

**CHANGE ORDER APPROVAL FORM**

PROJECT: Design Services for William Burgess Extension

CHANGE ORDER NUMBER: 1

DATE: 5/13/2020

CONTRACT NUMBER: CM2785

TO CONTRACTOR: GAI Consultants, Inc.

DEPARTMENT: Engineering Services


**Reason for Change Order:** No-Cost Change Order, to cancel services for Contamination Assessment for ROW acquisitions as originally proposed in the scope of services of contract CM2785 attached hereto as Attachment "A". The County does not require these services anymore. In place of the services being canceled and at the request of Engineering, GAI will investigate the wetland encroachment areas on the JEA parcel north of the WBB proposed alignment which will include a Wetland Survey. The fee for the canceled Contamination Assessment is \$2,400 which will be rolled into Lump Sum Fee as part of the Design phase to cover the added Wetland Survey services.


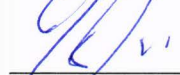
Please see attached GAI Change Request (Attachment "B") for further details.

Original Contract Sum.....	\$	<u>790,235.00</u>
Net Change by Previous Change Order/Supplemental Agreement.	\$	<u>0.00</u>
Contract Sum Prior to This Change Order.....	\$	<u>790,235.00</u>
Amount of This Change Order (No Cost).....	\$	<u>0.00</u>
New Contract Sum Including this Change Order.....	\$	<u>790,235.00</u>

APPROVED BY:  DATE: 05/14/2020  
Robert Companion, Engineering Services

APPROVED BY:  DATE: 5/26/20  
Grayson Hagins, Contract Purchasing Manager

APPROVED BY:  DATE: 6/4/20  
Megan Diehl, Office of Management and Budget

APPROVED BY:  DATE:   
Michael Mullin, County Manager/County Attorney

APPROVED BY: N/A DATE: \_\_\_\_\_  
Justin M. Taylor, Chairman





November 18, 2019

Mr. Robert Companion, PE  
County Engineer  
Nassau County Engineering Services  
96161 Nassau Place  
Yulee, FL 32097

**Subject: Bid No. NC19-016 Design Services for the William Burgess Extension**

Dear Mr. Companion,

GAI Consultants, Inc. (GAI) respectfully submits the following Scope of Services and Fee Proposal to complete the Design Services for the William Burgess Extension (WBE) in Nassau County, FL., as described in the RFQ and as detailed below.

**Project Understanding**

Based on the RFQ, the project will create a two (2) lane extension of William Burgess Boulevard (WBB) from US Highway 17 (US 17) to Miner Road and include the following: Signalization and improvements at the intersection of US 17, intersection improvements at the intersection of Miner Rd., Construction of approximately 1.5 miles of new roadway, construction of drainage facilities and construction of a new 8 ft to 10 ft wide multi-use path. It is also noted that the WBE is being partially funded by the Florida Department of Transportation (FDOT) and will require a separate (or component) set of plans and specifications so that design, construction and construction engineering and inspection (CEI) costs can be accounted for appropriately.

The RFQ further defines the "Scope of Project" under Section 2.0 and subsections 2.1 through 2.8. To better define the details requested, GAI attended a Scope of services meeting on November 6<sup>th</sup> with Nassau County (County) to review the anticipated consulting services for initial contract negotiations. In this meeting, it was agreed that under subsection 2.8 of the Scope of Services, Post design services would not be included in the initial proposal, however, it can be added later by a change order once the level of work and project complexities are better understood.

**Scope of Work**

This consulting services are for the engineering, design, permitting and bid documents to construct the William Burgess Extension project described above. GAI will provide the following services:

**Task 1 – Project Management, Meetings and Coordination**

GAI will provide project management and coordination with the County, FDOT and utility stakeholders through the duration of the project. The following tasks are included:

- Kick-off meeting, progress meetings, Field meetings and project reviews.
- Progress Reports to be included with monthly invoices.
- Contract Administration
- Assist the County with one open house public information meeting. Provide project board displays and power point.



