SECOND AMENDMENT TO THE AGREEMENT

In accordance with the SW 49th Ave Corridore (South Phase - CR 484 Widening from Marion Oaks Pass to Marion Oaks Course) Agreement entered into on July 19, 2016, and all of its amendments (if any), collectively (the "Agreement") this First Amendment to the Agreement (this "Amendment") is made and entered into by and between **Kimley-Horn & Associates, Inc.**, whose address is 421 Fayetteville Street, Suite 600, Raleigh, NC 27601; possessing FEIN **56-0885615**, (hereinafter referred to as "Firm") and Marion County, a political subdivision of the State of Florida, 601 SE 25th Avenue, Ocala, FL, 34471, (hereinafter referred to as "COUNTY").

WITNESSETH

WHEREAS this Amendment shall remain in full force and effect until all completion of services required of Firm, and the parties wish to amend the Agreement.

IN CONSIDERATION of the mutual covenants and conditions contained herein, COUNTY and Firm (singularly referred to as "Party", collectively "Parties") hereto agree as follows:

1. This Amendment shall be deemed to amend and become part of the Agreement in accordance with the project 16Q-020, (the "Project"). All provisions of the Agreement not specifically amended herein shall remain in full force and effect.
2. This Amendment is for engineering and design services related to a new 4-lane section of SW 49th Avenue from Marion Oaks Trail to SW 145th Place Road, commencing upon approval of the Marion County Board of County Commissioners. Firm shall complete the scope of services set forth in the Scope of Service, Exhibit "A", and Table A - Cost Estimate for Service, Exhibit "B", hereto.
3. COUNTY shall make payment of Six Hundred Forty-Six Thousand, Eight Hundred Seventy Dollars ($646,870.00) (the "Agreement Price"), to Firm under COUNTY's established procedure and according to Table A, Exhibit "B".

IN WITNESS WHEREOF the Parties have entered into this Amendment, as approved by the Marion County Board of County Commissioners, on the date of the last signature below.

ATTEST:

DEC 19 2018

DAVID R. ELLSPERMANN, DATE
CLERK OF COURT

APPROVED AS TO FORM AND LEGAL SUFFICIENCY

12-14-18

for MATTHEW G. MINTER, DATE
MARION COUNTY ATTORNEY

WITNESS:

SIGNATURE
Amber L. Gartner
PRINTED NAME

WITNESS:

SIGNATURE
Mohammed Murad
PRINTED NAME

MARION COUNTY, A POLITICAL SUB-DIVISION OF THE STATE OF FLORIDA

DEC 18 2018

MICHELLE STONE DATE
CHAIRMAN

BCC APPROVED:
December 4, 2018
16Q-020-CA-02, SW 49th Ave Corridore
(South Phase - CR 484 Widening from Marion Oaks Pass to Marion Oaks Course)

KIMLEY-HORN & ASSOCIATES, INC.

12.5.2018

BY: DATE

PRINTED:

ITS: (TITLE) Richard V. Busche, P.E.
Sr. Vice President
Kimley-Horn and Associates, Inc.

EXHIBIT "A"

Kimley»Horn

AGREEMENT BETWEEN THE MARION COUNTY BOARD OF COUNTY COMMISSIONERS AND KIMLEY-HORN AND ASSOCIATES, INC.

SCOPE OF SERVICES FOR FINAL ROADWAY DESIGN SERVICES

FOR

SW 49TH AVENUE SOUTH PHASE ONE FROM MARION OAKS TRAIL TO SW 145TH PL RD (1.9 MILES)

KIMLEY-HORN AND ASSOCIATES, INC.

By: _____
(Signature)

Richard V. Busche, PE – Senior Vice President
(Print Name and Title)

Date: November 5, 2018

Kimley»Horn

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Kimley»Horn

PART I - PREAMBLE

A. PURPOSE

The purpose of this Agreement is to describe the scope of work and the responsibilities of Kimley-Horn and Associates, Inc., hereinafter called the ENGINEER and the Marion County Office of the County Engineer, hereinafter called the COUNTY, in connection with the completion of final design and preparation of complete roadway construction plans for the proposed improvements to ***SW 49th Avenue South Phase One***.

This Scope of Services is for the design and permitting of certain roadway improvements within Marion County. The ENGINEER was selected for this project in 2016 under a competitive process consistent with the CCNA process contained in the Florida Statutes as part of RFQ# 16Q-020.

