

ORIGINAL TO GENERAL FILES

**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

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

FILE P.I. #0007920 **OFFICE** Design Policy & Support
CSMSL-0007-00(920)
Cobb County **DATE** April 30, 2010
GRTA West Xpress Operation Facility

FROM  for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED REVISED CONCEPT REPORT**

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

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Administrator
Ron Wishon, State Project Review Engineer
Glenn Bowman, State Environmental Administrator
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Keith Golden, State Traffic Operations Engineer
Angela Alexander, State Transportation Planning Administrator
Paul Liles, State Bridge Engineer
Bobby Hilliard, State Program Delivery Engineer
Angela Robinson, Financial Management Administrator
Jeff Baker, State Utilities Engineer
Jonathan Walker, Chamblee District Utilities Engineer
Mike Lobdell, Chamblee District Preconstruction Engineer
Bryant Poole, Chamblee District Engineer
Marlo Clowers, Project Manager
BOARD MEMBER

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
Office of Innovative Program Delivery

REVISED PROJECT CONCEPT REPORT

GRTA West Xpress Operation Facility
Formerly known as:
Blairs Bridge Road Park and Ride Lot

Project Number: CSMSL-0007-00(920)
County: Cobb
PI No. 0007920
Federal Route Number: I-20
State Route Number: SR 6, SR 402
County Route Number: CR 11, CR 71 Douglas/CR 2621 Cobb

The scope of this project has evolved since the original concept report was approved in June of 2007. The original project included a park and ride facility only, and only a portion of the 18.94-acre parcel was utilized. Also, the original project maintained the original alignment of the future HOV lane that would bisect the site. The revised plan includes a small bus maintenance facility and employee parking, as well as the park and ride element. The future HOV lane alignment has been incorporated into the design, so that it will share the driveway with the maintenance facility.

Submitted for approval:

DATE 2/8/2010

Jeffrey Lowe, P.E. - URS Corporation
Design Consultant Name and Firm Name (if applicable)

DATE _____

N/A
Local Government (if applicable)

DATE _____

N/A
Design Phase Office Head (if applicable)

DATE 2/25/10

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

DATE 2/22/10

[Signature]
Project Manager

Recommendation for approval:

DATE 3/16/10

Glenn Bowman/DEP * *Recommendation on file
State Environmental Administrator

DATE _____

N/A
State Bridge Design Engineer (if applicable)

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

DATE 3/24/10

[Signature]
State Transportation Planning Administrator

Need and Purpose:

The Atlanta region has experienced robust population growth over the last decade. Since 2000, approximately 71% of all growth in the 20-county Atlanta region has occurred within the core 10 counties of Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale. Presently, over 4 million residents live in these 10 counties, with over a million more living in the external 20-county region of Barrow, Bartow, Carroll, Coweta, Forsyth, Hall, Newton, Paulding, Spalding and Walton. By 2030, the population in the 20-county region is expected to surpass the 6 million mark. Over half of the population in Georgia lives within the Atlanta region.

Atlanta's development pattern has increasingly dispersed employment and has generated scattered residential suburbs throughout the region. The dispersed pattern has created suburb-to-suburb transportation needs and has decreased the percentage of the region's jobs located in one central location, downtown Atlanta (from 29% of the jobs in downtown Atlanta to 6%).

The region's road network and trip-making patterns have created corridors with high levels of traffic congestion on a daily basis. Despite significant investments in freeways and transit systems, radial and suburban cross-town corridors alike are congested. By 2025, the number of daily person trips in the region will rise to 14.6 million, a 37% increase. There are 44 congested corridors within the 13-county region, as identified by the Atlanta Regional Commission (ARC).

In recent years, the Atlanta metropolitan region has taken major steps in meeting the transportation challenges for its residents and visitors. Two comprehensive transit plans have been developed to address the current and future transit needs. The initial plan, identified as the Regional Transit Action Plan (RTAP), was developed over a two year time frame and provided an integrated public transportation network for the Atlanta region.

The RTAP concept plan was identified as the initial regional blueprint which identified the future public transportation network for the Atlanta region. The plan laid out a new direction in extending transit services into congested corridors through the implementation of a regional transit network consisting of 1) the Regional Express Bus Program and 2) the Regional Bus Rapid Transit System.

The regional express bus program included a regional express bus system, supporting circulator systems, arterial Bus Rapid Transit (BRT) corridors, and high speed BRT corridors. This identified system would provide competitive choices to the region's residents, would enhance the customer experience, would invest wisely and optimize the value of such a system, and would develop an integrated system.

