

# PROPOSAL TO DESIGN AND CONSTRUCT THE STATEWIDE ITS DMS DEPLOYMENT DESIGN-BUILD PROJECT CHATHAM, CHEROKEE, AND COBB COUNTIES P.I. NO. 0017389

## Technical Proposal – Package 2



Submitted to:  
Georgia Department of Transportation

Submitted by:  
Brooks-Berry-Haynie & Associates, Inc., Lead Contractor and Atkins North America, Inc., Lead Design Consultant  
December 10, 2020

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# C1. Technical Approach

## C.1.1 Information Regarding DB Team

Lead Contractor and Contractor – Brooks-Berry-Haynie & Associates, Inc. (BBH)



<b>Corporate Headquarters</b>	600 Discovery Place Mableton, Georgia 30126
<b>Local address</b>	600 Discovery Place Mableton, Georgia 30126
<b>Primary contact</b>	Jason Owen, President 770.874.1162 phone 770.874.1171 fax jason@bbhelectric.com
<b>Website</b>	www.bbhelectric.com
<b>Additional branch offices</b>	3151 Aero Court, East Point, GA 30344 900 Sirius Lane, Charlotte, NC 28208
<b>Office from which project will be managed</b>	All work will be managed from the Mableton, GA office.
<b>Ownership</b>	Corporation
<b>State of incorporation</b>	Georgia
<b>Years in business</b>	67
<b>Years in Georgia</b>	67

Lead Design Consultant – Atkins North America, Inc. (Atkins)  
(A member of the SNC-Lavalin Group)



Member of the SNC-Lavalin Group

<b>Corporate Headquarters</b>	4030 West Boy Scout Boulevard Suite 700 Tampa, Florida 33607
<b>Local address</b>	1600 RiverEdge Parkway, NW, Suite 700, Atlanta, GA, 30328
<b>Primary contact</b>	Ashlyn Morgan 678.247.2414 phone ashlyn.morgan@atkinsglobal.com
<b>Website</b>	atkinsglobal.com
<b>Office from which project will be managed</b>	All work will be managed from the Atlanta, GA office.
<b>Ownership</b>	Corporation, publicly traded
<b>State of incorporation</b>	Florida (incorporated February 29, 1960)
<b>Years in business</b>	60
<b>Years in Georgia</b>	47



## C.1.2 Project Approach Narrative

### C.1.2(a) Construction Phasing Approach and Project Challenges

Our approach to construction phasing on this project recognizes three distinct geographic locations, each with its own set of considerations. In addition to phasing, overall project challenges are traffic impact, foundation construction, and structure installation.

**Savannah.** Proximity of these sites to Port Wentworth results in high truck-traffic requiring construction phasing, scheduling, and traffic management to mitigate traffic impacts and safety of construction personnel.

**Cobb Pkwy.** Construction phasing of these signs will be driven by the heavy vehicular and pedestrian traffic during AM, midday, and PM peaks, as well as special events.

**Sixes Rd.** Construction will be phased to mitigate work and impacts during the heavy AM peak; night work will be minimized to avoid adverse noise for the nearby residential areas and medical facilities.

Additional challenges are foundation construction and installation of structures. Spread foundations create a large excavation that requires spoil management and special mitigation to prevent erosion and safety issues. To mitigate this, our team will use drilled shaft foundations to reduce footprint, spoils, and create a smaller area to be cordoned off for safety. Hydro-excavation will also be used where necessary to eliminate the need to stockpile spoils and also reduce the risk of damage to utilities. Maintenance of traffic for structure installation will be scheduled to mitigate traffic and safety impacts.

### C.1.2(b) Team Approach vs RIDs

Based on site visits and past experience, our design might be considered different from the reference information documents (RID) as follows.

**Jimmy Deloach Connector.** Structure to be placed on the outside shoulder just south of the RID location to optimize sight distance and minimize slope.

**Augusta Rd.** Install power service in the SW quadrant of Augusta Rd. and International Trade Pkwy. at an existing GDOT power service rack.