## **Bid No. NC19-016 Scope and Fee Proposal**

- Utility Coordination to include a field meeting with each utility and then formal meeting with all utilities after the 60% plan submittal. GAI will create a conflict utility matrix to use for utility work schedules. The Utility work schedules signed by the respective utilities will be included in the contract specifications. Utilities anticipated within the project limits include JEA, AT&T, Comcast, Broadband CTI and Peninsula Gas Co.
- An FDOT permit submittal will be required for work impacting the US 17 intersection. GAI will meet with FDOT prior to plan submittal to review intended permit requirements and then submit for a permit using the 60% progress plans. Approved permit will be included in the contract specifications.
- The County is currently coordinating some of the ROW acquisitions in advance, primarily with the Hideaway Development. GAI is not anticipating ROW change at this location. GAI will assist the County with investigations for the remaining parcels that will affect the JEA and Yulee School. It is anticipated that the parcels will include two ponds and the corridor width along these two properties. GAI will assist the County with FDOT coordination on ROW as needed.

### **Task 2 – Concept Refinement**

The objective of this task is to refine the concept alignment to verify ROW requirements:

- Data Collection: Collect existing plans from the County, FDOT, St. Johns River Water Management District (SJRWMD) and existing utilities.
- Establish roadway typical sections for approval.
- Roadway 15% line and grade determined from approved typical sections and survey.
- Preliminary Cross Sections
- Provide preliminary drainage design requirements (pond locations and anticipated conveyance).
- Provide an estimated ROW corridor and boundary width.
- Provide an engineer's estimate of concept developed to date.
- Signing and Marking Concept plan.
- Route and Topographic Survey for proposed alignment as defined below.
- Geotechnical Borings and Engineering Report for the new alignment as detailed below.
- Environmental Assessments as detailed below.
- GAI will conduct a preapplication meeting with SJRWMD on the proposed alignment.
- Subsequent to performing the next stage in design, GAI to obtain consensus from the County on the 15% line and grade plan. The summary of findings will serve as the basis for final engineering.

### **Task 3 – Engineering, Permitting, Costs, Plan Production and Specifications**

GAI will progress plans to the 60%, 90%, and 100% phase. Upon the conclusion of each phase, a progress set of plans will be provided. All reports, calculations and plan submittal will go through the GAI QaQc process. All engineering design tasks will be developed in accordance with the Nassau County, then Florida Greenbook and then Florida Department of Transportation (FDOT) standards and requirements in that order. Understanding that the County is receiving partial funding from the FDOT,

**Bid No. NC19-016 Scope and Fee Proposal**

those relevant items associated with FDOT criteria will be followed (i.e. ROW mapping, and Environmental Clearances).

The following list of plans sheets is anticipated but is not limited to:

- Key Sheet
- Roadway typical sections and pavement design (Nassau County standard). Note: Four typical urban roadway sections are anticipated. Prepare typical for US17 to show future FDOT widening template and match existing pavement thickness per geotechnical cores (reference straight line diagram)
- General Notes
- Drainage Map
- Summary of Drainage Structures
- Project Layout
- Plan and Profile Roadway Sheets
- US 17 Signalization Plans. Note: Three Mast Arm structures are anticipated and Traffic Signal Warrant Analysis to justify proposed installation.
- Miner Road Roundabout sheets. Note: Design will require operational modeling (capacity analysis using HCM methodology, LOS and lane configurations, am/pm peak volumes and growth factors). Design documentation including exhibits for design vehicle turning paths, fastest path analysis, and sight distance.
- Also, the installation of this roundabout will require Miner Road Reconstruction due to re-alignment needed to minimize ROW outside the County School property limits. The design will also include additional street lighting with pedestrian crossings.
- Two wet detention ponds and control details (estimated at 2-acres each).
- Drainage Structure Cross Sections
- Roadway and Pond Cross Sections
- County Standard Details
- Maintenance of Traffic Phasing Sections, Plan Sheets and a detour plan.
- Utility Adjustment Sheets. Note: GAI will provide utility coordination
- SWPPP/Erosion Control standard detail sheets
- Signing and pavement Marking Plans. Note: Requirement to also meet Manual of Uniform Traffic Control Devices (MUTCD).
- Signalization Plans and details
- Pedestrian Lighting details for US 17 and Miner Road.
- Landscape plans to include drought tolerant trees and no irrigation along the proposed roadway.

