL GOVERNMENT shall certify that all required right of way is obtained and cleared of obstructions, including underground storage tanks, 3 months prior to advertising the PROJECT for bids.

15. The DEPARTMENT unless otherwise shown in Attachment "A" shall be responsible for Letting the PROJECT to construction, solely responsible for executing any agreements with all applicable utility/railroad companies and securing and awarding the construction contract for the PROJECT when the following items have been completed and submitted by the LOCAL GOVERNMENT:

a. Submittal of acceptable PROJECT PE activity deliverables noted in this agreement.

b. Certification that all needed rights of way have been obtained and cleared of obstructions.

c. Certification that the environmental document is current and all needed permits and mitigation for the PROJECT have been obtained.

d. Certification that all Utility/Railroad facilities, existing and proposed, within the PROJECT limits are shown, any conflicts have been resolved and reimbursable agreements, if applicable, are executed.

If the LOCAL GOVERNMENT is shown to LET the construction in Attachment "A", the LOCAL GOVERNMENT shall provide the above deliverables and certifications and shall follow the requirements stated in Chapter 10 of the DEPARTMENT's Local Administered Project Manual.

16. The LOCAL GOVERNMENT shall provide a review and recommendation by the engineer of record concerning all shop drawings prior to the DEPARTMENT review and approval. The DEPARTMENT shall have final authority concerning all shop drawings.

17. The LOCAL GOVERNMENT agrees that all reports, plans, drawings, studies, specifications, estimates, maps, computations, computer files and printouts, and any other data prepared under the terms of this Agreement shall become the property of the DEPARTMENT if the PROJECT is being let by the DEPARTMENT. This data shall be organized, indexed, bound, and delivered to the DEPARTMENT no later than the advertisement of the PROJECT for letting. The DEPARTMENT shall have the right to use this material without restriction or limitation and without compensation to the LOCAL GOVERNMENT.

18. The LOCAL GOVERNMENT shall be responsible for the professional quality, technical accuracy, and the coordination of all reports, designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement. The LOCAL GOVERNMENT shall correct or revise, or cause to be corrected or revised, any errors or deficiencies in the reports, designs, drawings, specifications, and other services furnished for this PROJECT. Failure by the LOCAL GOVERNMENT to address the errors or deficiencies within 30 days of notification shall cause the LOCAL GOVERNMENT to assume all responsibility for construction delays caused by the errors and deficiencies. All revisions shall be coordinated with the DEPARTMENT prior to issuance. The LOCAL GOVERNMENT shall also be responsible for any claim, damage, loss or expense, to the extent allowed by law that is attributable to errors, omissions, or negligent acts related to the designs, drawings, specifications, and other services furnished by or on behalf of the LOCAL GOVERNMENT pursuant to this Agreement.

This Agreement is made and entered into in FULTON COUNTY, GEORGIA, and shall be governed and construed under the laws of the State of Georgia.

The covenants herein contained shall, except as otherwise provided, accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the DEPARTMENT and the LOCAL GOVERNMENT have caused these presents to be executed under seal by their duly authorized representatives.

DEPARTMENT OF
TRANSPORTATION

PAULDING COUNTY

BY: _____
Commissioner

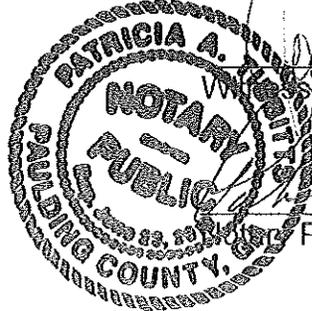
BY: [Signature]
Name
Title

ATTEST:

Treasurer

Signed, sealed and delivered this
13th day of October,
2009, in the presence of:

[Signature]
[Signature]
Public



This Agreement approved by Local Government, the 13th day of October, 2009

Attest
[Signature]
Name and Title

FEIN: _____

ATTACHMENT "A"

CSMSL-0007-00(285), CSAPD-0008-00(037):- Paulding County

Project (PI#, Project #, Description)	Preliminary Engineering		Right of Way			Construction		Utility Relocation	
	Funding	PE Activity by	*Funding of Real Property	Acq. by	Acq. Fund by	*Funding	Letting by	Utility Funding by	Railroad Funding by
PI# 0007285 CSMSL-0007-00(285) Paulding County Technology Park and Roadway Improvements	Federal \$15,000.00 Local Gov. \$350,000.00 > (\$365,000.00) 100% Local Gov.	Local Gov.	(100%) Local Gov. (\$150,000.00) >(\$150,000.00) 100% Local Gov.	Local Gov.	Local Gov.	(100%) Federal (\$1,680,000.00) >(\$1,680,000.00) 100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.
PI# 0008037 CSAPD-0008-00(037) Paulding County Technology Park Local Access Road	Federal \$15,000.00 Local Gov. (126,000.00) > (\$141,000.00) 100% Local Gov.	Local Gov.	100% Local Gov. (42,000.00) > (42,000.00) 100% Local Gov.	Local Gov.	Local Gov.	(80%)Federal (\$983,800.00) (20%) State (\$247,200.00) >(\$1,221,000.00) 100% Local Gov.	Local Gov.	100% Local Gov.	100% Local Gov.