Under a previous Agreement the ENGINEER completed a Preliminary Engineering Report (PER) for the proposed new alignment of SW 49th Avenue. The PER was adopted by the Marion County Board of County Commissioners (BOCC) on February 6, 2018. Under this Agreement the ENGINEER will perform survey work, environmental assessments, prepare roadway design and construction plans and obtain permits for the associated widening and improvements for approximately 1.9 miles of SW 49th Avenue. In addition, the ENGINEER will develop signal design and improvement plans for the intersection of SW 49th Avenue at Marion Oaks Trail for an interim period prior to the widening of SW 49th Avenue.

On August 7, 2018 Marion County approved a separate Agreement with the ENGINEER to perform survey work, environmental assessments, prepare roadway design and construction plans for CR 484 widening. The agreement for CR 484 design includes the intersection of CR 484 at SW 49th Avenue. The design of this intersection is not included in this Agreement.

This Agreement includes the following design responsibilities:

> SW 49th Avenue South Phase One – Survey, design plans, environmental assessments, and regulatory agency permitting, beginning just north of the intersection of SW 49th Avenue and Marion Oaks Trail and continuing southward along new roadway alignment to terminate at a new intersection with SW 145th Place Road, for a distance of approximately 1.9 miles. The design of this roadway segment will include a signalized intersection at Marion Oaks Trail. Signal design plans for the intersection of SW 49th Avenue with Marion Oaks Trail will also be developed considering an interim period prior to the widening of SW 49th Avenue.

This Agreement does not include support services for the acquisition of new right of way through the eminent domain process, the need for which has been identified in the PER. This Agreement does include all work needed to support the acquisition of right of way and pond sites from property owners that will provide right of way through cooperative negotiation with the COUNTY.

It is anticipated that this project will utilize existing and proposed new drainage retention areas per the approved PER.

The ENGINEER will perform those surveys, engineering analyses, designs and permitting services required to complete the final design and to prepare design plans to include environmental assessments, surveying, right of way parcel sketches, roadway, drainage, signing and pavement markings, signalization and the coordination of underground and overhead wire utilities. The ENGINEER will perform those engineering studies, designs and technical reviews of work associated with the development and preparation of the contract plans. The COUNTY will provide job specific information and/or functions as outlined in this Agreement.

During the design stage, it will be necessary for the ENGINEER to have access to the proposed roadway corridor alignment for survey, staking, geotechnical investigations, etc. It is expected that the alignment will be located through existing agricultural operations and residential properties. The COUNTY will secure all necessary permissions, easements, agreements, etc. needed to permit access to the ENGINEER equal to the access that is available on a normal and typical roadway design project.

This Agreement does not include any new preliminary engineering studies, public involvement tasks, etc. designed to help set, or refine, the alignment of the roadway corridor. Those services were provided in a prior agreement during the PER process.

This Agreement does not include work pertaining to the acquisition of properties through the eminent domain process. This work will be considered post-design services and provided under a separate agreement or amendment to this Agreement.

This Agreement does not include any design or permitting services associated with extensions of Marion County utility lines / facilities.

PART II - FINAL DESIGN SCOPE OF SERVICES

A. PROJECT ADMINISTRATION

The project administration activities contemplate an eighteen-month duration following Notice to Proceed by the COUNTY, not including post-design services. The activities that will be undertaken include the following:

1. Project Setup: ENGINEER will establish project files, project work plan, and initiate the project accounting and invoicing system.
2. Kick-off Meeting: ENGINEER will conduct a kick-off meeting with the COUNTY and the project team. ENGINEER will circulate meeting minutes to all participants following the kick-off meeting.
3. Utility Kick-off Meeting: ENGINEER will conduct a utility kick-off meeting with the COUNTY and the various wire utility companies that are within the project corridor to inform them of phasing, schedules, and to establish protocols for the transfer of needed information and relocation plans.
4. Monthly Progress Meetings: Beginning in the second month of the contract and continuing through the duration of the contract, the ENGINEER will meet with the COUNTY to review the progress of work, to conduct project reviews and to coordinate with utility companies.
5. Progress Reports and Invoices: ENGINEER will prepare a monthly progress report to be included with each monthly invoice.
6. Miscellaneous Meetings: ENGINEER will prepare for and attend up to four general meetings with the COUNTY, affected land owners, stakeholders, etc. This would not include advertised public meetings, BOCC workshops, etc.