**Permits:** GAI will provide for the following permitting services to include permitting with the County, FDOT, SJRWMD and/or the US Army Corps of Engineers (USACOE). Costs for permitting fees are included as a reimbursable not to exceed item.

**Costs:** An Engineers Opinion of Probable Cost (OPC) will be submitted at each of the plan submittal milestones. GAI will prepare a project specifications package and bid form in accordance with the County Standards.

**Specs:** The Specification package will be developed to meet County requirements. Reference FDOT standard/spec requirements on US17.



**Bid No. NC19-016 Scope and Fee Proposal****Task 4 – Survey (task 4.1) / ROW Mapping (task 4.2)**

Project Description: Corridor route will begin 200 feet west of William Burgess intersection with US 17, then continue along the preliminary alignment that maintains west and north of the JEA powerline right-of-way to connecting intersection of Miner Road and the Yulee High School entrance road. Also, assuming 200 feet of tie-ins north and south of US 17 and Miner Road provides an approximate corridor length of 1.92 miles or 10,140 feet. New and existing road will extend in width by 20 feet past anticipated right-of-way. The 3D Route, topographic, tree & utility survey will include the route centerline of road and right-of-way lines, located from available property corners. GAI will not be verifying private boundary lines.

GAI will locate utilities from above ground indicators to the underground utilities along with any hand holes or manholes that can be opened. The survey will include 3D topography of the route with any buildings, driveways, sidewalks, above ground utility indicators to underground utilities, signs, light poles, drainage, fences, parking, curbing and other topography features along route. The survey may extend past right-of-way to include adjacent significant property features. Work will also produce topographic survey for ponds or ditches running from road. Task to include the following:

- Add a horizontal control (NAD83 state plane datum) by Survey grade GPS Trimble R-8 receivers through a networked control station with accuracies of 0.02' and benchmarks will be set coming off benchmarks on State Road 100 and will be on a NAVD88 datum and per professional standards run closed traverse to 2 different control and benchmarks for Quality check.
- Locate available monumentation along the right-of-way lines to determine alignment and create Right-of-way Lines.
- Locate 3D topography along the route and may extend beyond the right-of-way to connect adjacent topographic features to the project route. The topographic survey will include any buildings, driveways, sidewalks, fences, walls, signs, light poles, drainage, parking, and other topographic features within the route and may locate topographic features within adjacent Right-of-way. All topography will have elevations and contours plotted into Survey Map and CAD files.
- Locate any utility tops, markers, cuts in pavement, signs of utilities, or sunshine utility painted locations along the road. Also review any as-builts for any information they may have and show on survey.
- Survey the flagged wetland limits, once completed.
- A new Right-of-way Map, Route, 3D Topographic, & Utility Survey map will be produced from the above information. The surveyor will show all information and produce this survey in CAD format with 1-foot contours and to a scaled relation to the existing ground conditions depicting as much information on the survey as per scope for an urban project. The Survey map will be professionally printed with the Surveyor signing and sealing as many prints as requested.

**Task 5 – Traffic Modeling**

Traffic Counts and modeling scope of work detail is attached under the Ossiris9 fee proposal for subconsultant.

