

SUPPLEMENTAL AGREEMENT APPROVAL FORM

PROJECT: Blackrock Road

CHANGE ORDER NUMBER: 02

(from SR A1A to Heron Isles Parkway

DATE: 02/27/12

CONTRACT NUMBER: CM1745

TO CONTRACTOR: Peters & Yaffee, Inc.

Reason for Change Order: As a supplement to the original Blackrock Road design services contract, Peters & Yaffee, Inc. original scope of services shall be modified to construct a flat slab bridge structure over top of the existing box culvert at Lanceford Creek instead of replacing it with another box culvert as was originally scoped. Since the proposed bridge and abutments are anticipated to be placed well out of the tidal flow (leaving the existing box in-place), no changes in the existing hydraulic or scour conditions are anticipated. As a result, the associated hydraulic and scour analyses are deleted from the original scope of services are part of this supplemental agreement. As part of this supplemental agreement, Peters & Yafee shall perform the additional scope of services, attached hereto as Exhibit A.

Original Contract Sum.....	\$	<u>417,681.22</u>
Net Change by Previous Change Order/Supplemental Agreement.	\$	<u>41,369.60</u>
Contract Sum Prior to This Change Order.....	\$	<u>459,050.82</u>
Amount of This Change Order (Add/Deduct).....	\$	<u>43,100.87</u>
New Contract Sum Including this Change Order.....	\$	<u>502,151.69</u>

ACCEPTED BY: [Signature] DATE: 2/28/12
Scott, Herring, Public Works Director

APPROVED BY: [Signature] DATE: 3/6/12
Ted Selby, County Manager

APPROVED BY: [Signature] DATE: 3-26-12
David Hallman, County Attorney

APPROVED BY: [Signature] DATE: 3-26-12
Stacy T. Johnson, Chair

APPROVED BY: [Signature] DATE: 4/2/12
John A. Crawford, Ex-Officio Clerk

EBK 3/26/12 *JS 3/28/12*

EXHIBIT A
SCOPE OF SERVICES
ENGINEERING SERVICES
FOR
BLACKROCK ROAD GRS SUPPLEMENTAL AGREEMENT 2
Nassau County Contract No. CM1745
Blackrock Road Design Services

February 27, 2012

PROJECT DESCRIPTION

As a supplement to the original Blackrock Road design services contract, the Consultant's original scope of services shall be modified due to the decision by the Client to construct a flat slab bridge structure over top of the existing box culvert at Lanceford Creek instead of replacing it with another box culvert as was originally scoped. Since the proposed bridge and abutments are anticipated to be placed well out of the tidal flow (leaving the existing box in-place), no changes in the existing hydraulic or scour conditions are anticipated. As a result, the associated hydraulic and scour analyses are deleted from the original scope of services as part of this supplemental agreement.

A. PROJECT SCOPE

1. Project General Tasks

- a. *Notice to Proceed Meeting* – The Consultant team shall prepare for and attend one Notice to Proceed Meeting with Nassau County staff.
- b. *Project Status Meetings* – The appropriate members of the Consulting team shall attend up to three progress meetings with the County staff to discuss project progress and status, upcoming events and activities. The purpose of these meetings is to maintain clear communication between the County and the Project Team. The Consultant shall prepare and distribute meeting minutes following each of these meetings.
- c. *Other Coordination Meetings* – The appropriate members of the Consulting team shall attend other additional meetings with the appropriate using agencies with their consultants as appropriate.

- d. *Project Schedule* – The Consultant shall prepare and submit a project schedule for this project identifying major tasks, their duration and tasks relationships. The schedule shall be updated monthly and at other appropriate intervals.
- e. *Invoices/Progress Report* – Invoices shall be prepared in the format prescribed by the County. Progress reports shall be submitted with each monthly invoice.
- f. *Quality Assurance/Quality Control* – The Consultant shall designate appropriate staff to conduct Quality Assurance/Quality Control (QA/QC) reviews of all work products prior to submittals to the County.

2. Roadway Analysis and Plans

The Consultant will perform the necessary roadway analyses and prepare construction plan sheets, notes and details for a complete set of roadway construction documents to convey the intent and scope of the project for the purposes of construction. The consultant will develop a pavement design based on the existing traffic data provided by the County. Included herein are also the analyses, plans and design details necessary for a safe and effective Maintenance of Traffic (MOT) Plan to move vehicular and pedestrian traffic during all phases of construction. The design will be prepared in accordance with the FDOT Design Criteria for Resurfacing, Restoration and Rehabilitation (RRR) Chapter 25 of the Plans Preparation manual (PPM) Volume 1 and the FDOT Green Book and applicable County Standards. This task will also include the preparation of Standard Specifications and Special Provisions.