Note: Maximum allowable GDOT participating amounts for PE category shall be shown above. Local Government will only be reimbursed the percentage of the accrued invoiced amounts up to but not to exceed the maximum amount indicated. *R/W and Construction amounts shown are estimates for budget planning purposes only.

ATTACHMENT "B-1"
0007285 – Paulding County

Proposed Project Schedule

Environmental Phase				
Concept Phase				
Preliminary Plan Phase				
Right of Way Phase				

Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
--	--------------------------	-------------------------------------	---	--	--

Annual Reporting Requirements

The Local Government shall provide a written status report to the Department’s Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

ATTACHMENT "B-2"
0008037 – Paulding County

Proposed Project Schedule

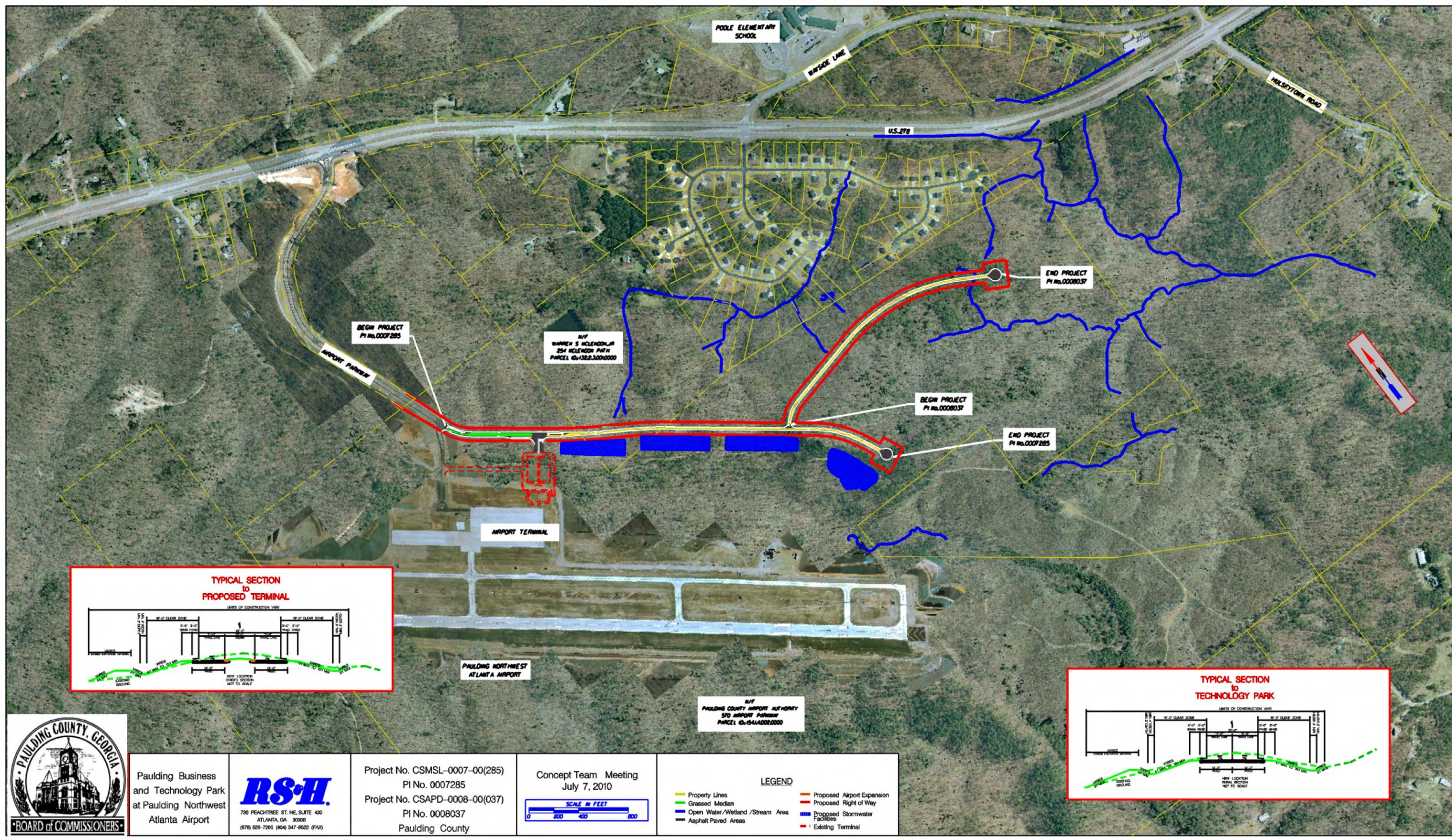
Environmental Phase					
Concept Phase					
Preliminary Plan Phase					
Right of Way Phase					

Deadlines for Responsible Parties	Execute Agreement	Month/Year (Approve Concept)	Month/Year (Approve Env. Document)	Month/Year (Authorize Right of Way funds)	Month/Year (Authorize Const. funds)
--	--------------------------	-------------------------------------	---	--	--

Annual Reporting Requirements

The Local Government shall provide a written status report to the Department’s Project Manager with the actual phase completion date(s) and the percent complete/proposed completion date of incomplete phases. The written status report shall be received by the Department no later than the first day of February of every calendar year until all phases have been completed.