The RTAP and associated projects are included in the 2030 Regional Transportation Plan (RTP), known as Envision 6, and in the 2008-2013 Transportation Improvement Program (TIP). The projects are identified as AR-375D&E, AR-5390B-GRTA, AR-604, AR-606, AR-607, AR-610, AR-612-614, AR-616, AR-619-620, AR651A-D, CO-AR-303 and AR-5307-GRTA. The RTAP was an integral transit component of the adopted 2030 RTP.

The second plan identified, Concept 3, is currently being developed by the Transit Planning Board (TPB). The TPB is a partnership that will establish and maintain a seamless, integrated transit network for the Atlanta region. Created by a joint resolution of the Atlanta Regional Commission (ARC), Metropolitan Atlanta Rapid Transit Authority (MARTA) and the Georgia Regional Transportation Authority (GRTA), the TPB will:

- Conduct an initial planning phase of at least two years during which it will develop a regional transit plan including a comprehensive financial plan;
- Work to improve regional service coordination, including integrating fares, marketing and customer information;

- Measure system performance; and,
- Advocate for increased federal funding for regional transit.

The development of Concept 3 has included an extensive outreach program and data collection effort. The plan has incorporated aspects of the RTAP and other transit studies previously completed by regional partners. One of the elements considered and incorporated into Concept 3 is the previously identified regional express program and its associated system elements. The adopted Concept 3 will be incorporated into the development of the next RTP.

The Georgia Regional Transportation Authority (GRTA), created by the Georgia Legislature in 1999, to improve Metro Atlanta's air quality and traffic congestion problems, launched the *Xpress* commuter coach service in 2004. *Xpress* provides a public transit alternative on Atlanta's interstate highways. From initiation, this has been one of the most successful transit system start-ups in the U.S. *Xpress* currently provides 27 weekday routes from 12 counties in metropolitan Atlanta, operating approximately 100 peak service time coaches primarily from suburban locations to midtown or downtown Atlanta. *Xpress* operates from a current system of 25 park & ride lots and carries a total of over 11,000 daily passengers system wide. During the month of September 2008, over 325 coach trips operated with standing room only, indicating the system's popularity and the need for further service expansion. In response, *Xpress* is beginning a major second phase expansion in 2009-2013: proposing the addition of 20 new routes, 92 new coaches at peak service times and a number of additional park & ride lots.

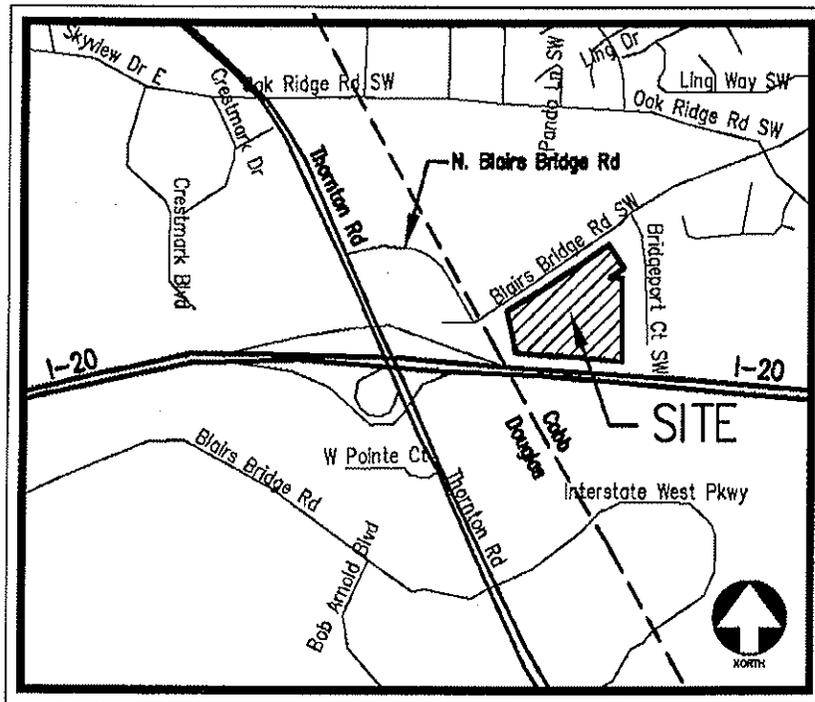
In the development of the regional *Xpress* system, locations throughout the region for supporting infrastructure have been identified. Such supporting infrastructure would include, but not be limited to, park and ride lots and maintenance facilities. One identified facility is the proposed West *Xpress* Operations Facility, which is located on Blairs Bridge Road in Cobb County, Georgia.

