Peters and Yaffee, Inc. 1225 West Beaver Street, Suite 117 Jacksonville, FL 32204 (904)265-0751

Scope of Services and Fee Proposal

Proposed Improvements for Miner Road For the Board of County Commissioners Nassau County, Florida

I. PURPOSE

This Scope of Services is for an individual task within the Agreement between the Nassau County and Peters and Yaffee, Inc. dated October 12, 2008.

<u>Project Description:</u> This project consist of the pavement improvements (milling and resurfacing, pavement widening and sidewalk construction) for Miner Road from the pavement change south of SR 200 approximately 0.5 mile to pavement change north of Shady Oak Drive/Hickory Village Way. Nassau County Roadway and Drainage Standards shall govern the design and construction. The Consultant shall investigate the status of the project and become familiar with concepts and commitments developed by the County.

II. FINAL DESIGN PHASE

The CONSULTANT shall provide services for the final plans and bid package preparation for the pavement improvements for Miner Road. The approximate length of the project is 0.5 miles. The CONSULTANT's services will result in all drawings, specifications, permit applications, and other documents needed for the County to seek bids and contract for construction of the Miner Road Project.

A. DESIGN SURVEY (TO BE PROVIDED BY THE COUNTY)

The COUNTY shall provide survey services including topographic survey. Specific requirements for topographic survey and right-of-way control survey are as follows:

 Baseline Control – The design survey shall establish control lines relative and referenced to the existing right-of-way, with all the coordinates for all ground control points provided in the Florida State Plane Coordinate System, Florida East, NAD83 for future use.

- 2. *Alignment* The alignment of the route will follow the existing roadway.
- 3. Bench Levels Vertical control for the project will originate from existing benchmarks and will loop through the project, with a maximum spacing of 1000'. Benchmarks shall be based on the North American Vertical Datum of 1988 (NAVD88). The benchmark monuments will also be physically referenced with tie points to facilitate re-establishing at a future date.
- 4. Topography Provide cross sections for the existing cross slope at 100 feet intervals within the project limits (approximately 2,649 feet in length). In addition, cross sections should include the existing edge of pavement (EOP) and extend to 15 feet beyond the EOP on both the northbound and southbound lanes. The cross sections will have a common benchmark elevation at the centerline of the highway for each cross section. A minimum of two (2) benchmarks should be set off of the highway near the Right-of-Way (R/W) Line and may be assumed elevation, NAVD88 datum. If the surveyor elects to use temporary assumed benchmarks, they must last throughout the life of construction and cannot be set in trees, power poles or concrete monuments. Establish begin and end points of project and reference.
- 5. Utility Designates The utilities within the Miner Road Right-of-Way shall be designated. Locate the DESIGNATED utilities in the following manner: All survey readings taken to rneasure the location of the DESIGNATED utility are to be recorded. The survey readings taken are to be on the surface of the ground or pavement above the utility and the surface survey reading should be accurate for elevations values to the tenth (0.1) of a foot. A statement is to be placed in the description of each survey reading stating where the survey reading was taken (i.e., ground survey reading over gas line, pavement survey reading over a waterline, etc.). In addition, the description shall state the type of the utility (i.e., 2" gas, fiber optic, TV cable, etc.). A station-offset report is to be created showing the station and offset to each utility DESIGNATED.

Existing Right-of-Way Maps - Not included in the Scope of Services

All CADD files will be provided for use in the roadway design.

All field survey activities shall be performed under the direct supervision of a Professional Surveyor & Mapper licensed and in good standing with the State of Florida and shall adhere to State of Florida Minimum technical Standards in 61G17-6, FAC.

All work shall be conducted using equipment, personnel, and procedures that will insure compliance with the accuracy standards as defined below.

It is the responsibility of the supervising Land Surveyor to insure that all work under this agreement complies with all state and local regulations. All documents submitted shall bear the surveyors seal, signature and certificate that all work was done under the surveyor's supervison and that all information contained in the documents is true and is accurately shown.

Horizontal control work can be done using either standard surveying techniques or Global Positioning System (GPS) techniques meeting the specification requirements outlined in this scope.

At a minimum, all horizontal control work shall comply with Second Order – Class II standard accuracy for geodetic control as established by the FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C) and Facility Management.

At a minimum, vertical control work shall be Second Order – Class II, as outlined in the FGDC Geospatial Positioning Accuracy Standards, Part 4: Standards for Architecture, Engineering, Construction (A/E/C) and Facility Management.

Horizontal control shall be based on the North American Datum of 1983 (NAD 83). Vertical Control shall be based on the North American Vertical Datum 1988 (NAVD 88). Exceptions to this may be survey ties to acceptable defined project site coordinate systems. The coordinate system to be used for this project shall be identified in writing by the Surveyor and shall be approved by Peters and Yaffee, Inc. prior to the commencement of the survey.

The units of measurement for this project shall be in US Survey Feet.