3. Drainage Analysis

The Consultant will provide services necessary for the analysis and final design of improvements to the existing and any proposed drainage facilities necessary to support the proposed roadway improvements. The Consultant will also account for all off-site drainage currently flowing to the roadway and accommodate for same in the design. All proposed drainage improvements are anticipated to remain within the current County right of way. All design work will be in compliance with the FDOT Drainage Manual, County Standards, and the requirements of the regulatory agencies. The consultant's drainage analysis includes the following provisions:

- a. Bridge Hydraulics report that will include hydraulic flow calculations, scour analyses and storm surge calculations in accordance with FDOT requirements. – ITEM DELETED FROM ORIGINAL SCOPE

- b. Final design drawings (signed and sealed by a professional engineer registered in the State of Florida) necessary for the construction of the above described improvements.

4. Utility Coordination

The Consultant shall be responsible for coordinating all design with the affected utility companies in order to minimize utility conflicts. The following services will be included:

- a. *Utility Coordination* – Services to be provided in the Blackrock Road design services Contract No. CM1745.

5. Signing and Pavement Marking Analyses and Plans

The Consultant will perform the necessary signing and pavement marking analyses and prepare construction plan sheets, notes and details for a complete set of signing and pavement marking documents to convey the intent and scope of the project for the purposes of construction.

6. Structural Analysis – ITEM DELETED FROM ORIGINAL SCOPE

As a supplement to the original Blackrock road design services contract, the Consultant will provide the following additional services for a flat slab bridge structure utilizing the Geosynthetic Reinforced Soil (GRS) Integrated Bridge System that will span over top of the existing box culvert at Lanceford Creek.

The provided GRS-IBS design services will include the design analysis (including necessary coordination), plans development, and load rating of a short span (approximately 41'-0" clear) concrete flat slab bridge founded on a GRS abutment which will include, but not limited to, the following:

- Flat slab bridge design analysis
- GRS abutment design analysis
- General notes, including GRS wall notes.
- Plan and elevation sheet.
- Flat slab bridge superstructure design with traffic barriers.
- Finish grade elevations.
- Rebar list.
- Bearing seat details.
- GRS coordination and required detail incorporation.

- GRS wall/abutment geometry sheets, including plan and elevations.
- Geotechnical coordination.
- Details and requirements for the removal, storage, and setting of the existing pedestrian bridge to be reused if/as required.
- Load rating analysis.

Since the proposed bridge and abutments are anticipated to be placed well out of the tidal flow (leaving the existing box in-place), the design of any scour countermeasures are not anticipated to be required and thus are not included herein.

7. Construction Cost Estimate

The Consultant will provide two construction cost estimates. The first will be provided at 60% and the second will be provided with final plans.

8. Bid Phase Services

The Consultant will prepare a bid package including front end documents for the bidding of this project. The consultant will also formally respond to questions during the bidding phase of the project and prepare a recommendation of the lowest qualified bidder based on the county prepared bid tabulations.

9. Post Design Services

The Consultant will provide services necessary to assist the County during the construction phase of this project. The consultant will respond to contractor requests for information, review and approve shop drawings, attend meetings as necessary and revise plans as necessary. This effort also includes the review and approval of as-built drawings to provide certification to the SJRWMD and any other regulatory agencies, as required.

B. PROJECT DELIVERABLES

The Consultant shall contact the County prior to making a submission to verify the number of copies to submit. Up to five draft copies of the construction plans and required supporting documents (utility certifications, drainage and permit certifications, QC certifications, design calculations, letters, memos, etc.) will be submitted at the 60%, 90% and final stages of design.

C. PROJECT SCHEDULE

The consultant will provide a revised project schedule for county no later than 10 days after NTP. The consultant will meet all permitting requirements of this scope but timeliness of receipt of permits is out of the consultant's control.

D. COMPENSATION

Peters and Yaffee, Inc. and its subconsultants will perform the scope of services outlined herein for a lump sum fee of \$43,100.87. Prime consultant and subconsultant fee amounts are indicated in the table below. Proposal amounts for subconsultants are attached.