B. ENVIRONMENTAL ANALYSIS AND REPORTING

The ENGINEER conducted a Natural Resource Assessment (NRA) for the proposed alignments as summarized in the PER. As part of that scope, scrub jay surveys were included but have not been conducted to date pending decision on the final alignment. Additionally, permitting for other potential species that could occur were not included in the previous scope. Lastly, the ground conditions of portions of the project area have changed, specifically in the central area that is currently used for

agriculture. We understand that the land owner has commissioned environmental studies in this area and that these studies will be made available to ENGINEER. We further understand that there are no wetland impacts on the project, but there could potentially be impacts to federal and state listed species. As such, an Incidental Take Permit (ITP) from the US Fish and Wildlife Service (USFWS) may be required along with state listed species permits. The federal listed species could include Eastern indigo snake, Florida scrub-jay, and sand skink. State listed species could include gopher tortoise and burrowing owl.

Until surveys are complete and it is determined that federally listed species will be impacted, the scope and extent of coordination and permitting is unknown. With no federal nexus (e.g. other federal action or funding), an ITP under Section 10 of the Endangered Species Act (ESA) will be required. The ITP includes preparation of a Habitat Conservation Plan (provided by the applicant) and an Environmental Assessment (EA) (generally prepared by the USFWS). The USFWS determines if a public hearing is required for the ITP, but is anticipated since the project completed a PER with public input this may not be required. The USFWS will publish a notice in the Federal Register to solicit input on the action prior to issuance of a permit. It is anticipated this may be deemed a low effect HCP and will be issued out of the Regional Office in Atlanta following Jacksonville Office review, with no Headquarters (Washington, DC) involvement. The general timeframe for completing this permit is 9-18 months. If a ITP is required, the ENGINEER will prepare an amendment to this Agreement to include the scope and fee for this permitting effort. The ITP is not included in this scope of work.

1. Listed Species Surveys. ENGINEER will conduct the following surveys (noting as mentioned above that the scrub-jay surveys were in the previous PER scope):

    a) Gopher Tortoise Survey – ENGINEER will conduct a 15% gopher tortoise survey along the proposed SW 49th South Phase One alignment and the pond sites in accordance with Florida Fish and Wildlife Conservation Commission (FWC) guidelines. Gopher Tortoise burrows identified in the survey will be mapped using hand-held GPS and classified according to activity (potentially occupied or abandoned). Following the survey, a map of burrows identified will be completed.

    b) Burrowing Owl Survey – ENGINEER will conduct pedestrian survey along the proposed alignment of SW 49th South Phase One and the pond sites. Burrowing owl burrows will also be located with GPS. A map showing the approximate location of burrows will be prepared following the survey.

    c) Eastern Indigo snake – ENGINEER will conduct a limited pedestrian survey to identify Eastern indigo snake or snake refugia that occurs along the proposed SW 49th South Phase One or pond sites.

    d) Sand Skink Pedestrian Survey and Analysis – ENGINEER will conduct an analysis of the current condition of the alignment (based on changes that have occurred since the PER was prepared), photograph the habitats and conduct a pedestrian survey to identify potential sand skink tracks. It is anticipated that the surveys described above will be conducted simultaneously or within the same field review. It is anticipated the surveys will require two biologists for 5 days. Note: this scope assumes that a cover board survey will not be required and that coordination with USFWS will be sufficient to receive sign off on no cover board survey required. This is based on the disturbance to the area and on previous projects where USFWS deemed the area not suitable. If additional survey is required a separate scope and fee will be prepared.

    e) Listed Species Summary Report – Following the surveys listed above and the scrub-jay survey, a summary report will be prepared. The report will include a summary of field methodologies and results. Field maps showing the location of identified species will be

prepared along with field data sheets used for the surveys. ENGINEER will schedule and attend one meeting in the USFWS Jacksonville office to discuss the results of the surveys and an approach for moving forward with the project or permits required.

2. Environmental Resource Permit. ENGINEER will complete the Environmental Resource Permit (ERP) application (Sections A, C and E) and an Environmental Narrative summarizing the results of the NRAs and surveys completed. The maps included in the NRA for the SW 49th Avenue PER will be revised to show the proposed project only. It is anticipated that a US Army Corps of Engineers permit will not be required so a separate application is not needed.