**Bid No. NC19-016 Scope and Fee Proposal****Task 6 –Environmental/Permit****Task 6.1 Ecological Assessment/Wetland Delineation and Permitting**

- Research existing published literature and available documents pertinent to the project area, particularly prior wetland delineations and wildlife surveys.
- Review existing databases from the US Fish and Wildlife Service and the Florida Fish and Wildlife Conservation Commission for the presence of federal and state listed plant and animal species, including requesting a database search from the FWC for the presence of the Southern Bald Eagle on-site or within a one-mile radius of the project area.
- Conduct one site assessment to evaluate the presence of threatened and endangered species, critical habitat, natural communities, and the location, landward extent, and quality of potentially jurisdictional wetlands.
- Field flag the landward extent of wetlands potentially within the jurisdiction of governmental agencies with statutory permitting authority following the 2010 Final Supplement to the Corps of Engineers Wetlands Delineations Manual (1987) and the Unified Wetland Delineation Methodology for the State of Florida dated 1 July 1994.
- Coordinate with surveyors and/or engineers to locate the field flags as previously placed.
- Prepare an Ecological Assessment Report for inclusion in the Environmental Resource Permit application which will include the following information pertinent to the project site:
  - Existing site conditions (including a FLUCCS map).
  - Approximate landward extent of wetlands.
  - Potential for occurrence of listed plant and animal species, including wetland dependent animal species.
  - Projected wetland impacts and analysis of proposed wetland impacts utilizing the Unified Mitigation Assessment Methodology (UMAM) and/or Wetland Rapid Assessment Process (WRAP).
  - A discussion of secondary and cumulative impacts associated with the project.
  - A discussion of avoidance and minimization of wetland impacts associated with the project (alternate site plans must be prepared by others if required by the agencies).
  - Proposed use of an approved mitigation bank to off-set projected wetland impacts.
- Participate in a pre-application conference with the SJRWMD.
- Assist EOR with preparing Environmental Resource Permit (ERP) application for submittal to SJRWMD and a Federal Dredge and Fill Permit application for submittal to the US Army Corps of Engineers (Corps).
- Schedule and conduct site reviews with representatives of SJRWMD and/or the Corps for verification of the landward extent of jurisdictional wetland limits.
- Prepare responses to Requests for Additional Information (RAI's).



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- **Task 6.2 Archaeological Phase I Site Assessment (Environmental Clearance for ROW acquisition only)**
  - Conduct background research to determine the extent of previously-recorded cultural resources in the vicinity of the proposed pond sites and to characterize the potential of the Area of Potential Effect (APE) to contain unrecorded cultural resources.
  - Includes submittal of a Florida Master Site File (FMSF) Township, Range, and Section (TRS) Data Request Form to the Florida Division of Historical Resources (FDHR) to receive information for both architectural and archaeological resources in the project vicinity including the completion of previously-completed Cultural Resources Assessment Surveys.
  - It is assumed that neither a visit to the FDHR's office nor on-site fieldwork will be required for this study.
  - To the extent feasible, consult the county's GIS website, historic-period maps, and any historic aerials.
  - Prepare a brief summary of the results of this effort and any recommendations.
  - Additional services to conducting archaeological and architectural fieldwork to determine if there are any potential historic resources in the areas are to be affected by the proposed work can be added as a supplement to the current scope of work.

**Task 6.3 Contamination Phase I Site Assessment (Environmental Clearance for ROW acquisition only):**

The detail scope of work detail is attached under the NDN Companies fee proposal for subconsultant.

**Task 7 - Geotechnical Engineering**

- Geotechnical exploration and investigation to include field explorations and report. The detail scope of work detail is attached under CSI-geo fee proposal for subconsultant.

**Task 8 - Subsurface Utility Exploration (SUE)**

- SUE within the existing roadway is expected at the US 17 and Miner Road intersections, and along School driveway. The work effort will include designation and approximately thirty (40) locates. The detail scope of work detail is attached under FR Aleman fee proposal for subconsultant.

**Task 9 –Bidding Assistance**

- Assist the County during the bidding phase, including attending a pre-bid meeting, addressing bid questions, addendums and in the award process by analyzing unit bids versus cost calculated.

**ASSUMPTIONS**

- ROW needs are limited to those described
- Environmental assessments or other planning requirements are not required outside those proposed.
- The County will provide coordination with property owners should driveways, and encroachments be required.
- Mitigation impacts to be paid by the County from local mitigation bank.