Firm Name	Role	Fee Amount
Peters and Yaffee	Prime Consultant	\$19,646.20
Atkins North America	Subconsultant	\$23,454.67
TOTAL		\$43,100.87

E. COUNTY RESPONSIBILITIES

1. Documents – The County shall provide access to any available plans, maps and other pertinent information under its control essential to the satisfactory completion of the work indicated herein.
2. Reviews – The County will provide timely reviews of the Consultant's work in accordance with the schedule agreed upon between the County and the Consultant. Each review period by the county shall be two weeks, at which time all comments will be forwarded to the Consultant.

F. ASSUMPTIONS

1. This effort does not include any Contamination investigations or analysis. If areas are identified during the design, requiring further analysis, they will be addressed separately.
2. Utility relocation design services are not included in this scope of work. If relocations and/or upgrades are identified as necessary by utility agencies, the relocation design work will be addressed separately.

- 3. Wetland mitigation and/or threatened and endangered species mitigation efforts and/or designs are not included in this scope of services. If necessary, efforts will be addressed separately.
- 4. The County will be responsible for all agency permitting and/or application fees. These costs are not part of the Consultant's scope and proposal.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

**Nassau County,
Board of County Commissioners**

Stacy T. Johnson

Its: Chair

Date: 3-26-12

**ATTEST TO CHAIR
SIGNATURE**

[Signature]

JOHN A. CRAWFORD
Its: Ex-Officio Clerk

Approved as to form and legal
sufficiency:

[Signature]

DAVID A. HALLMAN

ATTEST:

[Signature]

(Corporate Secretary)

*ESH
4/11/12
ds
4/11/12*

Peters and Yaffee, Inc.

[Signature]

Signature of President/Owner

Russell Yaffee, PE
Type/Print Name of Corporate Secy.