Project Location:

The 18.94-acre site located in Cobb County, Georgia was purchased for the proposed project by the Department in 2007 as an early acquisition for the future I-20 West HOV interchange project. The parcel is bordered by Interstate 20 to the south, Blairs Bridge Road to the north, and a residential subdivision along Bridgeport Court to the east. The design for the future HOV interchange at I-20 @ Thornton Road crosses the site. Proximity to I-20 and the future HOV network made the location quite suitable to construct a park and ride facility.

Existing Conditions

The previous owner of the parcel was in the process of building a residential development of town homes when construction of the residential development was halted for the I-20 West HOV interchange early acquisition. Subsequent to acquiring the property, the Department began to re-examine the proposed HOV network in the form of a tolled managed lane network and the I-20 West HOV project was moved to Long Range. The property has been vacant since that time. The existing conditions on the site include the infrastructure for that development, including curb and gutter and asphalt roads, complete storm and sanitary sewer, underground water and power, graded building pads, several retaining walls and a storm-water detention pond.



Location Map

Project: CSMSL-0007-00(920), Cobb County **PI No.:** 0007920

Description: West Xpress Operations Facility

Description of the Approved Concept:

The proposed park and ride facility infrastructure would consist of approximately 492 parking spaces, three bus pavilions, a Fare Systems Shelter building for ticket vending, and access to the site from various locations. The 18.94-acre parcel is divided by the future HOV Interchange alignment, leaving two separate parcels. The park and ride lot will be constructed on the northern side of the HOV Interchange in an area of approximately 10.7 acres. There is a 50-foot non-disturbed buffer along the eastern property line, and there is also a 50-foot stream buffer near the southeastern corner of the site. The proposed park and ride lot will not encroach into these buffers therefore the approximate disturbed area for the project is 7 acres. The location of the existing storm-water detention facility will remain in place. The design criteria used for the pond design will be studied to confirm that there is adequate storage for the park and ride lot.

Access

Commuter vehicles will enter and exit the lot via the full access driveway on Blairs Bridge Road. Initially, buses will enter the lot via a separate driveway off of Blairs Bridge Road. This access driveway will remain in place during the HOV Interchange construction, so that operation of the bus service will not be interrupted. When the construction of the HOV Interchange is complete, buses will then enter the lot directly off of the new access road. Buses will exit the lot onto Blairs Bridge Road during both current and future conditions.

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

PDP Classification: Major , or Minor

Federal Oversight: Full Oversight , Exempt , State Funded , or Other

Functional Classification: I-20 – Urban Interstate Principal Arterial
 Thornton Road – Urban Principal Arterial
 North Blairs Bridge Road – Urban Local Road
 Blairs Bridge Road – Urban Local Road
 Six Flags Drive - Urban Local Road

U.S. Route Number(s): I-20
 State Route Number(s): Thornton Road (SR 6), I-20 (SR 402)
 County Route Number(s): North Blairs Bridge Road (Douglas CR 11)
 Blairs Bridge Road (Douglas CR 71, Cobb CR 2621)

Traffic as shown in the approved concept:

ROUTE	BASE YEAR 2007 AADT	DESIGN YEAR 2027 AADT
Thornton Road	75,000	Not shown
North Blairs Bridge Road	4,100	Not shown
Blairs Bridge Road	3,570	Not shown
Six Flags Drive	7,900	Not shown

Updated traffic data:

ROUTE	BASE YEAR 2010 AADT	DESIGN YEAR 2030 AADT
Thornton Road	66,471	120,053
North Blairs Bridge Road	4,986	9,006
Blairs Bridge Road	3,713	6,706
Six Flags Drive	8,381	15,137

Approved Programmed/Schedule:

P.E.: Authorized 2004 R/W: Authorized 2007 Construction: September 2010 letting

VE Study Required YES () NO (X)

Benefit/Cost Ratio: Not applicable

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

Is the project located in a PM2.5 Non-attainment area? Yes No

Approved Design Features:

- **Project Termini:**
A total land area of 18.94 acres has been acquired. Only 10.7 acres will be developed for this project, which included 492 commuter parking spaces and infrastructure for only a park and ride lot facility
- **Alignment:**
The park and ride lot layout was based on the alignment of the future HOV interchange connection that would cross the site, effectively splitting the project area into two parcels.
- **Access Control:**
Commuter vehicles will enter and exit the lot via the full access driveway on Blairs Bridge Road. Initially, buses will enter the lot via a separate driveway off of Blairs Bridge Road. This access driveway will remain in place during the HOV Interchange construction, so that operation of the bus service will not be interrupted. When the construction of the HOV Interchange is complete, buses will then enter the lot directly off of the new access road. Buses will exit the lot onto Blairs Bridge Road during both current and future conditions. Refer to the attached Traffic Report for further detail related to access to the site.