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- Modification of the Yulee School permit will not require separate plan submittals that would require another other plan set. (i.e. If adjacent pond to school driveway is impacted, these changes are including in the William Burgess Extension plan set.
- Assume that the US17 intersection can be widened and not reconstructed (affects MOT complexity)
- The cost of reproduction for Bidding (plans and specs), to be paid by each bidder.

**EXCLUSIONS**

- No post design services including review of shop drawings, response to RFI's or field reviews are included in this scope
- No construction engineering inspection services are included in this scope of services
- No utility designs
- No ITS system design
- No ROW Acquisition Services
- Changes to the Yulee School site plan (changes to parking area, ingress/egress).
- RR Coordination not anticipated in signalization design, due to distance from US17 intersection (approximately 900 feet).

**DELIVERABLES/ Schedule**

- Provide the County with electronic progress submittals for review, final plans and specifications as well as quantities, permits outlines and bid form for bidding a unit price contract.
- A detailed schedule will be submitted within 10 days of receiving an NTP.

**Fee Breakdown (Refer to Fee Summary Exhibits attached):**

<b>GAI Design (LS)</b>	<b>\$516,340</b>	
<b>GAI Expenses (LS)</b>	<b>\$ 3,100</b>	
<b>GAI Field Survey (LS)</b>	<b>\$ 88,465</b>	
<b>GAI ROW Mapping (LS)</b>	<b>\$ 22,405</b>	
<b>Osiris9/ PMA (Traffic) (LS)</b>	<b>\$ 41,615</b>	
<b>NDN (Contamination Phase I) (LS)</b>	<b>\$ 2,400</b>	<i>- Services being canceled</i>
<b>CSI-Geo (Geotech) (Reimbursable)</b>	<b>\$91,085</b>	
<b>FR Aleman and Assoc. (SUE) (Reimbursable)</b>	<b>\$24,825</b>	
<b>Total Fee</b>	<b>\$790,235</b>	<i>- NO Change to total</i>

Thank you for giving us the opportunity to submit this proposal and providing you with the above services. I trust that this proposal meets with your expectations. Please if you have any questions or need additional information related to this proposal, do not hesitate to contact me.

Sincerely,



Ronald Hoogland, P.E.  
**Project Manager**

May 12, 2020

Mr. Robert Companion, PE  
 County Engineer  
 Nassau County Engineering Services  
 96161 Nassau Place  
 Yulee, FL 32097

**Subject: Bid No. NC19-016 Design Service Change 1 for the William Burgess Extension**

Dear Mr. Companion,

As requested, GAI will investigate the wetland encroachment areas on the JEA parcel north of the WBB proposed alignment. This added service will not create any added consulting costs since we are voiding the Contamination Assessment Task, that was to be performed by NDN our subconsultant. As you indicated, the County will not require a Phase I Contamination Assessment for ROW acquisitions. The task was in the amount of \$2,400.

The wetland survey will be performed, within the illustrated boundary figure below. The point numbers are a reference to survey coordinates. The plotted linework is north of the WBB alignment and this area will serve as an alternate project pond location and/or future park area, if acceptable to the County.

The task hours to perform the environmental services will meet all the requirements detailed in the scope of services, as can be referenced under Task 6 Environmental/Permit:

Environmental Manager: 7-hours @\$170/hr  
 Environmental Specialist: 7-hours @\$150/hr  
 Environmental GIS: 3-hrs@\$90/hr  
 Sum Total: \$2,510.

In order to not exceed the projected cost under contract, the above fee is rounded to meet the cancelled task of **\$2,400 Lump Sum fee**. The \$2,400 will be added to the GAI lump sum fee and the NDN subconsultant amount will become \$0.0. The NDN subconsultant fee will be removed from the project invoice.

Please if you have any questions or need additional information related to this proposal, do not hesitate to contact me.

Sincerely,



Ronald Hoogland, P.E.  
**Project Manager**