3. State Listed Species Permitting (Optional depending on results of survey and impacts and not included in this Agreement)

   If burrowing owls or gopher tortoise are identified and will be impacted, permits for gopher tortoise relocation and burrowing owl burrow take will be required. The on-line applications will be prepared and submitted to FWC. All permit application fees will be paid by the County. The information prepared as part of Task B.1. (survey maps) can be used for the application. ENGINEER will attend one field meeting with FWC if required and will respond to one request for additional information. Note: A 100% survey for gopher tortoise will be required 90 days prior to the start of construction. All items described within this sub-task are not included within this scope of services. A new Agreement or amendment to this Agreement will be prepared for these services, should they become necessary.

C. SURVEYING AND MAPPING

Design Survey: +/- 12,550 feet of topography; +/- 23 existing parcels; 7 planned intersecting street locations; +/- 2 proposed drainage retention areas

1. Records Research: The ENGINEER will obtain information from the Marion County Property Appraiser's Office, Marion County Clerk of Courts and Bureau of Land Management to acquire record evidence of parcel ownership, existing right of way limits for SW 49th Avenue, SW 48th Terrace, Marion Oaks Trail, SW 128th Street, SW 129th Place, SW 134th Loop, SW 130th Street, and SW 145th Place Road, certified corner records and horizontal and vertical control. The ENGINEER will contract with a Title Company to obtain Ownership and Encumbrance Reports for each parcel along and adjacent to the proposed right of way corridor. These reports will be relied upon for any individual easements or right of way takings.

2. Base Map Digital Control File: The ENGINEER will create a master horizontal control file to be utilized throughout the planning and design of the roadway alignment. This map will include the location of the existing right of way lines for those portions of intersecting roadways that fall within the project limits. These right of way lines together with the boundary lines and controlling monumentation for each ownership entity will serve as the base geometry for the project.

3. Establish Roadway Alignment and Obtain Topography: The ENGINEER will recover the roadway alignment, which we assume has been previously established and incorporate it in the base map digital control file. Vertical control points (benchmarks) will be set every 1,000 feet. Cross-section elevations will be obtained at each 100-foot station and extend a distance of 100 feet right and 100 feet left of the centerline alignment. Above ground improvements and surface evidence of underground utilities, including aboveground visible wells will be located.

   The following intersections will be surveyed to obtain cross section elevations at 100-foot intervals within the existing right of way:

- Marion Oaks Trail: 400' west and 600' east.
- SW 128th Street: 150 feet in each direction from the intersection
- SW 129th Place: 200 feet east and 150 feet west from the intersection
- SW 131st Place: 100 feet east and 300 feet north from the intersection
- SW 134th Loop: 150 feet in each direction from the intersection
- SW 130th Street: 150 feet in each direction from the intersection
- SW 145th Place Road: 150 feet in each direction from the intersection

The ENGINEER will also obtain topographic data in up to two separate +/- 2-acre drainage retention areas.

Up to 20 geotechnical boring locations will be staked in the field and the corresponding northing, easting and elevation will be provided.

Those trees that are 12" diameter at breast height and greater, lying within the topographic limits, will be located and included in the digital base map.

The topographic data obtained in the field will be processed, downloaded, checked and imported into the base map digital control file. A digital terrain model (DTM) will be prepared.

4. Sketch and Legal Descriptions of Right of Way Acquisition Parcels and Drainage Retention Areas: Based upon a cursory review of the Marion County Property Appraisers website, there are approximately 23 parcels and 2 drainage retention areas lying within the proposed corridor that may require right of way acquisition. Upon determination and acceptance of the final roadway right of way limits, the ENGINEER will prepare legal descriptions and sketches for the acquisition of the required right of way and drainage retention areas. Based on the PER, 6 of the affected private parcels within the corridor have residential structures that will require a "full take". A boundary improvement survey will be prepared for each of these 6 residential parcels. Based on the PER, there are 2 residential partial takes that will require a boundary and improvement survey and descriptions of the proposed right of way and the remaining portion of the property.

   The legal descriptions and sketches will be prepared in accordance with the Florida Minimum Technical Standards set forth by the Florida Board of Professional Land Surveyors in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes. Deliverables to the County will consist of five (5) signed and sealed copies of the legal description and sketch on 8½" by 11" sheets.

5. Right of Way Map: A right of way map will be prepared for the final roadway corridor. Prior to final recording in the public records, the Surveyor of Record will update the map to depict the boundaries of the acquired parcels based upon the recorded information provided by the County. The right of way will be monumented in the field along the right of way lines and those corners will be referenced on the right of way map. The Right of Way Map will be prepared in accordance with the Florida Minimum Technical Standards set forth by the Florida Board of Professional Land Surveyors in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027, Florida Statutes.