Proposed Design Features:

- **Project Termini:**
No additional right-of-way will be required. However, the scope of the project has been expanded to include not only commuter parking areas, but also a bus maintenance facility, bus parking and employee parking. The maintenance facility will be used to fuel and wash the buses, as well as a service building for bus maintenance and repairs. The bus parking will be used during the day in between the morning and evening service hours, and also for overnight parking. The revised developed area for the operations facility is approximately 12 acres.
- **Alignment:**
In order to expand the project to include the maintenance facility, the alignment of the future HOV interchange connection has been revised in this concept design. Instead of bypassing the site, the HOV interchange connection will now be integral to the Xpress Operations Facility. This provides much more efficient use of the project site.
- **Access Control:**
The revised concept combines the driveway to the Xpress Operations Facility with the future HOV interchange connection to provide access to the facility for commuters, employees and buses. Vehicles maneuvering to/from Thornton Road must travel through the park and ride lot and make a series of turning movements to connect to the managed lanes on I-20. Buses will still enter the lot via a separate driveway on Blairs Bridge Road. Refer to the attached Concept Plan for details.

Reason for Change: GRTA has redefined their needs on this property and the scope of the project has changed to accommodate those requirements.

Updated Cost Estimate		
Description	Approved Project	Revised Project
Construction, including Contingencies, Engineering and Inspection	\$3,205,000	\$6,023,000
Fuel Adjustment	\$0	\$0
Right-of-Way	\$2,200,000 (purchased in 2007)	No Additional RW Required
Utilities (reimbursable)	\$0	\$0
Utility Contingencies	\$0	\$0
Environmental Mitigation	\$0	\$0

Other Considerations: The project team met with the original I-20 West HOV Project Manager and the Metro-Atlanta Managed Lane System Plan (MLSP) Project Manager on February 16, 2010 to discuss this project. All parties at the meeting were in agreement that the Revised Concept Plan works integrally with the location identified for a managed lane interchange in the I-20 West HOV project and MLSP. In addition, the Revised Concept Plan has independent utility from a managed lane interchange existence or location. The Xpress buses have alternate routes that could be used to access the facility if a managed lane interchange is moved to another location.

Recommendation: This Office recommends that the proposed revision to the concept be approved for implementation.

Attachments:

1. Revised Concept Plan (Site and Grading)
2. Revised Cost Estimate

Concur: 
 Director of Engineering

Approve: 
 Chief Engineer

Date: 4/21/2010

Estimate Report for file "GRTA West Xpress Ops Facility 0007920"

Section ROADWAY ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	25000.0	TRAFFIC CONTROL - P.I. NO. 0007920	25000.0
210-0100	1	LS	1300000.0	GRADING COMPLETE - P.I. NO. 0007920	1300000.0
318-3000	100	TN	20.39	AGGR SURF CRS	2039.0
441-3340	2000	SY	37.47	CONC SIDEWALK, 4 IN	74940.0
441-6216	11500	LF	15.66	CONC CURB & GUTTER, 8 IN X 24 IN, TP 2	180090.0
441-9000	14	EA	67.96	PRECAST BUMPER BLOCK	951.43
Section Sub Total:					\$1,583,020.44

Section BUILDINGS AND MAINTENANCE FACILITIES					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
763-0100	1	LS	150000.0	FARE SYSTEM SHELTER BUILDING	150000.0
763-0110	1	LS	250000.0	BUS PAVILIONS (two buildings included)	250000.0
763-XXXX	1	Lump Sum	1000000.0	BUS MAINTENANCE FACILITY	1000000.0
Section Sub Total:					\$1,400,000.00

Section Pavement Items					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
310-1101	16400	TN	19.92	GR AGGR BASE CRS, INCL MATL	326688.0
402-3103	2300	TN	60.31	RECYCLED ASPH CONC 9.5 MM SUPERPAVE, TYPE II, GP 2 ONLY, INCL BITUM MATL & H LIME	138713.0
402-3121	2900	TN	73.34	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	212686.0
402-3190	3700	TN	75.19	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H	278203.0

				LIME	
413-1000	2500	GL	2.83	BITUM TACK COAT	7075.0
Section Sub Total:					\$963,365.00