**Cobb Pkwy., NB.** Install power service adjacent the existing service point serving the roadway lighting. We also propose to tie into the existing Regional Traffic Operations Program fiber along Cobb Pkwy.

**Cobb Pkwy., SB.** Install power service at the existing service point at Cobb Pkwy. and I-285 EB on-ramp.

**Sixes Rd.** Install dynamic message sign on outside shoulder of the SB lane; fiber will connect across I-575 to the existing trunk on the NB side; power will come from an existing service point in the opposite quadrant from that shown on the RIDs.

### C.1.2(c) Management Approach and Continuity of Work.

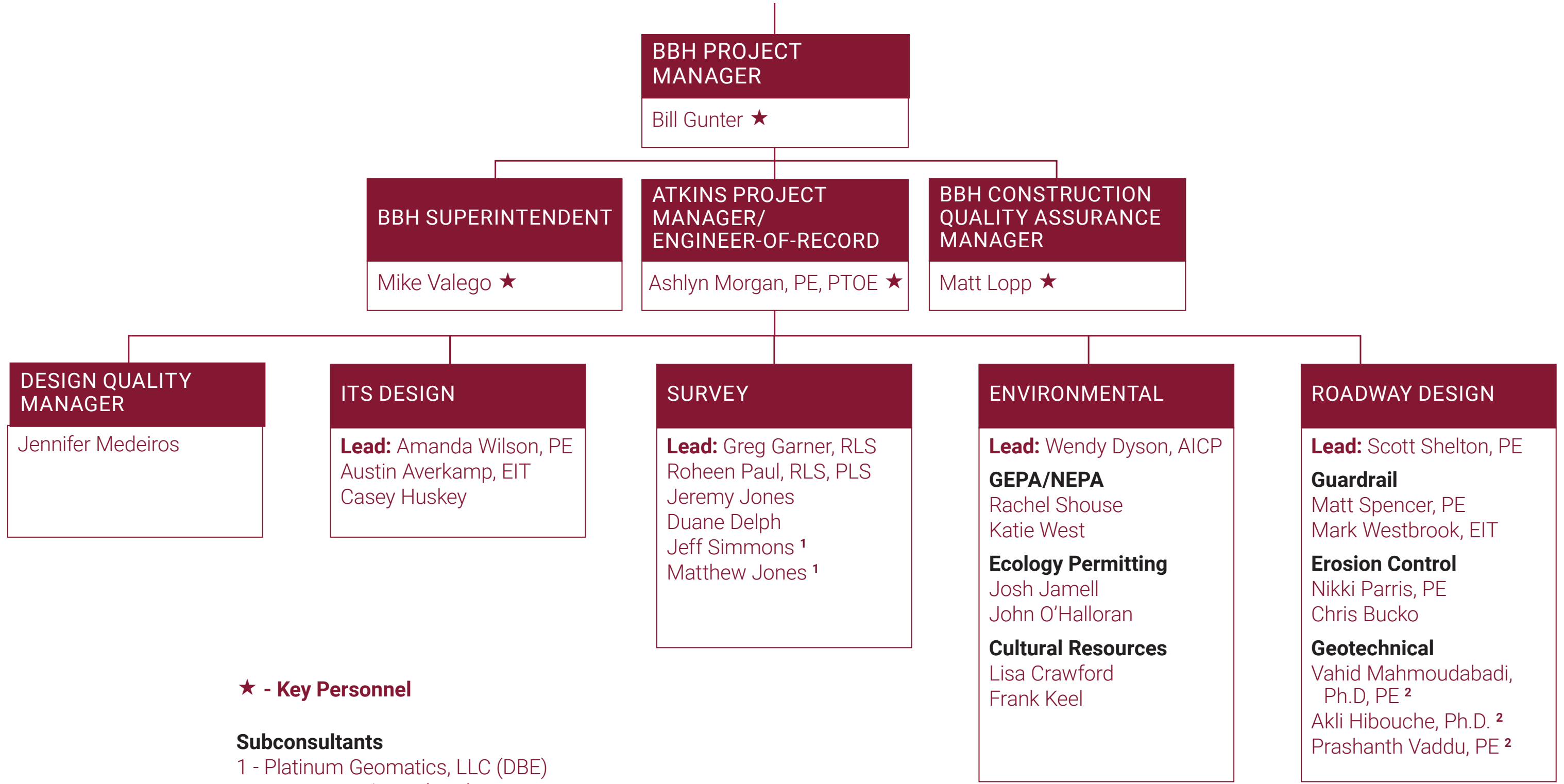
**Management approach.** This project will be right-sized and results-driven. The job will be managed so that the result of the design and construction provide a quality product that is completed efficiently, properly, and in a fiscally responsible manner. BBH will provide overall management for this project for both the design and construction phase—overseeing Atkins' design efforts and managing construction activities. This is a relatively small scope project; therefore, the extent of the design and construction efforts should match the project.