Attachment 8: Project Layout



Paulding Business and Technology Park at Paulding Northwest Atlanta Airport

RS·H
730 PEACHTREE ST. NE, SUITE 430
ATLANTA, GA 30308
(878) 825-7200 (404) 347-9522 (FAX)

Project No. CSMSL-0007-00(285)
PI No. 0007285
Project No. CSAPD-0008-00(037)
PI No. 0008037
Paulding County

Concept Team Meeting
July 7, 2010
SCALE IN FEET
0 200 400 800

LEGEND

- Property Lines
- Grassed Median
- Open Water/Wetland /Stream Area
- Asphalt Paved Areas
- Proposed Airport Expansion
- Proposed Right of Way
- Proposed Stormwater Facilities
- Existing Terminal



Department of Transportation
240 Constitution Blvd • Dallas, Georgia • 30132
(770) 445-4759 phone • (770) 443-7566 fax
www.paulding.gov

SCOTT K. GREENE, PE
Director

May 14, 2012

Mr. Brent Story, P.E.
Office of Design Policy and Support
Georgia Department of Transportation
One Georgia Center, 26th Floor
Atlanta, GA 30308
Attention: Dave Peters

Subject: CMSL-0007-00(285) Paulding County Technology Park Roadway
CAPD-0008-00(037) Paulding County Technology Park Local Access Road
PI No. 0007285 & 0008037
Response to FHWA Concept Report Review

Dear Mr. Story,

The Paulding County Department of Transportation (PCDOT) has reviewed the FHWA Concept Report comments dated February 9, 2012 on the noted project and offers the following responses:

Comment 1

There is a significant increase in the projected traffic for the proposed project. Please provide information on the planned development in the area, that would contribute to the increase in traffic noted in the report (Base year: 2015 = 40vpd, Design Year: 2035 = 5,302vpd).

Response 1

The project traffic volumes and volume projection methodology have been reviewed and approved by GDOT. The methodology is discussed in the Concept Report Attachment 4 Traffic Memorandum. In general, the airport currently has three full time employees and 12 to 24 private planes (varies daily). No project related development is likely to occur before the project is open in 2015 because there is no access to the potential building sites. This level of activity generates the low 2015 volumes noted in the Concept Report.

As discussed on page 3 and Appendix C of Concept Report Attachment 4 Traffic Memorandum, traffic volume projections are based on 890,000 square feet (SF) gross floor area. This estimated area was furnished by the Paulding County Industrial Building Authority (IBA) and is based on the following building assumptions: 2 – 50,000 SF Sites, 3 – 80,000 SF Sites, 2 – 100,000 SF Sites, 1 – 150,000 SF Site, and 1 – 200,000 ST Site located along the proposed access roads on the approximately 110 acre site.

Comment 2

Please verify if there are any plans to extend either of the roadways constructed for the proposed project, with respect to the anticipated growth for the area within or beyond the design year. If the roadways are expected to be extended or provide a connection to a nearby high volume route, please provide the details of the possible connection or extension.

Response 2

PCDOT / IBA do not foresee extending either roadway during the 20 year design of this project. The nearest road, other than back to US 278, is Hulsetown Road which has a 2011 traffic volume of 430 vpd. The feasibility of this connection has not been studied and no details are available.

Comment 3

It is noted within the concept report that a Transportation Management Plan (TMP) is not anticipated for the proposed project. Please take note that a TMP is required for all federal aid projects. However, GDOT should determine the appropriate level of TMP for the proposed project. Please ensure that a TMP is prepared for the proposed project.

Response 3

As noted in the Concept Report Template ...“significant” projects require the development of a Transportation Management Plan (TMP)... The Need for a TMP was discussed at the July 2010 Concept Team Meeting and the group quickly concurred that a TMP was not required. The project was not considered “significant” as it is simply a two lane new location cul-de-sac. In addition, existing airport traffic does not require any staging for the construction of this project.

Comment 4

Within the Environmental Concerns Section, there seems to be some uncertainty in the type of Section 404 permit required and timeframe for which the Section 404 permit will be acquired. Please provide a updated status of the Section 404 permit required for the proposed project with respect to the project program dates identified (Base year: 2015, Design Year: 2035).

