Post Design-Build Evaluation Report

Project Description: I-75 Auxiliary Lane NB P.I. Number: 0010126 County: Henry GDOT District: District 3

Date Conducted: April 25, 2014



# 1. **Project Description:**

Project 0010126 included the widening of northbound I-75 to accommodate an auxiliary lane between the northbound acceleration lanes of Eagles Landing Parkway/Hudson Bridge Road interchange and the exit lanes to I-675 in Henry County. The existing Walt Stephens/Red Oak Road Bridge was also replaced. The northbound auxiliary lane and Walt Stephens/Red Oak Road Bridge were constructed within the existing right-of-way.

2. Design-Build delivery goal(s): Expedited delivery, and to make use of available funds.

# 3. Project stakeholders:

- GDOT Project Delivery and Inspection
- E. R. Snell Contractor, Inc. Prime Contractor
- o Moreland Altobelli Associates, Inc. Prime Designer

# 4. Project Summary:

Project Milestone	Date	Procurement Summary	
Public Notice Advertisement (PNA)	5/28/2011	No. of SOQ's received	3
Request for Qualifications (RFQ)	8/16/2011	No. of teams shortlisted/prequalified	3
Statement of Qualifications (SOQ)	9/23/2011	No. of price/technical proposals received	2
Request for Proposals (RFP)	10/21/2011	Amount of lowest responsive bid	\$7,488,610.00
Letting	12/16/2011		
Award	12/30/2011		
NEPA Approval (CE)	12/14/2011		
NTP 1 - Design	2/02/2012		
NTP 2 – Construction Phase 1	6/20/2012		
NTP 2A – Construction Phase 1a	8/10/2012		
NTP 3 – Construction All Areas	9/19/2012		
Original Contract Completion Date	12/31/2013		
Revised Contract Completion Date	2/11/2013		
Open to Traffic	12/18/2013		
Construction Complete	2/28/2014		

### 5. Design-Build Proposers:

	Contractor	Designer	Shortlisted or Prequalified (Y/N)	Total Bid		
1	E.R. Snell Contractor, Inc	Moreland Altobelli Associates, Inc.	Y	\$7,488,610.00		
2	C.W. Matthews Contracting	Michael Baker Corporation (formally known as The LPA Group)	Y	\$7,800,483.66		
3	G.P.'s Enterprises, Inc	Stantec Consulting Services, Inc.	Y	Tech Proposal submitted, no Bid submitted		

### 6. Stipend

# 7. Design-Build Request for Qualifications (RFQ)

- a. Did GDOT employ a shortlist of between 3 and 5 Design-Build teams? 🗌 Yes 🔀 No
  - If yes, list reasons why a shortlist was utilized for this project: -
- b. General observations of the RFQ process: *ER Snell expressed that the process was cumbersome at times and they needed to fill out a lot of paperwork. Some of which was not necessary to be completed. GDOT is currently working on streamlining this process for future Design-Build Projects.*

# 8. Design-Build Request for Proposals (RFP)

- a. Type of procurement: 🔀 Two Phase/Low Bid
- b. Advertisement duration: 🗌 30 days 🔀 60 days 🗌 90 days
- c. Was a draft RFP released for this project? Yes No
  - If yes # of releases: N/A
- d. Was a Q&A format provided? Xes No
- e. Were One-on-One meetings held with proposers?  $\Box$  Yes  $\boxtimes$  No
- f. List GDOT offices involved in the RFP development: Design Policy & Support, Engineering Services, Environmental Services, Innovative Delivery, Utilities, Construction, Maintenance, Bridge, District 3, Traffic Operations

# 9. Design-Build RFP Package

a. List items included in the RFP package:

Item	Yes	No	Notes
Costing plans	Х		
Approved bridge layouts	Х		Provided on the GDOT's ftp site
Approved concept report/concept revision	Х		Provided on the GDOT's ftp site
Approved Environmental Document	Х		
CAICE files	Х		Provided on the GDOT's ftp site
Microstation files	Х		Provided on the GDOT's ftp site
Approved Design Exceptions/Variances	Х		Reduced shoulder width, provided on the
			GDOT's ftp site
Approved BFI		Х	BFI from the original Walt Stephens bridge
			construction provided on GDOT's ftp site
Approved WFI		Х	
Approved Soils Report		Х	
Geotechnical borings		Х	
Approved Pavement Design	Х		Provided on the GDOT's ftp site
Pavement Design Alternative		Х	
Overhead/Subsurface Utility Engineering (SUE)	Х		Provided on the GDOT's ftp site
Quality Level "B" (QL-B)			
Utility Memorandum of Understanding (MOU)	Х		
Costing Plan Review Report		Х	Provided on the GDOT's ftp site
Draft Transportation Management Plan (TMP)	Х		Provided on the GDOT's ftp site
Special Provision 999	Х		
Other	Х		Survey Control database, Pothole
			information for Henry County utilities

- b. General observations of the RFP contents and/or procurement process:
  - The Design-Build (DB) Team requested that additional boring information should be required on future projects.
- c. Were conflicts in project scope identified: Xes No

If yes, what sections should be revised for future RFPs:

- The DB Team felt that some scope items were vague, such as the maintenance and replacement of existing damaged drainage structures. Additionally, the DB Team was unclear as to the limits of responsibility. Even though the design utilized an existing system, the downstream damaged pipe was beyond the limits of construction. Future projects have been modified to date; however providing less vague scope requirements will help the DB Team appropriately assess their risk.
- LRFD was a requirement to design all structural components of this project. This is the first DB project that utilized the LRFD design method; however there were some other Design-Bid-Build projects within the state that did use LRFD design. The DB Team experienced issues with the AASHTO design requirements and some construction issues did arise on this project. The Class D concrete was claimed to cause cracks on one of the bridge deck spans, but the other span did not have any cracks. The DB Team had to replace a portion of the deck and re-poured with class AA concrete. GDOT explained that the Class D is still a requirement and a GDOT LRFD manual has since been posted. This manual is intended to provide guidance for GDOT, consultants, and contractors to follow for LRFD.
- The DB Team felt that the contract completion time was not realistic. GDOT has already identified this issue and is currently implementing a new process to validate all future project completion times.

### 10. Environmental

	a.	Type of document: 🛛 NEPA: Level: 🗍 PCE 🛛 CE 📄 EA/FONSI 📄 EIS/ROD
	u.	GEPA: Level: Type A Type B EER/NOD
	b.	Was the environmental document approved prior to the RFP advertisement?  Yes X No
	c.	Was a re-evaluation performed post-let? 🛛 Yes 🗌 No
		If yes, describe scenario why a re-evaluation was required: The DB Team shifted the Walt Stephens Bridge further to the north which caused impacts to the existing sound barrier.
		If yes, did the Design-Build team perform the re-evaluation? 🔲 Yes 🔀 No
		Did the Design-Build team provide supporting documentation? 🛛 Yes 🗌 No
	d.	General observations of the pre-let or post-let environmental process:
		<ul> <li>The Department added the migratory bird restrictions specification after the project was Let. This led to the SA for the Department to modify intermediate completion date in SP 108.08 for the Walt Stephens Bridge. The demolition of the existing Walt Stephens Bridge was to be completed by the contract completion date of December 31, 2013.</li> </ul>
11. <b>Env</b>	iror	imental Permitting
	a.	Type of 404 permit required: 🗌 NWP 🗌 IP 🗌 Other 🔀 None
	b.	Was mitigation required as part of the permit? 🗌 Yes 🛛 No
		If yes, did the Design-Build team perform mitigation and/or acquire credits? 🗌 Yes 🗌 No
	C.	Was a Stream Buffer Variance (SBV) required? 🗌 Yes 🔀 No

- d. List any other permits required by the project (not counting NPDES Permit): None
- e. General observations of the environmental permitting process: DB Team felt that the process went well.

# 12. NPDES Permit

- a. Did the Design-Build team prepare the Notice of Intent (NOI)? 🛛 Yes 🗌 No 🗌 NA
- b. Did the Design-Build team pay the NPDES permitting fee? 🗌 Yes 🛛 No 🗌 NA
- c. Were the ESPCP regularly redlined? 🛛 Yes 🗌 No 🗌 NA
- d. Did any self-report actions occur? 🗌 Yes 🔀 No
  - If yes, describe the reason(s) and outcome(s): -
- e. Was a consent order filed? 🗌 Yes 🔀 No
- f. If yes, describe the reason(s) and outcome(s): -
- i. Additional comments: The DB Team felt that the process went well.