**Continuity of work.** Upon design notice to proceed, we will begin a coordinated design effort between our team to ensure constructability while meeting design standards. This will result in less rework and expedite the design process.

Following the design workshop, phased survey and design will begin. Design will begin as each site survey is completed, not waiting for all sites to be completed. This coordinated approach allows BBH to start working with sign structure manufacturers on shop drawings and structure approval to reduce impacts of extended lead times for sign structures.

Following approval of the release for construction plans, construction will be managed in three segments: Savannah, Cobb Pkwy., and Sixes Rd. As structural components are fabricated, construction will begin on underground conduit, power services, and structure foundations. Sites will be constructed geographically in order to minimize mobilizations and not leave uncompleted work open at a site. Coordination with the design team will not stop. Once a site is complete, the engineer-of-record will review the construction and begin the compliance report; the design team will begin work on as-builts. Through this phased and collaborative approach, the project will be delivered correctly and timely. **BBH and Atkins have successfully delivered several projects in this manner; we are right team for this project.**

C.1.2(d) Organizational Chart



★ - Key Personnel

**Subconsultants**

- 1 - Platinum Geomatics, LLC (DBE)
- 2 - MC Squared, Inc. (DBE)

### C.1.3 Proposal Schedule

GDOT Statewide ITS Deployment Design/Build  
**Proposal Schedule**

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Calendar																									
							N	D	Half 1, 2021					Half 2, 2021				Half 1, 2022				Half 2, 2022										
							J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A						
1		<b>DMS Design/Build Preliminary Schedule</b>	<b>485 days</b>	<b>Tue 2/16/21</b>	<b>Wed 6/15/22</b>		[Gantt bar from 2/16 to 6/15]																									
2		<b>Milestones</b>	<b>485 days</b>	<b>Tue 2/16/21</b>	<b>Wed 6/15/22</b>		[Gantt bar from 2/16 to 6/15]																									
3		NTP 1 & 2	0 days	Tue 2/16/21	Tue 2/16/21		[Milestone diamond at 2/16]																									
4		NTP 3	0 days	Thu 9/16/21	Thu 9/16/21	43,16,23	[Milestone diamond at 9/16]																									
5		Substantial Completion	0 days	Thu 3/17/22	Thu 3/17/22	3FS+395 days	[Milestone diamond at 3/17]																									
6		Final Acceptance	0 days	Wed 6/15/22	Wed 6/15/22	5FS+90 days	[Milestone diamond at 6/15]																									
7																																
8		<b>Design Activities</b>	<b>213 days</b>	<b>Tue 2/16/21</b>	<b>Thu 9/16/21</b>		[Gantt bar from 2/16 to 9/16]																									
9		Finalize sign locations	14 days	Tue 2/16/21	Mon 3/1/21	3	[Task bar from 2/16 to 3/1]																									
10		<b>Project management Plan</b>	<b>56 days</b>	<b>Tue 2/16/21</b>	<b>Mon 4/12/21</b>		[Gantt bar from 2/16 to 4/12]																									