D. GEOTECHNICAL COORDINATION

1. All geotechnical engineering deemed necessary by the ENGINEER to support the design of the roadway improvements, structural signal pole design, and drainage retention areas will be provided by a registered professional geotechnical engineer, under a separate contract with the COUNTY.

2. The ENGINEER will provide requirements for the necessary geotechnical field investigations to the COUNTY for procurement of geotechnical engineering services.

3. During design, the ENGINEER will review and evaluate the results of the geotechnical investigations; and provide coordination needed for final design and permitting with the regulatory agencies.

E. TRAFFIC OPERATIONS ANALYSIS

1. The ENGINEER shall confirm the operations analysis prepared as part of the approved PER to establish the needed number of travel lanes, intersection geometries, turn lane lengths, etc. Any additional analyses requested or required by the COUNTY, or any other regulatory agency, is not included in this agreement and would be considered an additional service.

2. The ENGINEER will include this information in the design documentation submittal described in Task F. DESIGN ANALYSIS.

F. DESIGN ANALYSIS

1. Typical Section Package. A Typical Section Package will be prepared and submitted to the COUNTY for review and approval. The general typical section will be a 4-lane curb and gutter section with a center median, two travel lanes in each direction, 4-foot paved shoulders on both sides of the roadway, a sidewalk on the west side of the roadway, and a 12-foot wide shared-use path on the east side of the roadway. The design speed and posted speed will be 45 mph.

2. Geometrics. The ENGINEER will design the geometrics for the project in accordance with the classification for urban roads of Marion County, applicable Florida Department of Transportation (FDOT) standards, the Manual on Uniform Traffic Control Devices (MUTCD), with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, drainage features, aesthetics, pedestrian and bicycle concerns, accessibility and accommodation for mass transit, ADA requirements, access management and scope of work.

3. Pavement Design Package. The required Pavement Designs will be prepared by the ENGINEER.

4. Design Documentation, Computation Book and Quantities. The ENGINEER will submit to the COUNTY design notes and computations to support and document the design conclusions reached during the development of the construction plans. No design exceptions are anticipated.

   Up to three copies of the design notes and computations will be submitted to the COUNTY at each plan review, unless otherwise directed by the COUNTY. When the plans are submitted for each subsequent review, the design notes and computations corrected according to COUNTY comments will be resubmitted. At the project completion, a final set of design notes and computations will be submitted with the record set of plans.

5. Technical Special Provisions. The ENGINEER will provide Technical Special Provisions for items of work not covered by FDOT Standard Specifications, Supplemental Specifications or Recurring Special Provisions.

G. DRAINAGE ANALYSIS

1. The ENGINEER will be responsible for designing a drainage and stormwater management system for the project. The design work will comply with local and state requirements. This work will include the engineering analysis necessary to design the following: cross drains, roadway ditches, outfall ditches, storm sewers and retention/detention facilities.

2. The locations of the drainage basins and outfalls will be determined by the ENGINEER, and coordinated with the COUNTY, based on the corridor topography and geotechnical conditions. The ENGINEER will work to provide drainage pond shapes and designs that are somewhat curvilinear in nature adjacent to the roadway, subject to approval by the COUNTY.

3. The ENGINEER will design a piping conveyance system that meets the requirements of the Marion County Land Development Code and takes into consideration an agreed upon design storm event and accounts for normal drainage parameters such as conveyance, capacity, velocity, and pavement gutter spread.

4. This drainage analysis will be prepared as a stand-alone design. Modification of existing watershed models that may exist at the COUNTY or the Southwest Florida Water Management District (SWFWMD) is not included in the scope of work of this Agreement.

5. The scope of work of this Agreement also does not include modification of flood insurance rate maps through FEMA. The current FEMA Flood Insurance Rate Map for the Project area, dated 08/28/2008, does not delineate any regulated flood zones within the Project limits.

6. The ENGINEER will provide the COUNTY with up to three signed and sealed copies of the Drainage Design Report in addition to those required for permitting. This will incorporate the work undertaken in the preliminary engineering phase of the project and will include final calculations for the proposed storm drainage system, final pond calculations and information required for permit review and approval.