# 13. Right of Way (R/W)

- a. Was R/W required? 🗌 Yes 🔀 No
  - If yes, who was responsible for R/W? GDOT Locals Design-Build team
  - If yes, was it acquired prior to award of the Design-Build contract?
  - If yes, did R/W acquisition activities impact the project schedule? 🗌 Yes 🛛 No
- b. How were R/W commitments or cost-to-cure elements handled on this project: -
- c. List any special circumstances, conditions, or property owner commitments of R/W acquisition: -
- d. General observations of the R/W acquisition process: None

### 14. Utilities

- a. Was SUE performed pre-let and included in the RFP package?  $\square$  Yes  $\square$  No
  - If yes, what level? 🗌 QL-D 🗌 QL-C 🔀 QL-B 🗌 QL-A
  - If No, was a 'SUE waiver' approved by the State Utilities Office?

If No, what was the mitigating activity (e.g. white lining specification, "no-conflict" letters, first submission plans): -

- b. Were Design-Build Utility MOU's executed? 🛛 Yes 🗌 No
- c. List the utility owners, if any, which were included in the Design-Build contract: AT&T, AGL, Henry County Water and Sewer Authority, Charter Communications, Clayton County Water Authority, Georgia Power Company.
- d. Generally describe observations with respect to Design-Build utility coordination:
  - The DB Team was able to avoid all waterline conflicts and "no conflict" letters were received from Henry and Clayton County Water.
  - Through early coordination with utility companies, the DB Team was able to perform early relocation prior to beginning work on Walt Stephens.
  - The DB Team experienced issues early on during the advertisement phase. They were not able to contact any of the utility owners for relocation quotes. GDOT has provided MOU's on all of their projects for each utility owner within the project limits, and GDOT has revised the MOU to require the utility owners to provide the names and numbers of all of their approved contractors.

- The DB Team discussed that if GDOT allowed a utility allowance on projects, this would reduce the risk on the contractors side. If all of the allowance was not used per project, then GDOT will keep the remainder amount; however if more of the allowance was required, then the DB Team would be responsible for the remaining amount.
- e. Generally describe any areas of improvement with respect to Design-Build utility coordination:
  - None, utility coordination performed as expected
- f. What was the frequency of utility coordination meetings: *The utility coordination meetings occurred on a monthly basis until all utilities were relocated.*

### 15. Geotechnical

	a.	Was an approved Soils Report included in the RFP package? 🔲 Yes 🛛 No
		If no, was a Soils Report required for the project? 🛛 Yes 🗌 No
	b.	Was an approved BFI included in the RFP package? 🗌 Yes 🔀 No
		If no, was a BFI required for this project? 🛛 Yes 🗌 No
	c.	Was an approved WFI included in the RFP package? 🔲 Yes 🔀 No
		If no, was a WFI required for this project? 🛛 Yes 🗌 No
	d.	Was an approved High Mast Found Investigation report included in the RFP package? 🗌 Yes 🔀 No
		If no, was a HMFI required for this project? 🔲 Yes 🔀 No
	e.	Were there any geotechnical issues encountered on construction? 🔀 Yes 🗌 No
		If yes, describe issues and outcome:
		<ul> <li>Rock was encountered when placing the foundations for the walls and while driving piles fo the Walt Stephens Bridge bents. It was assumed the all rock was removed as part of the existing Walt Stephens Bridge construction.</li> </ul>
		• The DB Team did some borings in the area to test the soils, but not necessarily for any rock.
16. <b>D</b>	esign	and Construction Phases
	a.	Did the Design-Build team advance portions of the project to the construction phase while othe portions of the project continued to be designed and/or permits obtained? Xes No
		If yes, describe: The auxiliary lane was separated from the Walt Stephens Bridge in order to expedite the auxiliary lane construction. Preliminary coordination with EPD took place to coordinate the ESPCP phasing approach.
	b.	Describe the typical frequency for progress meetings? <i>Monthly</i>
	c.	Were the Design-Build team plans/submittals of acceptable quality? 🛛 Yes 🗌 No
		If no, describe issue and any corrective actions taken: -
	d.	Were GDOT's review times adequate? 🔀 Yes 🗌 No
		If no, describe:
		General observations of review times:
		<ul> <li>Review times were met on submittals.</li> </ul>
		<ul> <li>Review times did not cause delay to the project.</li> </ul>
		<ul> <li>Design-Build Team commended GDOT for providing quick responses.</li> </ul>