11		Draft Document	14 days	Tue 2/16/21	Mon 3/1/21	3	[Task bar from 2/16 to 3/1]																									
12		Submit Draft Document	0 days	Mon 3/1/21	Mon 3/1/21	11	[Milestone diamond at 3/1]																									
13		GDOT Review	30 days	Tue 3/2/21	Wed 3/31/21	12	[Task bar from 3/2 to 3/31]																									
14		Final Document	5 days	Thu 4/1/21	Mon 4/5/21	13	[Task bar from 4/1 to 4/5]																									
15		Submit Final Document	0 days	Mon 4/5/21	Mon 4/5/21	14	[Milestone diamond at 4/5]																									
16		PMP GDOT Review and approve	7 days	Tue 4/6/21	Mon 4/12/21	15	[Task bar from 4/6 to 4/12]																									
17		<b>Quality Management Plan</b>	<b>56 days</b>	<b>Tue 2/16/21</b>	<b>Mon 4/12/21</b>		[Gantt bar from 2/16 to 4/12]																									
18		Draft Document	14 days	Tue 2/16/21	Mon 3/1/21	3	[Task bar from 2/16 to 3/1]																									
19		Submit Draft Document	0 days	Mon 3/1/21	Mon 3/1/21	18	[Milestone diamond at 3/1]																									
20		GDOT Review	30 days	Tue 3/2/21	Wed 3/31/21	19	[Task bar from 3/2 to 3/31]																									
21		Final Document	5 days	Thu 4/1/21	Mon 4/5/21	20	[Task bar from 4/1 to 4/5]																									
22		Submit Final Document	0 days	Mon 4/5/21	Mon 4/5/21	21	[Milestone diamond at 4/5]																									
23		QMP GDOT Review and approve	7 days	Tue 4/6/21	Mon 4/12/21	22	[Task bar from 4/6 to 4/12]																									
24		<b>Final Design</b>	<b>183 days</b>	<b>Wed 3/17/21</b>	<b>Thu 9/16/21</b>		[Gantt bar from 3/17 to 9/16]																									
25		Design Workshop	0 days	Wed 3/17/21	Wed 3/17/21	3FS+30 days	[Milestone diamond at 3/17]																									
26		<b>Final Plans Development</b>	<b>120 days</b>	<b>Thu 3/18/21</b>	<b>Thu 7/15/21</b>		[Gantt bar from 3/18 to 7/15]																									
27		Survey Sites 1 & 2	27 days	Thu 3/18/21	Tue 4/13/21	25	[Task bar from 3/18 to 4/13]																									
28		Design Sites 1 & 2	27 days	Wed 4/14/21	Mon 5/10/21	27	[Task bar from 4/14 to 5/10]																									
29		Survey Sites 3 & 4	27 days	Wed 4/14/21	Mon 5/10/21	27	[Task bar from 4/14 to 5/10]																									
30		Design Sites 3 & 4	14 days	Tue 5/11/21	Mon 5/24/21	29	[Task bar from 5/11 to 5/24]																									
31		Survey Site 5	21 days	Tue 5/11/21	Mon 5/31/21	29	[Task bar from 5/11 to 5/31]																									
32		Design Site 5	7 days	Tue 6/1/21	Mon 6/7/21	31	[Task bar from 6/1 to 6/7]																									
33		GDOT Survey review	45 days	Tue 6/1/21	Thu 7/15/21	31	[Task bar from 6/1 to 7/15]																									
34		QAQC	7 days	Tue 6/8/21	Mon 6/14/21	28,30,32	[Task bar from 6/8 to 6/14]																									
35		Final Plans Submittal	0 days	Mon 6/14/21	Mon 6/14/21	34	[Milestone diamond at 6/14]																									
36		GDOT Review	30 days	Tue 6/15/21	Wed 7/14/21	35	[Task bar from 6/15 to 7/14]																									



Task [blue bar] Milestone [diamond] Summary [bracket] Deadline [down arrow] Progress [blue bar]