H. UTILITY COORDINATION

The ENGINEER will be responsible for coordinating the proposed design with the affected utility companies to minimize utility conflicts. The COUNTY will assist the utility coordination as needed during the design phase.

Each utility provider will be responsible for the design of their respective aboveground and underground utilities for this project. These designs will be provided to the ENGINEER by the utility provider or the COUNTY in CADD format for inclusion into the Roadway Plans for this project. The ENGINEER will be responsible for coordinating with the utility providers for the proposed construction elements such that utility conflicts are minimized or avoided.

The COUNTY will submit to each Utility Owner the necessary sets of plans for utility coordination and be prepared to provide the project CADD files in electronic format to each Utility Owner upon their request. ENGINEER will provide the CADD files for the convenience of the Utility owners; ENGINEER cannot be responsible for the accuracy of the files after they are provided to the Utility owners. The ENGINEER will, prior to and during design, obtain available data from the Utility Owners that may be needed to determine the actual location and depth of the underground utilities. The ENGINEER will prepare Utility Adjustments sheets prior to the 60% submittal. Utility adjustments will be designed by the utility owners and shown on the plan/profile sheets or other appropriate location in the plan set. Upon completion of these plans, the ENGINEER will send one complete set of plans to each utility owner and to the COUNTY.

I. ROADWAY PLANS

The ENGINEER will prepare roadway plans to include the necessary plan sheets, notes, and details to generally include the following:

1. Key Map

2. Summary of Pay Items
3. Drainage Maps
4. Typical Sections
5. Summary of Drainage Structures
6. Project Layout
7. Project Control
8. Roadway Plan/Profile Sheets
9. Drainage-Retention Area Sheets
10. Intersection Detail Sheets
11. Special Profile Sheets
12. Roadway Soil Survey
13. Cross Sections
14. Signing Pavement and Marking Plans
15. Construction Surface Water Management Plans
16. Miscellaneous Construction Details

J. SIGNALIZATION PLANS

The ENGINEER will develop one set of signalization plans for the intersection of SW 49th Avenue and Marion Oaks Trail. It is assumed that a concrete strain pole layout with box configuration (not diagonal) will be implemented. The plan set will include the following sheets:

1. Key sheet
2. Notes and tabulation of quantities
3. Signing and Marking plans
4. Signalization plans
5. Concrete strain pole and foundation details
6. Guide sign details

The signalization plans will specify controller settings, controller peripherals, phasing and initial timings, loops and lead-ins, conduit, cabling, pull boxes, vehicular signal displays, signs, and pedestrian displays and detector stations, if appropriate.

ENGINEER will prepare a structural analysis to determine the design of the proposed concrete strain poles. The required depth, width, and reinforcement of the pole foundations will be specified. The structural analysis will be summarized in a calculations book provided with the 90% submittal.

Geotechnical boring information at the four corners of the intersection will be provided by the COUNTY. The geotechnical information shall be suitable for the design of concrete strain pole foundations.

Signal design for other intersections are not included in this Agreement. If additional traffic signals are planned at other intersections within the corridor, they will be designed as an Additional Service after receiving authorization from the COUNTY.

K. PERMITTING

The ENGINEER will prepare and submit ERP applications, calculations and design plans to the SWFWMD. The ENGINEER will submit the required number of plans and supporting documentation to provide a complete permit application. The ENGINEER will respond to requests for additional information and address permitting agency review comments as appropriate, through permit issuance. For all permits, the COUNTY will be the applicant and provide signatures and any permitting fees if required.

The ENGINEER will prepare and submit phased review packages for each set of design plans (four phases in total) to the Marion County Office of the County Engineer. Design plans and calculations will be submitted at the following stages:

1. 30% Roadway Plans
2. 60% Roadway Plans and Calculations
3. 90% Roadway Plans and Calculations
4. 100% Roadway Plans and Calculations
5. Estimated quantities at 60% Plans stage.
6. Opinions of Probable Construction Costs at 90% and 100% Plans Stages

The COUNTY acknowledges that the ENGINEER has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at the time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

The COUNTY will review each review package promptly and provide written comments, compiled by all reviewers into a single document, to the ENGINEER. The ENGINEER will, with each following submittal, provide a written response to all COUNTY comments detailing how each review comment was addressed.

Following the submittal and review of the 100% Roadway Plans and Calculations, the COUNTY will provide a written approval for the ENGINEER's records indicating that all comments have been addressed and the plans are approved as submitted.