Response 4

Since the initial concept report preparation, the construction limits have been refined. Impacts to waters and wetlands of the US are expected. A permit will be required from the U.S. Army Corps of Engineers (ACOE). Since impacts are less than 1.0 acre, a Nationwide Permit (NWP) is anticipated. The permit type does not affect the environmental document approval schedule. However, the time duration of one (1) year for an Individual Permit is no longer applicable.

Comment 5

It is noted that a VE Study is not required for the subject proposed project. Considering the overall cost of the proposed project noted on the attached Project Status Reports, please verify the requirement of a VE Study with respect to the GDOT policy for VE Studies.

Response 5

When both projects are added together, the estimated construction and right-of-way cost shown in Attachment 2 of the Concept Report exceed the \$10 million dollar threshold for VE Studies. Right-of-way, including contingencies and administration, is \$5.7 million for two parcels. One of the parcels is owned by Paulding County Industrial Building Authority (IBA). The IBA property is approximately 90% of the right-of-way area or \$5.1 million of the right-of-way cost estimate. The IBA right of way will be simply deeded from one portion of the Paulding Count Government (IBA) to another portion of Paulding County Government (County Commissioners) at no cost. GDOT has no mechanism for adjusting the right-of-way cost for this intergovernmental land transfer. This issue was discussed at the Concept Team meeting. Since the real total cost will be well below the threshold for a VE study, a VE study is not anticipated.

Comment 6

Please explain why a Benefit/Cost Ratio is not applicable for the subject project.

Response 6

Requirements for Benefit /Cost Ratio calculations were removed from the Preliminary Plan Development process in approximately 2009. They are currently only required for construction contract incentives.

Comment 7

The Project Activities Responsibilities Section indicates that various activities will be accomplished by Paulding County DOT (Consultant). Furthermore, the project status reports indicate that the projects will use federal funds for preliminary engineering and construction. Please ensure that the proper federal procedures are followed to obtain consultant services to complete the identified project activities.

Response 7

Proper federal procedures were followed to obtain consultant services for this project.

Comment 7a

- a. The Scheduling Section indicates that various project activities have commenced but will not be completed until 2013 or 2014. Please verify that the consultant services were appropriately obtained, with respect to the type of funding for the proposed project.

Response 7a

Proper federal procedures were followed to obtain consultant services for this project.

Comment 8

Please provide information on the efforts made to determine the type of ACOE Permit required for the proposed project.

Response 8

See response 4.

Comment 9

A section for Context Sensitive Solutions was not incorporated into the concept report. Please review and revise the concept report in accordance to GDOT's policy on the format of concept reports.

Response 9

The Concept Report for this project was signed and routed for approval in August 2011. At that time, the Department's Concept Report Template did not include a Context Solution section. The Context Sensitive Solution section was added in the fall of 2011 for implementation on all Concept Reports submitted after January 1, 2012. In addition, no issues have been identified that would require a context sensitive solution.

Comment 10

The typical section provided in the report does not indicate the composition of the pavement sections. Please revise the typical sections to reflect the anticipated pavement design to accommodate the design traffic volume and with consideration of the anticipated types of vehicles that will utilize the facilities.

Response 10

Typical sections are not traditionally detailed during the Concept Phase so as not to commit the project to an un-approved pavement design. The Pavement Design is submitted, reviewed, and approved in later phases of the project when geotechnical information is available. For the purposes of the concept phase construction cost estimate, an asphalt pavement section was assumed which contained the following: 135 lbs/sy 9.5mm superpave, 220 lbs/sy 19mm superpave, 440 lbs/sy 25 mm superpave and 8" GAB.

Comment 11

The crash data provided in the Need and Purpose for the proposed project does not indicate the types of crashes. Please include the types of crashes that occurred for the crash history reported.

Response 11

A table showing the types of crashes on US 278 has been added to the Concept Report Attachment 1 Need and Purpose.

Comment 11a

- a. The traffic volumes noted for the proposed project does also indicate there will be an increase in the number of vehicles turning into the airport facilities from US 278. Therefore, the project should also ensure that the turning lanes (number of turn lanes, location of turn lanes, vehicle storage, etc.) from and to US278 are adequate to support the projected volumes to maintain and/or improve safety along the route. Please determine if any additional improvements are necessary for the proposed project.

Response 11a

As discussed in the Concept Report Attachment 4 Traffic memorandum, the US 278 and Airport Parkway intersection is adequate for existing and opening year conditions. Future operations of the intersection are dependent on the pace of development adjacent to the airport. Due to the slow pace of the economic recovery and lack of access to potential building sites, attracting potential development has been difficult. PCDOT will monitor and study the need for operational improvements to the US 278 and Airport Parkway Intersection to be implemented at the appropriate time.

Comment 12

The various environmentally related items included in the Need and Purpose section should be closely coordinated with the GDOT Office of Environmental Services to ensure that the related information is properly presented. Please coordinate as necessary with GDOT on the environmental information presented.