- e. Was the Asphalt Index specification included in this project?  $\square$  Yes  $\square$  No

f.	Was the Fu	uel Index specification included in this project? 🔲 Yes 🔀 No
g.	Was const	ruction staging/Maintenance of Traffic (MOT) acceptable? 🛛 Yes 🗌 No
	If no, o	describe: N/A
h.	Was the So	chedule of Values adequate? 🔀 Yes 🗌 No
		describe: N/A
i.		ay voucher and overall payment process acceptable? 🔀 Yes 📘 No
i		describe: N/A ritical Path Method (CPM) schedule specification used on this project? 🛛 Yes 🗌 No
J.		describe general experiences (pro or con) using the CPM specification:
	0	The DB Team saw a great value in the CPM schedule specification used on this project with
	0	managing the design side through construction and achieving their completion date.
	0	E.R. Snell viewed it as a true learning experience and have implemented the use of it on
		every project.
	If yes,	any suggested improvements to the use of CPM schedule:
	0	Some submittal requirements were requested to be removed, such as the successor and
	0	predecessor report; depending on the project size, this report can exceed 20 pages. An electronic copy for future projects would improve the submittal mailing timeframe.
	0	The spec required cost loading each activity item. After about 12 months of reviews, it was
		determined that the cost loading did not add any value to the project and GDOT. By mutual
		agreement it was decided to remove this from the monthly schedule updates.
	0	The DB Team requested the consideration of adding more design time to the construction schedule.
No	<b>te</b> : When as	sked what additional processes were used to stay on schedule, the DB Team responded that
the	ey shifted cr	ews and/or extended work times.
k.	Were ther	e any unique issues (to Design-Build) that occurred? 🔲 Yes 🔀 No
	If yes,	describe: N/A
I.	Were sour	nd barriers required on this project? 🛛 Yes 🗌 No
	If yes,	describe the material/color: See below.
	If yes,	was the sound barrier material/color specified in the contract? 🛛 Yes 🗌 No
	0	The Sound Barrier Type was specified as Type B in the contract and the color was specified as
		T-Rock Green; however the color was changed on construction to Tan which matches the
	If you	color of the existing sound barrier. was the sound barrier height/location specified in the contract? Xes No
		was the sound barrier height/location specified in the contract? X Yes No Noise barrier analysis and barrier impact assessment was provided during the RFP
	0	advertisement phase for the noise barrier design.
	0	The DB Team shifted the Walt Stephens Bridge to the north. A re-evaluation of the NEPA
	0	document was performed. A portion of sound barrier on the west side of I-75 was relocated
		to the south side of Walt Stephens. GDOT performed the updated noise analysis to
		determine this location.

*Note*: Due to an issue connecting the new wall to the existing wall, the DB Team designed and installed a connection to resolve the issue.

m. Were there lane closure restrictions on this project? 🛛 Yes 🗌 No

If yes, were they adequate or could they have been modified for efficiency:

• The lane closure restrictions as described in the contract were adequate to construct the project. ER Snell requested that the 150.11 be either revised or taken into consideration to add in a section for emergency lane closures to fix broken barrier walls or impact attenuators. This allowance would provide safety to the traveling public and the contractor when a safety device can no longer perform as needed.

n. Were there ITS outage restrictions on this project? Xes No NA

If yes, were they adequate or could they have been modified for efficiency: None

- o. Were there new or existing Traffic Signal modifications required? 🗌 Yes 🔀 No
  - If yes, were the traffic signal permits obtained by GDOT: 🗌 Yes 🛛 No
- p. Were As-built plans prepared by the Design-Build team? 🗌 Yes 🗌 No 🔀 Pending