L. TRAFFIC CONTROL CONCEPTS

The ENGINEER will prepare conceptual traffic control notes and details that convey the intended phasing of the proposed construction improvements. The ENGINEER will also prepare technical special provisions indicating the contractor's responsibility to prepare complete traffic control plans for

review and approval by the COUNTY. Complete Traffic Control Plans will be included as a lump sum bid item in the construction contract.

M. BID ASSISTANCE

1. Bid Plans and Bid Form. ENGINEER will provide one CD with electronic file versions of the plans in digital and PDF format to the COUNTY for bidding purposes. In addition, two signed and sealed sets of plans will be provided at 11"x17" size format. The ENGINEER will prepare a final bid form that lists all anticipated pay items with corresponding estimated quantities for the COUNTY's use in preparing the bid documents. The actual bid documents, posting the bid for potential bidders, and administration of the bid process will be handled by the COUNTY.

2. Addenda. ENGINEER will assist the COUNTY to prepare necessary addenda during the bidding. The Marion County Procurement Services Department will be responsible for issuing addenda to the Bidders of Record.

3. Pre-Bid Conference. ENGINEER will prepare for and participate in one (1) Pre-Bid Conference for the subject project. The COUNTY will be responsible for arranging for and conducting the meeting.

4. Bid Opening: Not included.

5. Bid Tabulation. Not included.

N. INITIAL IMPROVEMENTS – SW 49TH AVENUE AT MARION OAKS TRAIL

1. The ENGINEER will review the existing traffic operations of the intersection of SW 49th Avenue at Marion Oaks Trail during the AM peak period (7AM to 9AM), the peak school release period (1PM to 3PM), and PM peak period (4PM to 6PM).

2. The ENGINEER will develop interim recommendations to improve operations at the intersection based on the observations in Task N.1.

3. The ENGINEER will summarize the recommendations and submit a technical memorandum to the COUNTY for review and approval.

4. The ENGINEER will develop one set of intersection improvement and signalization plans considering the existing roadway conditions. It is assumed that a concrete strain pole layout with diagonal span layout will be implemented. The plan set will include the following sheets:

    1. Key sheet
    2. Notes and tabulation of quantities
    3. Paving, Grading, and Drainage plan
    4. Signing and Marking plans
    5. Signalization plans
    6. Concrete strain pole and foundation details
    7. Guide sign details

The signalization plans will specify controller settings, controller peripherals, phasing and initial timings, loops and lead-ins, conduit, cabling, pull boxes, vehicular signal displays, signs, and pedestrian displays and detector stations, if appropriate.

The ENGINEER will prepare a structural analysis to determine the design of the proposed concrete strain poles. The required depth, width, and reinforcement of the pole foundations will be specified. The structural analysis will be summarized in a calculations book provided with the 90% submittal. Geotechnical boring information at the two corners of the intersection will be provided by the COUNTY. The geotechnical information shall be suitable for the design of concrete strain pole foundations.

The ENGINEER will prepare and submit 60%, 90%, and Final review packages to the Marion County Office of the County Engineer. Estimated quantities will be provided with the 60% submittal, and an Opinion of Probable Construction Cost will be provided with the 90% and Final submittals. The Final plan set will be suitable for the County to bid the improvements.

The COUNTY acknowledges that the ENGINEER has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Engineer at the time and represent only the Engineer's judgment as a design professional familiar with the construction industry. The Engineer cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

The COUNTY will review each review package promptly and provide written comments, compiled by all reviewers into a single document, to the ENGINEER. The ENGINEER will, with each following submittal, provide a written response to all COUNTY comments detailing how each review comment was addressed.

Following the submittal and review of the Final Roadway Plans and Calculations, the COUNTY will provide a written approval for the ENGINEER's records indicating that all comments have been addressed and the plans are approved as submitted.

O. POST DESIGN SERVICES (NOT INCLUDED)

P. ROADWAY / PEDESTRIAN LIGHTING (NOT INCLUDED)

Q. PUBLIC MEETINGS / PRESENTATIONS (NOT INCLUDED)

R. LANDSCAPE PLANS (NOT INCLUDED)

S. EMINENT DOMAIN ASSISTANCE SERVICES (NOT INCLUDED)

T. EXPERT WITNESS SERVICES (NOT INCLUDED)

PART III – SCHEDULE

The ENGINEER will undertake this work upon receipt of Notice To Proceed. Work will be completed according to the following schedules:

A. 100% ROADWAY PLANS AND CALCULATIONS – 18 CALENDAR MONTHS FROM WRITTEN NOTICE TO PROCEED

A detailed schedule listing all subtasks and their expected individual durations will be provided to the COUNTY by ENGINEER at the Kickoff Meeting, and will be maintained and updated throughout the life of the project.