Dow W. Peters III, PE
Type/Print Name of President/Owner

Date: 3/28/2012



ESTIMATE OF WORK EFFORT AND FEE
Blackrock Road Improvements SA #2

No. / ACTIVITY	Project Management		Engineer III		Engineer II		Engineer I		Project Totals		
	Man Hours	Labor Cost	Man Hours	Labor Cost	Man Hours	Labor Cost	Man Hours	Labor Cost	Hours	Costs	
TASK 2 - PROJECT GENERAL TASKS											
2a-c Meetings	4	\$ 575.48		\$ -	0	\$ -	0	\$ -	4	\$ 575.48	
2d-e Project Administration / Coordination	4	\$ 575.48		\$ -	0	\$ -	0	\$ -	4	\$ 575.48	
2f QA/QC	8	\$ 1,150.96		\$ -	0	\$ -	0	\$ -	8	\$ 1,150.96	
Subtotal	16	\$ 2,301.92	0	\$ -	0	\$ -	0	\$ -	16	\$ 2,301.92	
TASK 3 - ROADWAY ANALYSIS AND PLANS											
3a Field Review / Site Visit											
3b Pavement Design	1	\$ 143.87	0	\$ -	4	\$ 433.20	0	\$ -	5	\$ 577.07	
3c Roadway Design Analysis	2	\$ 287.74	0	\$ -	12	\$ 1,299.60	0	\$ -	14	\$ 1,587.34	
3d Roadway Plans											
Key Sheet	1	0	\$ -	0	\$ -	2	\$ 216.60	0	\$ -	2	\$ 216.60
Summary of Quantities	1	2	\$ 287.74	0	\$ -	6	\$ 649.80	0	\$ -	8	\$ 937.54
Typical Sections Sheet	1	1	\$ 143.87	0	\$ -	7	\$ 758.10	0	\$ -	8	\$ 901.97
General Notes	1	1	\$ 143.87	0	\$ -	6	\$ 649.80	0	\$ -	7	\$ 793.67
Project Layout	1	1	\$ 143.87	0	\$ -	6	\$ 649.80	0	\$ -	7	\$ 793.67
Roadway Plans	2	2	\$ 287.74	0	\$ -	14	\$ 1,516.20	0	\$ -	16	\$ 1,803.94
SWPPP & Erosion Control Detail Sheets											
Special Details											
Traffic Control Details	6	2	\$ 287.74	0	\$ -	8	\$ 866.40	0	\$ -	10	\$ 1,154.14
Cross Sections	7	2	\$ 287.74	0	\$ -	8	\$ 866.40	0	\$ -	10	\$ 1,154.14
3e Design Documentation Report											
3f Pay Item Quantities	4	\$ 575.48	0	\$ -	8	\$ 866.40	0	\$ -	12	\$ 1,441.88	
3g Construction Documents & Specifications	6	\$ 863.22	0	\$ -	16	\$ 1,732.80	0	\$ -	22	\$ 2,596.02	
Deducted hours from original contract	-16	\$ (2,301.92)	0	\$ -	-24	\$ (2,599.20)	0	\$ -	-40	\$ (4,901.12)	
Subtotal	8	\$ 1,150.96	0	\$ -	73	\$ 7,905.90	0	\$ -	81	\$ 9,056.86	
TASK 4 - DRAINAGE ANALYSIS & PLANS											
See Atkins Proposal for Staffhours											
Subtotal											
TASK 5 - UTILITY COORDINATION											
No additional services required											
Subtotal											
TASK 6 - SIGNING AND PAVEMENT MARKING ANALYSIS AND PLANS											
Temporary Striping Plan	2	\$ 287.74	8	\$ 1,260.64	0	\$ -	0	\$ -	10	\$ 1,548.38	
Subtotal	2	\$ 287.74	8	\$ 1,260.64	0	\$ -	0	\$ -	10	\$ 1,548.38	
TASK 7 - TRAFFIC STUDIES											
No additional services required											
Subtotal											
TASK 8 - PERMITTING											
No additional services required											
Subtotal											
TASK 9 - STRUCTURAL ENGINEERING - Original Task (all tasks included in original scope have been deleted)											
See Atkins Proposal for Staffhours											
Subtotal											
TASK 9 - STRUCTURAL ENGINEERING - Revised Task (new tasks have been added for GRS - IBS design / plans preparation)											
See Atkins Proposal for Staffhours											
Subtotal											
TASK 10 - CONSTRUCTION COST ESTIMATES											
Subtotal	2	\$ 287.74	0	\$ -	12	\$ 1,299.60	0	\$ -	14	\$ 1,587.34	
TASK 11 - BID PHASE SERVICES											
Front End Bid Documents	2	\$ 287.74	0	\$ -	0	\$ -	2	\$ 149.62	4	\$ 437.36	
Pre-Bid Mtg (incl. Prep)	3	\$ 431.61	3	\$ 472.74		\$ -	3	\$ 224.43	9	\$ 1,128.78	
Contractor Question Responses	2	\$ 287.74	0	\$ -	0	\$ -	0	\$ -	2	\$ 287.74	
Bid Review / Recommendation	2	\$ 287.74	0	\$ -	0	\$ -	1	\$ 74.81	3	\$ 362.55	
Subtotal	9	\$ 1,294.83	3	\$ 472.74	0	\$ -	6	\$ 448.86	18	\$ 2,216.43	
LUMP SUM TOTAL	37	\$ 5,323.19	11	\$ 1,733.38	85	\$ 9,205.50	6	\$ 448.86	139	\$ 16,710.93	
TASK 12 - POST DESIGN SERVICES											
Pre-Con Mtg. / Site Visit	3	\$ 431.61	3	\$ 472.74	0	\$ -	3	\$ 224.43	9	\$ 1,128.78	
Contractor Submittal Reviews	2	\$ 287.74	2	\$ 315.16	0	\$ -	1	\$ 74.81	5	\$ 677.71	
Final Certification Incl Site Visit	3	\$ 431.61	3	\$ 472.74	0	\$ -	3	\$ 224.43	9	\$ 1,128.78	
Subtotal	8	\$ 1,150.96	8	\$ 1,260.64	0	\$ -	7	\$ 523.67	23	\$ 2,935.27	
LIMITING AMOUNT TOTAL	8	\$ 1,150.96	8	\$ 1,260.64	0	\$ -	7	\$ 523.67	23	\$ 2,935.27	
PROJECT TOTALS	45	\$6,474.15	19	\$2,994.02	85	\$9,205.50	13	\$972.53	162	\$19,646.20	