Response 12

The Concept Report Attachment 1 Need and Purpose is a Planning Level document. It is not intended to be the Environmental Document Need and Purpose. The Environmental Document Need and Purpose will be closely coordinated with GDOT Office of Environmental Services.

Comment 13

On page 13 of the Need and Purpose Logical Termini section, the Code of Federal Regulations is incorrectly referenced as 23CRF. Please revise to correctly reference as 23CFR.

Response 13

CFR has been corrected on page 13 of the Concept Report Attachment 1 Need and Purpose.

Comment 14

The proposed project is described to be a new location roadway in the Appalachian Region. Please verify if lighting is not needed, as indicated in the document, for the proposed project.

Response 14

As discussed at the July 2010 Concept Team Meeting, lighting is not required. Industrial parks typically do not require lighting as they are primarily used during regular business hours.

Comment 15

Please verify and update the status of the adjoining projects noted in Table 6, as necessary.

Response 15

The Table 6 from the Concept Report Attachment 1 Need and Purpose has been verified.

Comment 16

In the July 7, 2010 Concept Team Meeting Minutes, it is noted that the roadway was previously classified as an Industrial Collector. Please explain why the roadway classification was previously identified as an Industrial Collector. Also, please explain why the classification was changed to Rural Local Road.

Response 16

As discussed at the Concept Team Meeting, the Airport Entrance Road had not been classified by GDOT during the initial stages of the project development. It was incorrectly initially assumed that the roadway project would be classified as an Industrial Collector. Prior to the Concept Team Meeting, GDOT completed its classification determination and the roadway was classified as a Rural Local Road.

Please let us know if you need additional information.

Sincerely,



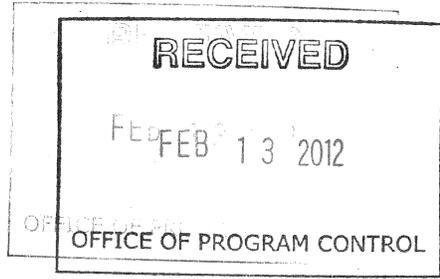
Scott K. Greene, P.E.

Paulding County Department of Transportation

CC: David Austin, Chairman
Mike L. Jones, P.E., County Administrator
Blake Swafford, Executive Director Paulding County Industrial Building Authority



Federal Highway Administration
Georgia Division



Route Slip

Date: 2/9/12

Routing Symbol: **GDOT**
Dave Peters – Office Of Design Policy & Support

	Per Your Request		For Your Signature
	For Your Information		Comment
	Per Our Conversation	XX	Take Appropriate Action
	Note and Return		Prepare Reply for Signature of
	Discuss With Me		For Your Use
	For your Approval		

Remarks:

District 3:

Project: MSL00-0003-00(246), Meriwether & Troup Counties

Concept Report: 14.947 miles of I-85/SR 403 widening from north of SR 109(MP 18.312) in Troup County to north of Forest Road (MP 33.259) in Meriwether County.

District 6:

Project: CSMSL-0007-00(285) & CSAPD-0008-00(037), Paulding County

Concept Report: 1.1 miles of two new location roadways for the Paulding County Business and Technology Park Roadway and Paulding County Local Access Road.

From: Telephone: (404) 562-3638

Routing Symbol: FHWA GA Division - HPE
Christy Poon-Atkins, P.E. - FHWA



U.S. Department
of Transportation
**Federal Highway
Administration**

Georgia Division

February 9, 2012

61 Forsyth Street SW
Suite 17T100
Atlanta, Georgia 30303
Phone 404-562-3630
Fax 404-562-3703
Georgia.fhwa.@fhwa.dot.gov

In Reply Refer To:
HPE-GA

Mr. Keith Golden, P.E., Commissioner
Georgia Department of Transportation
One Georgia Center, 600 West Peachtree Street, NW
Atlanta, GA 30308

Dear Commissioner Golden:

With respect to the proposed project of approximately 1.1 miles of two new location roadways for the Paulding County Business and Technology Park Roadway and Paulding County Local Access Road, Projects CSMSL-0007-00(285) and CSAPD-0008-00(037); we have reviewed and have comments on the Concept Report submitted. Please review and address the comments noted below for the subject project document.

Projects CSMSL-0007-00(285) & CSAPD-0008-00(037), Paulding County:

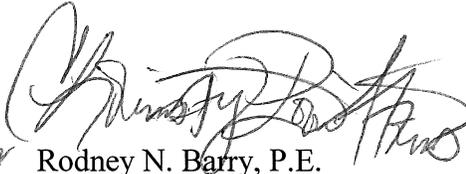
1. There is a significant increase in the projected traffic for the proposed project. Please provide information on the planned development in the area, that would contribute to the increase in traffic noted in the report (Base year: 2015 = 40vpd, Design Year: 2035 = 5,302vpd).
2. Please verify if there are any plans to extend either of the roadways constructed for the proposed project, with respect to the anticipated growth for the area within or beyond the design year. If the roadways are expected to be extended or provide a connection to a nearby high volume route, please provide the details of the possible connection or extension.
3. It is noted within the concept report that a Transportation Management Plan (TMP) is not anticipated for the proposed project. Please take note that a TMP is required for all federal aid projects. However, GDOT should determine the appropriate level of TMP for the proposed project. Please ensure that a TMP is prepared for the proposed project.
4. Within the Environmental Concerns Section, there seems to be some uncertainty in the type of Section 404 permit required and timeframe for which the Section 404 permit will be acquired. Please provide a updated status of the Section 404 permit required for the proposed project with respect to the project program dates identified (Base year: 2015, Design Year: 2035).

