

# Post Design-Build Evaluation Report

**Project Description: Jimmy Deloach Connector**

**P.I. Number: 0008690**

**County: Chatham**

**GDOT District: District 5**

**Date Conducted: June 07, 2016**



Jimmy Deloach Connector at Sonny Dixon Interchange, Chatham County

1. **Project Description:** P.I. 0008690 consists of the proposed Jimmy Deloach Connector project that would construct a new roadway alignment beginning at an at-grade “T” intersection with Bourne Avenue/SR 307 and terminating at the existing eastern end of Jimmy Deloach Parkway at SR 21. New interchanges would be constructed at both Grange Road and Jimmy Deloach Parkway. The typical section of the proposed limited access roadway would consist of four 12-foot-wide travel lanes (two in either direction) separated by a median barrier with 4-foot-wide inside shoulders and 6.5-foot-wide paved outside shoulders. The posted speed limit would be 55 mph.
2. **Design-Build delivery goal(s):** Expedite delivery
3. **Project stakeholders:**
  - GDOT – Innovative Delivery, Traffic Operations, District 5, Environmental Services, Bridge Design, Right of Way
  - Archer Western Contractors – Prime Contractor
  - Michael Baker International (formally The LPA Group) – Prime Designer
  - Georgia Ports Authority, Chatham County, City of Savannah, City of Port Wentworth

4. **Project Summary:**

	<b>Project Milestone</b>	<b>Date</b>
Pre-Let	Public Notice Advertisement (PNA)	02/18/2011
	Request for Qualifications (RFQ)	05/09/2011
	Letter of Interest (LOI)/Statement of Qualifications (SOQ)	06/24/2011
	Notice to Finalists	07/22/2011
	Request for Proposals (RFP)	08/19/2011
	Administrative Package Due	11/18/2011
	Technical Package Due	11/18/2011
	Price Proposal / Project Letting	11/18/2011
Post-Let	Project Award	12/02/2011
	NTP 1 – Preliminary Design	01/10/2012
	NTP 2 – Final Design	08/10/2012
	GEPA (EER) Re-Evaluation	07/25/2013
	Conditional NTP 3 – Construction Phase	07/26/2013
	Full NTP 3 – Construction Phase	11/18/2013
	Contract Completion Date	05/31/2016
	Substantial Project Completion	TBD

5. **Design-Build Proposers:**

	<b>Contractor</b>	<b>Designer</b>	<b>Total Bid</b>
1	<b>Archer Western Contractors</b>	<b>Michael Baker International (formerly The LPA Group)</b>	<b>\$72,772,000.00</b>
2	Zachry Construction Corporation	AECOM Technical Services	\$73,620,000.00
3	United Infrastructure Group & Baker Infrastructure Group	Reynolds, Smith, and Hills	\$74,700,000.00
4	Kiewit Infrastructure South Co.	Atkins North America	\$78,558,689.00
5	The Lane Construction Corporation	URS Corporation	\$87,403,000.00

**6. Stipend**

- a. Was a stipend (stipulated fee) offered to proposing Design-Build Teams?  Yes  No  
 If yes, how much per firm: - \$50,000.00 each to two firms

**7. Design-Build Request for Proposals (RFP)**

- a. Type of procurement:  One Phase/Low Bid  Two Phase/Low Bid  Best Value  
 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?  Yes  No  
 e. Were One-on-One meetings held with proposers?  Yes  No  
 f. List GDOT offices involved in the RFP development: Design Policy & Support, Engineering Services, Right of Way, Environmental Services, Innovative Delivery, Utilities, Construction, Bridge, District 5, Traffic Operations

**8. Design-Build RFP Package**

- a. List items included in the RFP package:

Item	Yes	No	Notes
Costing plans	X		Provided on the GDOT's SharePoint site
Bridge layouts	X		Provided on the GDOT's SharePoint site
Approved concept report/concept revision	X		Provided on the GDOT's SharePoint site
Approved Environmental Document	X		Provided on the GDOT's SharePoint site
CAiCE files	X		Provided on the GDOT's SharePoint site
Microstation files	X		Provided on the GDOT's SharePoint site
Approved Design Exceptions/Variations	X		Provided on the GDOT's SharePoint site
Geotechnical Reports	X		Preliminary sub-surface exploration report
Approved Pavement Design	X		Provided on the GDOT's SharePoint site and included in the RFP
Pavement Design Alternative		X	
Overhead/Subsurface Utility Engineering (SUE) Quality Level "B" (QL-B)	X		Provided on the GDOT's SharePoint site
Utility Memorandum of Understanding (MOU)	X		Included in the RFP
Costing Plan Review Report		X	
Draft Transportation Management Plan (TMP)		X	
Other	X		Survey Control database, Specifications, traffic study, adjacent project information, coordination meeting minutes, FAA MOU, Norfolk Southern RR agreement package, restrictive covenant, revocable license, VE study,

- b. General observations of the RFP contents and/or procurement process:
- o Survey of this heavily wooded area was based on mapping. There were significant survey busts particularly with existing elevations.
  - o Project was heavily dependent on in situ soil properties. Project had consolidation (settlement) issues. More in depth soil investigation would have been helpful.

- c. Were conflicts in project scope identified:  Yes  No

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

### 9. Environmental

- a. Type of document:  NEPA: Level:  PCE  CE  EA/FONSI  EIS/ROD  
 GEPA: Level:  Type A  Type B  EER/NOD

- b. Was the environmental document approved prior to the RFP advertisement?  Yes  No

If no, when was the NEPA/GEPA document approved? N/A

- c. Was a re-evaluation performed post-let?  Yes  No

If yes, describe scenario why a re-evaluation was required:

- o A change re-evaluation was completed to address the following:
  - A redesigned interchange at Bourne Avenue/SR 307 from a half diamond, at-grade intersection to an at grade "T" intersection.
  - A redesigned interchange at Jimmy Deloach Parkway to eliminate a depressed median section and replace with a median barrier section.
  - Reverting from a 4:1 to a 2:1 slope condition and a corresponding reduction in required right-of-way.
  - Additional paving on the west end of Bourne Avenue/SR 307.

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:

- o Design Team provided supporting documentation for the two re-evaluations completed.
- o Pre-let activities included full environmental field survey work however there were many post-let differences.
  - 90 days was a short time for the required field survey work.
  - Dramatic decrease in wetlands from pre-let to post-let.
  - Tidal influences had impact.

### 10. Environmental 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:

- o Consider giving allowances to Design Build Team for using on site mitigation credits.
- o Significant risks to Design Build Team because of mitigation bank availability. Consider having RFP include a base amount of bank availability.
- o Issues with another entity (Savannah Crossgate) coordinating independently with permitting agencies led to differing assessments being submitted by GDOT and Savannah Crossgate to the permitting agency.

### 11. 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
  - o Redlining at the project level was not done and was discouraged by the Design Build Team.
- d. Did any self-report actions occur?  Yes  No
  - If yes, describe the reason(s) and outcome(s):
    - o Two events that were addressed and corrected within 24-hours thus no Consent Order was issued.
- e. Was a consent order filed?  Yes  No
  - If yes, describe the reason(s) and outcome(s): N/A
- f. Additional comments: None

**12. 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?  Yes  No
  - 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:
  - o ROW acquisition was managed by a consultant.
  - o GDOT approved acquisition commitments.
- c. List any special circumstances, conditions, or property owner commitments of R/W acquisition:
  - o Utility casings were added as a cost to cure commitment.
  - o Parcel 17 driveway commitments.
  - o Access road added for a utility.
  - o Above \$250,000 second appraisal requirement added delays.
  - o A slip ramp was added.
  - o Design Build Team had to absorb risk for increases in condemnation above the 10% assumed in the RFP.
  - o Sometimes the Contractor was not kept fully in the loop during negotiations and acquisition activities.
- d. General observations of the R/W acquisition process:
  - o In general the process was faster than the traditional GDOT process.
  - o Consider defining right of way segments better in the RFP.
  - o Conditional NTP 3 was based on segmented right of way.