All data and deliverables prepared for this survey shall be provided to Peters and Yaffee, Inc. for the final design. The Surveyor also understands and agrees that Peters and Yaffee, Inc. may reproduce the drawings and use all or part of the information provided on the drawings. This includes any reports prepared in connection with the investigative work for this site without incurring obligation for additional compensation to the Surveyor. The original drawings, copies of field notes, and any required survey reports shall be and shall remain the property of Peters and Yaffee, Inc. All required documents shall be submitted to Peters and Yaffee, Inc. upon completion of the work.

B. GEOTECHNICAL

Pavement cores and 6 foot deep auger borings will be performed at a 500

foot spacing in the resurfacing area and at a 200 foot spacing in the deteriorated area. Pavement cores will be at a spacing of 1000 feet in both areas. Both the augers and pavement cores will be staggered on the right and left of the project centerline.

Laboratory classification testing and index property testing will be performed on samples obtained from the borings to help classify the soils and allow correlations with various engineering properties. A total of four limerock ratio (LBR) tests will also be performed.

An engineering report will be prepared that will include a review of available project information, a discussion and results of the conducted field and laboratory services, a discussion of site and subsurface conditions, recommendations for pavement milling depth, and resurfacing and recommendations for remediation of any distressed pavement.

C. ROADWAY PLANS PACKAGE

Construction Documents:

This task will involve the preparation of complete plans and specifications suitable for bidding and construction of the project. This task will also include the preparation of Standard Specifications and Special Provisions.

The plans for this project will include, but not limited to, the following:

- 1. Kev Sheet
- 2. Typical Section and Typical Section Details
- 3. Summary of Quantities
- 4. Lavout Sheet
- 5. General Notes
- 6. Traffic Control Plans
- 7. Stormwater Pollution Prevention Plan
- 8. Signing and Pavement Marking Plan

Progress Submittals:

Plan submittals shall include, but not limited to, the following:

The 50% and 100% submittals shall include, but are not necessary limited to, the following items:

50% Submittals Checklist

- 1. Key Sheet
- 2. Topographic Survey
- 3. Typical Sections
- 4. General Notes
- 5. Pavement Design
- 6. Traffic Control Plans
- 7. Engineering Cost Estimate

100% Submittals Checklist

- 1. Response to 50% review comments
- 2. Key Sheet
- 3. Typical Section and Typical Section Details
- 4. Summary of Quantities
- 5. Layout Sheet
- 6. General Notes
- 7. Traffic Control Plans
- 8. Stormwater Pollution Prevention Plan
- 9. Signing and Pavement Marking Plan
- 10. Standard Specifications
- 11. Engineering Cost Estimate

Permits:

The CONSULTANT shall provide the information necessary to submit the application for a National Pollutant Discharge Elimination System (NPDES) General Permit. This project qualifies for an exemption from the stormwater permitting requirements of St. Johns River Water Management District under Chapter 40C-42.0225 (5)(c) F.A.C.

Progress Meeting:

It is anticipated that there will be two (2) informal progress meetings related to design progress. One informal meeting will be held at the 50% design phase to discuss responses to comments. An additional meeting may be held prior to the 100% design submittal to discuss plan revisions and project scheduling.

Deliverables:

The CONSULTANT will provide five (5), 11" X 17" plan sets for review at the 50% submittal. The 100% plan submittal will include three (3) sets of signed and sealed plan set and specifications and five (5) 11" X 17" plan sets. Final plan submittal will include all revisions, and will be suitable for bidding and construction of the project.

Schedule:

Peters and Yaffee Inc. will commence the project immediately upon receipt of notice to proceed or execution of this Proposal. The 50% plans will be delivered within 6 weeks from notice to proceed. The 100% plans will be submitted within 8 weeks from notice to proceed.

Assumptions and Conditions

Our price and performance is based on the following assumptions and conditions:

- Design survey will be provided by the County that meets the requirements listed in Section II A. Design Survey.
- The existing drainage system will remain and permitting associated with this project will be executed with an exemption obtained by the Consultant.
- Traffic counts and traffic factors will be supplied by the County.
- Existing signs will be replaced by the Contractor.
- Mailbox relocation will be done by the Contractor.
- Bidding of the Project will be done by the County.
- Contractor will obtain the NPDES permit.
- Post design services and construction services are not included in this scope of service.
- Proposed pavement cross slope will be at a minimum 0.02 and longitudinal slope will remain.
- Design survey will be provided by the County that meets the requirements listed in Section II A. Design Survey.

Subconsultants:

Peters and Yaffee, Inc. intends to use Wolf/WPC for geotechnical services on this project.

Compensation

Peters and Yaffee, Inc. will perform the work on a Lump Sum basis for the amount of \$23,887.48 which including \$3,880 for geotechnical services (proposal attached).

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 Its: Chair
	Date: December 10, 2008
ATTEST TO CHAIR SIGNATURE	Approved as to form and legal sufficiency:
JOHN A. CRAWFORD	DAVID A. HALLMAN
Its: Ex-Officio Clerk LAK	
ATTEST:	Peters and Yaffee, Inc.
Zull VIII	La Carre
(Corporate Secretary)	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: 11/12/08