5. It is noted that a VE Study is not required for the subject proposed project. Considering the overall cost of the proposed project noted on the attached Project Status Reports, please verify the requirement of a VE Study with respect to the GDOT policy for VE Studies.
6. Please explain why a Benefit/Cost Ratio is not applicable for the subject project.
7. The Project Activities Responsibilities Section indicates that various activities will be accomplished by Paulding County DOT (Consultant). Furthermore, the project status reports indicate that the projects will use federal funds for preliminary engineering and construction. Please ensure that the proper federal procedures are followed to obtain consultant services to complete the identified project activities.
 - a. The Scheduling Section indicates that various project activities have commenced but will not be completed until 2013 or 2014. Please verify that the consultant services were appropriately obtained, with respect to the type of funding for the proposed project.
8. Please provide information on the efforts made to determine the type of ACOE Permit required for the proposed project.
9. A section for Context Sensitive Solutions was not incorporated into the concept report. Please review and revise the concept report in accordance to GDOT's policy on the format of concept reports.
10. The typical section provided in the report does not indicate the composition of the pavement sections. Please revise the typical sections to reflect the anticipated pavement design to accommodate the design traffic volume and with consideration of the anticipated types of vehicles that will utilize the facilities.
11. The crash data provided in the Need and Purpose for the proposed project does not indicate the types of crashes. Please include the types of crashes that occurred for the crash history reported.
 - a. The traffic volumes noted for the proposed project does also indicate there will be an increase in the number of vehicles turning into the airport facilities from US 278. Therefore, the project should also ensure that the turning lanes (number of turn lanes, location of turn lanes, vehicle storage, etc.) from and to US278 are adequate to support the projected volumes to maintain and/or improve safety along the route. Please determine if any additional improvements are necessary for the proposed project.
12. The various environmentally related items included in the Need and Purpose section should be closely coordinated with the GDOT Office of Environmental Services to ensure that the related information is properly presented. Please coordinate as necessary with GDOT on the environmental information presented.
13. On page 13 of the Need and Purpose Logical Termini section, the Code of Federal Regulations is incorrectly referenced as 23CRF. Please revise to correctly reference as 23CFR.
14. The proposed project is described to be a new location roadway in the Appalachian Region. Please verify if lighting is not needed, as indicated in the document, for the proposed project.
15. Please verify and update the status of the adjoining projects noted in Table 6, as necessary.

16. In the July 7, 2010 Concept Team Meeting Minutes, it is noted that the roadway was previously classified as an Industrial Collector. Please explain why the roadway classification was previously identified as an Industrial Collector. Also, please explain why the classification was changed to Rural Local Road.

Please contact Christy Poon-Atkins, P.E. at (404)562-3638 if you have any questions or comments.

Sincerely,

for 

Rodney N. Barry, P.E.
Division Administrator

PRECONSTRUCTION STATUS REPORT FOR PI:0007285,0008037

PROJ ID : 0007285	PAULDING BUSINESS TECHNOLOGY PARK AND ROADWAY IMPROVEMENTS	MGMT LET DATE : 11/15/2014
COUNTY : Paulding		MGMT ROW DATE : 12/15/2013
LENGTH (MI) : 0.00	MPO: Atlanta TMA	BASELINE LET DATE: 11/19/2014
PROJ NO.: CSMSL-0007-00(285)	TIP #: PA-062	SCHED LET DATE : 4/29/2015
PROJ MGR: Bailey, Kevin Matthew	MODEL YR : 2016	WHO LETS?: Local Let
AOHD Initials: AVS	TYPE WORK: Roadway Project	LET WITH : 0008037
OFFICE : Program Delivery	CONCEPT:	
CONSULTANT: Local Design, Local PE funds	PROG TYPE: New Construction	
SPONSOR : Paulding County	Prov. for ITS: N	
DESIGN FIRM: Reynolds, Smith and Hills, Inc.	BOND PROJ :	
		NEEDS SCORE: 4
		BRIDGE SUFF:

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS						
								Activity	Approved	Proposed	Cost	Fund	Status	Date Auth
11/15/2010	7/19/2011			Concept Development	6/17/2010	12/1/2011	100	PE	2006	2006	15,000.00	H680	AUTHORIZED	8/3/2005
5/24/2011	5/24/2011			Concept Meeting	7/7/2010	7/7/2010	100	ROW	2012	2014	2,282,000.00	LOC	PRECST	
6/7/2011	6/7/2011			PM Submit Concept Report	8/12/2011	8/12/2011	100	CST	2013	2015	1,307,666.00	H680	PRECST	
6/8/2011	7/19/2011			Concept Report Review and Comments	8/12/2011	12/1/2011	100							
7/19/2011	7/19/2011			Management Concept Approval Complete	8/12/2011	12/1/2011	100							
8/3/2011	8/3/2011			Public Information Open House Held	9/29/2011	9/29/2011	100							
7/20/2011	8/13/2013		8/1/2013	Environmental Approval	6/10/2011		18							
6/7/2012	6/27/2012	12/3/2012	12/21/2012	Field Surveys/SDE			0							
7/2/2012	8/9/2013		1/21/2014	Preliminary Plans	7/2/2012		4							
5/9/2012	9/18/2012	11/2/2012	3/14/2013	Underground Storage Tanks			0							
11/21/2013	5/7/2014	5/1/2014	10/15/2014	404 Permit Obtainment			0							
9/11/2013	9/11/2013	2/19/2014	2/19/2014	PFPR Inspection			0							
9/12/2013	10/9/2013	2/20/2014	3/19/2014	R/W Plans Preparation			0							
10/10/2013	11/20/2013	3/20/2014	4/30/2014	R/W Plans Final Approval			0							
10/18/2013	10/22/2013	3/28/2014	4/1/2014	L & D Approval			0							
11/21/2013	12/18/2013	5/1/2014	5/28/2014	R/W Authorization			0							
1/30/2014	2/12/2014	7/10/2014	7/23/2014	Stake R/W			0							
10/8/2012	4/24/2013			Soil Survey	7/13/2011	2/10/2012	100							
10/17/2013	3/26/2014	3/27/2014	9/10/2014	Final Design			0							
4/24/2014	4/24/2014	10/9/2014	10/9/2014	FFPR Inspection			0							
5/2/2014	5/15/2014	10/17/2014	10/30/2014	Submit FFPR Responses (OES)			0							

<u>Cost Estimate Amount</u>			<u>STIP AMOUNTS</u>		
Activity	Amount	Date	Activity	Cost	Fund
PE	\$15,000.00		PE	0.00	H680
ROW	\$2,282,000.00	8/29/2011	ROW	618,000.00	LOC
CST	\$2,136,117.18	8/29/2011	CST	1,307,666.00	H680

Bridge: NO BRIDGE REQUIRED
Design: CLM / DWR / PAM
EIS: EA | NotApvd | Not On Schedule - Baseline | Cox 01.09.12
LGPA: PMA SGN PAULDING DO PE & UTIL,ROW & CST TO BE DONE BY FUTURE AGREEMENTS 12-2-05.
Planning: ARC Bike/Ped Plan (2007) calls for the inclusion of bicycle facilities in all new construction projects
Prog. Develop: THIS PROJECT IS FOR DAN GENTRY'S 06 EARMARK PROJECTS
Programming: #1 9-05|#2 9-06|#3 6-09|#4 4-2010|CONFIRMED EXEMPT PER FHWA 9-7-2012
ROW: Required Right of Way to be donated by Airport Authority to Paulding County for this project and 0008037.
Utility: Local let - certification required 4-20-09
EMG: PE BY COUNTY

District Comments

-LOCAL Let
-0007285 is to build a road into the airport property and 0008037 is to build a road off that road. They're both on the same tract of land.
-PCRF appved to shift MRD to 12/2013 and MLD to 11/2014 due to FHWA instructions to adjust CE to EA.(4-16-12)kb
-Review/approval of Concept Report from ODPS underway. Environmental firm is working on the assessment of effects (AOE).The I-Bat issue may cause a delay in the ecology report.(9-20-12)kb

Prel. Parcel CT: 2	Total Parcel in ROW System:	Cond. Filed:	Acquired by: LOC
Under Review:	Options - Pending:	Relocations:	Acquisition MGR: Martin, Shelia (LOC)
Released:	Condemnations- Pend:	Acquired:	R/W Cert Date:

PRECONSTRUCTION STATUS REPORT FOR PI:0007285,0008037

PROJ ID : 0008037	PAULDING COUNTY TECHNOLOGY PARK LOCAL ACCESS ROAD	MGMT LET DATE : 11/15/2014
COUNTY : Paulding		MGMT ROW DATE : 12/15/2013
LENGTH (MI) : 0.00	MPO: Atlanta TMA	PRIORITY CODE:
PROJ NO.: CSAPD-0008-00(037)	TIP #: PA-063	DOT DIST: 6
PROJ MGR: Bailey, Kevin Matthew	MODEL YR : 2016	CONG. DIST: 11
AOHD Initials: AVS	TYPE WORK: Roadway Project	BIKE: N
OFFICE : Program Delivery	CONCEPT:	MEASURE: E
CONSULTANT: Local Design, Reimbursed by GDOT funds	PROG TYPE: New Construction	NEEDS SCORE: 4
SPONSOR : GDOT	Prov. for ITS: N	BRIDGE SUFF:
DESIGN FIRM: Reynolds, Smith and Hills, Inc.	BOND PROJ :	