**13. Utilities**

- a. Was SUE performed pre-let and included in the RFP package?  Yes  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?  Yes  No
  - 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: Atlanta Gas Light, AT&T Georgia, City of Port Wentworth, City of Savannah, Comcast Cable, Georgia Power (distribution), Georgia Power (transmission), Southern Natural Gas, Level 3 Communications.
- d. Generally describe observations with respect to Design-Build utility coordination:
  - o More pre-bid design commitments from utilities would be helpful. Some utilities refused to provide pre-bid information.
- e. Generally describe any areas of improvement with respect to Design-Build utility coordination:
  - o Note – MOU has changed dramatically in the Design Build process since this project was started.
  - o GA Power purchasing their right of way delayed construction starting on Bridge 1.
- f. What was the frequency of utility coordination meetings? Monthly

**14. 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:
  - o Settlement concerns and embankment construction wait times had to be incorporated into the design and schedules.
  - o There were interpretation of LRFD issues with GDOT but these were worked out.

**15. Design and Construction Phases**

- a. Did the Design-Build Team advance portions of the project to the construction phase while other portions of the project continued to be designed and/or permits obtained?  Yes  No  
If yes, describe: Conditional NTP 3 was provided for construction between Bourne Avenue/SR 307 and Grange Road while ROW acquisition was ongoing in the remainder of the project corridor.
- b. Describe the typical frequency for progress meetings? Weekly
- 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: N/A  
General observations of review times:
  - o They were within time allowed in the contract.
  - o Consider allowing more "Approved as noted" acceptances.
- e. Was the Asphalt Index specification included in this project?  Yes  No
- f. Was the Fuel Index specification included in this project?  Yes  No

- g. Was construction the Maintenance of Traffic (MOT) acceptable?  Yes  No  
If no, describe: N/A
- h. Was the Schedule of Values adequate?  Yes  No  
If no, describe: N/A
- i. Was the pay voucher and overall payment process acceptable?  Yes  No  
If yes, comments: Line up payments to same decimal precision. GDOT uses 3 and Contractor uses 5 decimal places. This would help to line up values.  
If no, describe: N/A
- j. Was the Critical Path Method (CPM) schedule specification used on this project?  Yes  No  
If yes, describe general experiences (pro or con) using the CPM specification:  
  - o Pro because the Contractor normally uses CPM method.If yes, any suggested improvements to the use of CPM schedule:  
  - o Increase flexibility by using 20-day maximum durations.
- k. Were there any unique issues (to Design-Build) that occurred?  Yes  No  
If yes, describe:  
  - o ROW acquisitions which are covered in previous sections of this report.
  - o One noted success by the Contractor Archer Western was the commendable job done by the Design Build Team Designer achieving the FEMA no-rise certification.
- l. Were sound barriers required on this project?  Yes  No  
If yes, describe the material/color: N/A  
If yes, was the sound barrier material/color specified in the contract?  Yes  No  
If yes, was the sound barrier height/location specified in the contract?  Yes  No
- m. Were there lane closure restrictions on this project?  Yes  No  
If yes, were they adequate or could they have been modified for efficiency:  
  - o Efficiency would have improved with longer allowable closure times.
  - o Lane closure restrictions should have been included for Jimmy DeLoach Parkway.
- n. Were there ITS outage restrictions on this project?  Yes  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 as of meeting.

**16. Design-Build Innovations**

- a. Were there innovative designs, solutions or materials used on this project?  Yes  No  
If yes, describe:  
  - o Wetland impact reductions.
  - o Reduction in retaining walls by utilizing 2:1 graded slopes.
  - o Steepening graded slopes to 2:1 and lowering roadway profile reduced required right of way from 120 to 90 acres.
  - o Use of Wick Drains to speed up consolidation thus reducing required embankment construction wait times.
- b. Were any Value Engineering Proposals (VEP) submitted?  Yes  No

If yes, fill out the below information:

No.	VECP Description	Total Savings	Approved
1	JDC/Pierce realignment	\$1,936,343.80	Yes

- e. List other benefits that are not reflected in the cost savings: Design change to a tight urban diamond interchange reduced impacts to Parcel 8.