# 17. Design-Build Innovations

- a. Were there innovative designs, solutions or materials used on this project? Xes No If yes, describe:
  - The DB Team proposed to shift the new Walt Stephens Bridge to the North of the existing bridge. This proposal allowed the DB Team to construct the new bridge in a single phase, reduce the amount of traffic control required, and reduce the amount of required utility relocations.
  - The DB Team proposed a different type of wall for the Walt Stephens Bridge approaches, which eliminated the impact to the water lines.
- b. Were any Value Engineering Proposals (VEP) submitted? 🗌 Yes 🔀 No

If yes, fill out the below information:

Nc	VECP Description	Total Savings	Approved

e. List other benefits that are not reflected in the cost savings: None

## 18. Supplemental Agreement Summary

SA No.	Amount	Description
1	\$8,471.00	Sound barrier post connection to the Flippin Rd Bridge over I-75
2	\$0	Modified SP 108.08.1 by removing the intermediate completion date of July 31, 2013 for the Walt Stephens Bridge and adding the migratory bird SP. This was due to the proposed bridge impacting a sound barrier.
3	\$21,123.05	Design and install the arrow per lane instead of the diagrammatic signs on the overhead sign structures on the roadway
4	\$110,243.00	Walt Stephens bridge footing redesign Bent 2 footing due to subsurface conditions. A time extension was issued with this Supplemental Agreement.
5	(\$45,000.00)	A Reduction in the Scope of Work via plan revisions for micro-milling and asphalt paving on I-75. A future project is scheduled to provide an overlay through this area.

- a. What was the project's DBE goal? 12%
- b. Was it or will it be met? 🛛 Yes 🗌 No Note: The DBE Goal was Met and Exceeded
  - If yes, generally describe utilization: *Clearing & Grubbing, Fuel, Hauling, Electrical, Piling, Grassing, and SIP Deck Forms/Rebar*

If no, then describe reasons: -

### 20. Summary of observations from Office of Innovative Delivery (ID)

- a. The DB team deserves credit for their approach to the phasing of the work, and the development of phased ESPCP/NOI.
- b. The DB Team was able to open the auxiliary lane on I-75 northbound prior to Christmas 2013. This was ahead of schedule and was very important to GDOT's Executive Management.

### 21. Summary of observations from Office of Construction

a. Overall the project ran very smoothly

### 22. Summary of observations from Design-Build team

- a. Communications by all parties were key to the success of the project.
- b. Valuable lessons were learned by all parties.

### 23. Recommendations

- a. Clarify detail to clear up the paving under guardrail issue.
- b. Ensure the GDOT duct bank detail referenced adequately identifies the type of duct bank to be installed.
- c. Ensure that any MUTCD guidance statements are clarified in the scope, i.e. the arrow lane on OH signs.
- d. *Revise the reviews table.*

### 24. Notable achievements by early interaction of design and contractor

- a. Phasing of construction activities
- 25. Post Design-Build Evaluation participants: Please see the attached Sign-In Sheets and Attendance Seating Chart.