BASE START	BASE FINISH	LATE START	LATE FINISH	TASKS	ACTUAL START	ACTUAL FINISH	%	PROGRAMMED FUNDS							
								Activity	Approved	Proposed	Cost	Fund	Status	Date Auth	
11/15/2010	7/19/2011			Concept Development	6/17/2010	12/1/2011	100								
5/24/2011	5/24/2011			Concept Meeting	7/7/2010	7/7/2010	100	PE	LOCL	LOCL	126,000.00	LOC	AUTHORIZED	6/28/2012	
6/7/2011	6/7/2011			PM Submit Concept Report	8/12/2011	8/12/2011	100	PE	2012	2012	50,000.00	L240	AUTHORIZED	6/28/2012	
6/8/2011	7/19/2011			Concept Report Review and Comments	8/12/2011	12/1/2011	100	ROW	2012	2014	3,423,000.00	LOC	PRECAST		
7/19/2011	7/19/2011			Management Concept Approval Complete	8/12/2011	12/1/2011	100	CST	2013	2015	1,000,000.00	L9A0	PRECAST		
8/3/2011	8/3/2011			Public Information Open House Held	9/29/2011	9/29/2011	100								
7/20/2011	8/13/2013		8/1/2013	Environmental Approval	6/10/2011		18								
6/7/2012	6/27/2012	12/3/2012	12/21/2012	Field Surveys/SDE			0								
7/2/2012	8/9/2013		1/21/2014	Preliminary Plans	7/2/2012		4								
5/9/2012	9/18/2012	11/2/2012	3/14/2013	Underground Storage Tanks			0								
11/21/2013	5/7/2014	5/1/2014	10/15/2014	404 Permit Obtainment			0								
9/11/2013	9/11/2013	2/19/2014	2/19/2014	PFPR Inspection			0								
9/12/2013	10/9/2013	2/20/2014	3/19/2014	R/W Plans Preparation			0								
10/10/2013	11/20/2013	3/20/2014	4/30/2014	R/W Plans Final Approval			0								
10/18/2013	10/22/2013	3/28/2014	4/1/2014	L & D Approval			0								
11/21/2013	12/18/2013	5/1/2014	5/28/2014	R/W Authorization			0	PE	\$50,000.00	2/11/2010		PE	50,000.00	L240	
1/30/2014	2/12/2014	7/10/2014	7/23/2014	Stake R/W			0	PE	\$126,000.00	2/11/2010		PE	0.00	LOC	
10/8/2012	4/24/2013			Soil Survey	7/13/2011	2/10/2012	100	ROW	\$3,423,000.00	8/29/2011		ROW	42,000.00	LOC	
10/17/2013	3/26/2014	3/27/2014	9/10/2014	Final Design			0	CST	\$3,052,008.99	8/29/2011		CST	1,236,000.00	L9A0	
4/24/2014	4/24/2014	10/9/2014	10/9/2014	FFPR Inspection			0								
5/2/2014	5/15/2014	10/17/2014	10/30/2014	Submit FFPR Responses (OES)			0								

Bridge: NO BRIDGE REQUIRED
Design: CLM / DWR / PAM [LOCAL PE]
EIS: EA | NotApvd | Not On Schedule - Baseline | Cox 01.09.12
LGPA: NOTIFICATION LETTER SENT TO PAULDING 5-10-06.
Planning: PE-Oversight
Programming: CHANGED TO EXEMPT PER FHWA 9-7-2012
ROW: Required Right of Way to be donated by Airport Authority to Paulding County for this project and 0007285.
Utility: Local let - certification required 4-20-09
EMG: PE BY COUNTY

District Comments

-Paulding County wants to let the project; OK per FHWA but must follow procedures for FOS project Because of lack of progress by County, funding probably not available now through the Apalachain Regional Commission. -12/10/2008

-PCRF appved to shift MRD to 12/2013 and MLD to 11/2014 due to FHWA instructions to adjust CE to EA.(4-16-12)kb
 -Review/approval of Concept Report from ODPS underway. Environmental firm is working on the assessment of effects (AOE).The I-Bat issue may cause a delay in the ecology report.(9-20-12)kb

Prel. Parcel CT: 2	Total Parcel in ROW System:	Cond. Filed:	Acquired by: LOC	DEEDS CT:
Under Review:	Options - Pending:	Relocations:	Acquisition MGR: Martin, Shelia (LOC)	
Released:	Condemnations- Pend:	Acquired:	R/W Cert Date:	