**17. Supplemental Agreement Summary**

SA No.	Amount	Description
1	\$291,658.27	Additional raised median on Bourne Avenue, Parcel 17 driveway revisions
2	-\$968,171.90	VECP savings as described above
3	\$1,519,728.26	Guardrail standard change, EFH mitigation design, EFH mitigation credits, schedule extension due to EFH mitigation, previously disturbed wetlands, parcel 2 and 45 driveways, additional environmental coordination, SNG access road, seismic study, bridge joint spacing revisions, PSRM vs. Bituminous Treated Roving
4	\$561,601.96	Drainage and utility casings
5	\$698,949.62	City of Savannah waterline, parcel 17 drainage revisions, sign reflective sheeting revision

**18. DBE**

- a. What was the project’s DBE goal? 0%
- b. Was it or will it be met?  Yes  No  
 If yes, generally describe utilization: N/A  
 If no, then describe reasons: N/A

**19. Summary of observations from Office of Innovative Delivery (OID)**

- a. This early Design Build project provided valuable Lessons Learned used in developing the processes used with subsequent and current projects.
- b. Six years from Concept to completing the construction is impressive.
- c. First time right of way acquisition was included in a Design Build project.

**20. Summary of observations from Office of Construction**

- a. Definite learning experience.
- b. Some construction quality issues still need addressing.

**21. Summary of observations from Design-Build Team**

- a. Archer Western feels overall it’s was a good projects.
- b. Coordination was good but having to deal with the many agencies involved was challenging.
- c. Suggestion – establishment of a Force Account to provide a mechanism to compensate for changes before construction starts.
- d. Suggestion – GDOT involve Construction Office during project design.
- e. Suggestion – don’t require the Engineer of Record to approve items that are just normal field changes which was unnecessarily required on this project.

**22. Recommendations**

- a. None

**23. Notable achievements by early interaction of design and contractor**

- a. Good coordination between the Design Build Contractor and Designer.



**24. Post Design-Build Evaluation participants:**

Name	Company/Office	Telephone Number	E-Mail Address
Brian Woods	Archer Western	404-495-8700	bwoods@walshgroup.com
Greg Shaw	Archer Western		gshaw@walshgroup.com
Tom Montgomery	Michael Baker International	770-263-9118	tmontgomery@mbakerintl.com
Mary Best	Michael Baker International	678-966-6613	mdbest@mbakerintl.com
Saurabh Bhattacharya	Parsons Transportation Group Inc.	678-969-2315	Saurabh.bhattacharya@parsons.com
Andrew Hoenig	GDOT Innovative Delivery	404-631-1757	ahoenig@dot.ga.gov
Steve Gaston	GDOT Bridge Design	404-631-1887	sgaston@dot.ga.gov
Lisa Myers	GDOT Engineering Services	404-631-1770	lmyers@dot.ga.gov
Derrick Cameron	GDOT Engineering Services	404-631-1223	dcameron@dot.ga.gov
Erik Rohde	GDOT Engineering Services	404-631-1611	erohde@dot.ga.gov
Mike Garner	GDOT Office of Construction	404-631-1970	mgarner@dot.ga.gov
Russell Daughtry	GDOT District 5/Area 5 – Moreland Altobelli	912-651-2144	rdaughtry@dot.ga.gov
Teresa Scott	GDOT Office of Utilities	912-530-4403	tscott@dot.ga.gov
Cory Knox	GDOT District 5 Construction	912-530-4362	cknox@dot.ga.gov
Joseph Capello	GDOT District 5/Area 5	912-651-2144	jcapello@dot.ga.gov