	PRINT	PRINT E-MAIL ADDRESS LEGIBLY.	S LEGIBLY.	DNA - DID NOT	1
	OT EMPLOYEES PLEASE SIG	N IN WITH NAME AS	DOT EMPLOYEES PLEASE SIGN IN WITH NAME AS SHOWN ON DOT E-MAIL ADDRESS	\$	2
NAME	COMPANY / OFFICE	PHONE NUMBER	E-MAIL ADDRESS	SIGNATURE (ATTENDENCE)	
Robert Reid	GDOT/Engineering Services	(404) 631-1754	rreid@dot.ga.gov	RLRR	
Derrick Cameron	<b>GDOT/Engineering Services</b>	(404) 631-1223	dcameron@dot.ga.gov	550	
Joe Carpenter	GDOT/P3/Program Delivery	(404) 631-1928	jcarpenter@dot.ga.gov	AND >	AND
Darryl VanMeter	GDOT/Innov Prog Delivery	(404) 631-1703	dvanmeter@dot.ga.gov	Cam Int	
Loren Bartlett	GDOT/Innov Prog Delivery	(404) 631-1642	Ibartlett@dot.ga.gov	Screw Bartley	
Shane Swan	HNTB/Innov Prog Delivery	(404) 631-1691	sswan@dot.ga.gov	SHANE SWAN	
Robert Lewis	HNTB/Innov Prog Delivery	(404) 631-1649	roblewis@dot.ga.gov	A PNA	ANG
Bill Duvall	GDOT/Bridge Design	(404) 631-1883	bduvall@dot.ga.gov	that Mchage	
Andy Lindsey	GDOT/Construction	(404) 631-1970	alindsey@dot.ga.gov	ady to A	
Ken Robinson	GDOT/D3 Construction	(706) 646-7508	krobinson@dot.ga.gov	Kont aler	
Michael L Williams	GDOT/D3 A5 Construction	(706) 646-6100	miwilliams@dot.ga.gov	Mudial M	~
Kerry Gore	GDOT/D3 Utilities	(706) 646-7603	kgore@dot.ga.gov	NUS	-PMA-
Alvin Gutierrez	FHWA	404-562-3632	Alvin.gutierrez@dot.gov	Al marker	
Kathy Stansell	E.R. Snell/Construction	2709850600	kstansell@ersnell.com	Kellin Stanell	
Billy Franklin	E.R. Snell/Construction		bfranklin@ersnell.com	V	DMA
Randy Griffin	E.R. Snell/Construction		rgriffin@ersnell.com	My All	
Jason Quinn	E.R. Snell/Construction		jquinn@ersnell.com	Joed Jume	

POST DESIGN BUILD EVALUATION SIGN-IN SHEET

PI No.: 0010126 County: HENRY

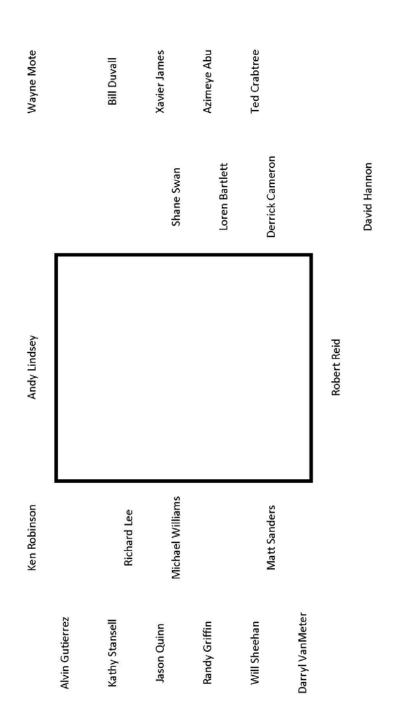
Date: APRIL 25, 2014

# NON DOT EMPLOYEES PLEASE PROVIDE BUSINESS CARD OR PRINT F-MAIL ADDRESS LEGIBLY.

Post Design-Build Evaluation PI No. 0010126 Page 10

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E-MAIL ADDRESS	mharper@dot.ga.gov	rile@dot.ga.gov	tcrabtree@dot.ga.gov	msanders@dot.ga.gov	csewell@dot.ga.gov	wmote@hntb.com	wsheehan@maai.net	Aabu@ dot. 52. 900	X James R det isanon	dhaman a hits can							
PHONE NUMBER	(404) 631-1971	(706) 646-6100	(404) 631-1767	(404) 631-1752	(678) 332-8341	Stan 100 miles	770-263-5945	Har) 631-1540	44) 631-1583	275-275-20H	20						
COMPANY / OFFICE	GDOT/Construction	GDOT/D3 A1 Construction	GDOT/Engineering Services	GDOT/Engineering Services	GDOT/D3 Griffin Construction	HNTB -255-0417 BINH	MAAI/Design	040	CPD	L NT3							
NAME	Melissa Harper	Richard Lee	Ted Crabtree	Matt Sanders	Craig Sewell	Wayne Mote	Will Sheehan	Azimene Aby	Keiller And	Davil Kenne							

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# Engineering Services Conference Room Attendance Seating Chart