ATKINS ESTIMATE OF WORK EFFORT AND FEE
Blackrock Road SA #2

No. / ACTIVITY	Sheets	Sr. Project Manager		Sr Engineer		Engineer II		Sr. Designer		Clerical		Project Totals		
		Rate = \$163.57		Rate = \$155.33		Rate = \$121.83		Rate = \$92.20		Rate = \$55.04		Avg Rate \$0.00		
		Man Hours	Labor Cost	Man Hours	Labor Cost	Man Hours	Labor Cost	Man Hours	Labor Cost	Man Hours	Labor Cost	Hours	Costs	
TASK 4 - DRAINAGE ANALYSIS & PLANS														
Preparation of Bridge Hydraulic Report (Tidal Analysis) - Removed from scope														\$ (25,259.90)
Subtotal		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ (25,259.90)
TASK 9 - STRUCTURAL ENGINEERING - Original Task (all tasks included in original scope have been deleted)														
Original Structural Design Task - Removed from Scope														\$ (22,842.44)
Subtotal		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	\$ (22,842.44)
TASK 9 - STRUCTURAL ENGINEERING - Revised Task (new tasks have been added for GRS - IBS design / plans preparation)														
Structures - Summary, Misc. Tasks, Dwgs.		8	\$ 1,308.56	25	\$ 3,883.25	17	\$ 2,071.11	33	\$ 3,042.60	0	\$ -	83	\$ 10,305.52	
Short Span Flat Slab Bridge Structural Design		17	\$ 2,780.69	52	\$ 8,077.16	35	\$ 4,264.05	70	\$ 6,454.00	0	\$ -	174	\$ 21,575.90	
GRS Abutment Design and Plans Development		11	\$ 1,799.27	32	\$ 4,970.56	22	\$ 2,680.26	43	\$ 3,964.60	0	\$ -	108	\$ 13,414.69	
Meetings & Coordination		32	\$ 5,234.24	13	\$ 2,019.29	9	\$ 1,096.47	18	\$ 1,659.60	40	\$ 2,201.60	112	\$ 12,211.20	
Q/C		2	\$ 327.14	5	\$ 776.65	3	\$ 365.49	7	\$ 645.40	0	\$ -	17	\$ 2,114.68	
Subtotal		62	\$ 10,141.34	102	\$ 15,843.66	69	\$ 8,406.27	138	\$ 12,723.60	40	\$ 2,201.60	411	\$ 59,621.99	
TASK 11 - BID PHASE SERVICES														
Front End bid Documents		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	
Pre-bid Mtg (incl. Prep)		8	\$ 1,308.56	8	\$ 1,242.64	0	\$ -	0	\$ -	8	\$ 440.32	24	\$ 2,991.52	
Contractor Question Responses		2	\$ 327.14	8	\$ 1,242.64	0	\$ -	0	\$ -	0	\$ -	10	\$ 1,569.78	
Bid Review / Recommendation		2	\$ 327.14	0	\$ -	0	\$ -	0	\$ -	0	\$ -	2	\$ 327.14	
Subtotal		12	\$ 1,962.84	16	\$ 2,485.28	0	\$ -	0	\$ -	8	\$ 440.32	36	\$ 4,888.44	
LUMP SUM TOTAL		74	\$ 12,104.18	118	\$ 18,328.94	69	\$ 8,406.27	138	\$ 12,723.60	48	\$ 2,641.92	447	\$ 16,408.09	
TASK 12 - POST DESIGN SERVICES														
Pre-Con Mtg. / Site Visit		4	\$ 654.28	8	\$ 1,242.64	0	\$ -	0	\$ -	0	\$ -	12	\$ 1,896.92	
Contractor Submittal Reviews		2	\$ 327.14	16	\$ 2,485.28	0	\$ -	0	\$ -	8	\$ 440.32	26	\$ 3,252.74	
Final Certification Incl Site visit		4	\$ 654.28	8	\$ 1,242.64	0	\$ -	0	\$ -	0	\$ -	12	\$ 1,896.92	
Subtotal		10	\$ 1,635.70	32	\$ 4,970.56	0	\$ -	0	\$ -	8	\$ 440.32	50	\$ 7,046.58	
LIMITING AMOUNT TOTAL		10	\$ 1,635.70	32	\$ 4,970.56	0	\$ -	0	\$ -	8	\$ 440.32	50	\$ 7,046.58	
PROJECT TOTALS		84	\$13,739.88	150	\$23,299.50	69	\$8,406.27	138	\$12,723.60	56	\$3,082.24	497	\$23,454.67	