Section RETAINING WALLS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-3201	35	CY	397.73	CLASS B CONCRETE, RETAINING WALL 1	13920.55
500-3201	35	CY	397.73	CLASS B CONCRETE, RETAINING WALL 4	13920.55
XXX-XXXX	2025	SF	70.0	RETAINING WALL 2	141750.0
XXX-XXXX	1900	SF	70.0	RETAINING WALL 3	133000.0
Section Sub Total:					\$302,591.10

Section STRIPING ITEMS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
652-0095	10	EA	42.03	PAVEMENT MARKING, HANDICAP SYMBOL	420.3
652-0110	5	EA	48.61	PAVEMENT MARKING, ARROW, TP 1	243.05
652-0210	2	EA	67.25	PAVEMENT MARKING, WORD, TP 1	134.5
652-0260	2	EA	69.07	PAVEMENT MARKING, WORD, TP 6	138.14
652-5451	10000	LF	0.28	SOLID TRAFFIC STRIPE, 5 IN, WHITE	2800.00
652-5452	1000	LF	0.12	SOLID TRAFFIC STRIPE, 5 IN, YELLOW	120.0
652-5701	200	LF	1.91	SOLID TRAF STRIPE, 24 IN, WHITE	382.0
652-5801	200	LF	0.92	SOLID TRAF STRIPE, 8 IN, WHITE	184.0
652-9001	150	SY	2.11	TRAFFIC STRIPE, WHITE	316.5
Section Sub Total:					\$4,738.49

Section SIGNS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
636-1033	200	SF	21.44	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 9	4288.0

636-2070	1000	LF	9.58	GALV STEEL POSTS, TP 7	9580.0
Section Sub Total:					\$13,868.00

Section GUARDRAIL AND FENCE

Item Number	Quantity	Units	Unit Price	Item Description	Cost
624-0410	6350	SF	19.25	SOUND BARRIER, TP B, INTERLOCKING STEEL PANELS	122237.5
641-1200	1000	LF	19.94	GUARDRAIL, TP W	19940.0
641-5001	4	EA	708.76	GUARDRAIL ANCHORAGE, TP 1	2835.04
643-1152	1000	LF	15.07	CH LK FENCE, ZC COAT, 6 FT, 9 GA	15070.0
643-8010	2	EA	871.34	GATE, CHAIN LINK ZC COAT	1742.68
Section Sub Total:					\$161,825.22

Section UTILITY - WATER AND SANITARY SEWER ITEMS

Item Number	Quantity	Units	Unit Price	Item Description	Cost
660-0806	500	LF	66.27	SAN SEWER PIPE, 6 IN, DUCTILE IRON	33135.0
668-3300	8	EA	1708.86	SAN SEWER MANHOLE, TP 1	13670.88
670-5620	500	LF	21.78	WATER SERVICE LINE, 3/4 IN	10890.0
670-8430	1	EA	2699.24	DBL STRAP SADDLE, 16 IN X 3/4 IN	2699.24
670-9732	1	EA	3009.15	INSTALL BACKFLOW PREVENTION ASSEMBLY FOR 3/4 IN SERVICE LINE, WITH VAULT	3009.15
Section Sub Total:					\$63,404.27

Section STORM DRAINAGE

Item Number	Quantity	Units	Unit Price	Item Description	Cost
XXX-XXXX	12	AC	29300.0	STORM DRAINAGE	351600.0
Section Sub Total:					\$351,600.00

Section EROSION CONTROL AND GRASSING

Item Number	Quantity	Units	Unit Price	Item Description	Cost

Item Number	Quantity	Units	Unit Price	Item Description	Cost
XXX-XXXX	12	AC	16605.0	EROSION CONTROL AND GRASSING	199260.0
Section Sub Total:					\$199,260.00

Section UTILITY - LIGHTING AND COMMUNICATION CONDUITS					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
XXX-XXXX	12	AC	28107.0	LIGHTING, POWER AND COMMUNICATION CONDUIT	337284.0
Section Sub Total:					\$337,284.00

Section LANDSCAPE					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
XXX-XXXX	12	AC	16320.0	LANDSCAPE	195840.0
Section Sub Total:					\$195,840.00

Total Estimated Cost: \$5,576,796.52

Subtotal Construction Cost	\$5,576,796.52
E&C Rate 8.0 %	\$446,143.72
Inflation Rate 0.0 % @ 0 Years	\$0.00
<hr/>	
Total Construction Cost	\$6,022,940.24
Right Of Way	2200000.00
ReImb. Utilities	0.00
<hr/>	
Grand Total Project Cost	\$8,222,940.24