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PART IV – MISCELLANEOUS

SECTION I. PROVISIONS FOR WORK

A. GOVERNING REGULATIONS

The services performed by the ENGINEER will comply with applicable COUNTY and FDOT Standards Guidelines. The current edition, including updates, of the following References and Guidelines will be used in the performance of this work.

1. Marion County Land Development Code
2. Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (FDOT)
3. FDOT 2018 Florida Design Manual
4. FDOT Drainage Manual
5. AASHTO's "A Policy on Geometric Design of Highways and Streets"
6. Florida Manual on Uniform Traffic Studies (MUTS)
7. Manual on Uniform Traffic Control Devices (MUTCD)
8. AASHTO Guide for Bicycle Facilities Design

B. PROGRESS REPORTING

The ENGINEER will provide periodic e-mails and monthly written progress reports that describe the work performed on each task. Progress reports will be delivered to the COUNTY concurrently with the monthly invoice.

C. QUALITY CONTROL

The ENGINEER will be responsible for the professional quality, technical accuracy and coordination of surveys, designs, drawings, specifications and other services furnished by the ENGINEER under this Agreement.

The ENGINEER will provide a Quality Control Plan 30 days after the official Notice to Proceed that describes the procedures to be utilized to verify, independently check, and review design drawings, specifications, and other documentation prepared as a part of the contract. The ENGINEER will describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan may be one utilized by the ENGINEER as part of their normal operation or it may be one specifically designed for this project.

D. CORRESPONDENCE

Copies of written correspondence between the ENGINEER and any party pertaining specifically to this contract will be provided to the COUNTY for their records.

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E. SUBMITTALS

The ENGINEER will provide copies of the required documents as listed below. These are the anticipated printing requirements for the project. Up to five copies will be submitted to the COUNTY and additional copies will be submitted to the regulating agencies as required for review and approval. In addition, up to two copies of each roadway plan submittal will be provided to the COUNTY for each utility company affected by the project.

1. Limited Species Summary Report
2. Drainage Design Report
3. 60%, 90%, and Final Improvement and Signalization Plans for Initial Improvements at SW 49th Avenue and Marion Oaks Trail
4. 30% Roadway Plans
5. 60% Roadway Plans and Design Calculations
6. 90% Roadway Plans and Design Calculations
7. 100% Roadway Plans and Design Calculations
8. Estimated quantities at 60% Plans stage
9. Opinions of Probable Construction Costs at 90% and 100% Plans Stages in Microsoft Excel format
10. Final Roadway Plans, signed and sealed
11. Digital files in electronic format (PDF and AutoCAD) at the final submittal
12. Bid Form for Final Bid Plans
13. Sketch and Legal Descriptions
14. Right of Way Map

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EXHIBIT "B"

TABLE A
COST ESTIMATE FOR SERVICES

PROJECT: SW 49TH AVE SOUTH PHASE ONE DESIGN
CLIENT: MARION COUNTY OFFICE OF THE COUNTY ENGINEER
KHA PM: AMBER L. GARTNER, P.E.
BASIS FOR ESTIMATE: COUNTY-APPROVED HOURLY RATES, SW 49TH AVENUE

SHEET: 1 of 1
DATE: 11/05/2018

		DIRECT LABOR													
		Principal Engineer	Senior Professional Engineer	Project Manager (Registered)	Project Engineer (Registered)	Staff Engineer	Staff Scientist	Senior Designer	CADD Technician	Surveyor Mapper	Survey Field Crew	Clerical	LABOR HOURS	SUB (1)	LABOR TOTAL
TASK ID	TASK DESCRIPTION	$225.00	$180.00	$190.00	$140.00	$110.00	$95.00	$110.00	$90.00	$125.00	$130.00	$40.00			
A.	PROJECT ADMINISTRATION	10	20	70	25	25						50	210		$ 25,700
B.	ENVIRONMENTAL ANALYSIS AND REPORTING	8		40		60	120					20	248		$ 27,000
C.	SURVEYING AND MAPPING	10		80		40		200	200	360	380	20	1270	$ 5,000.00	$ 155,350
D.	GEOTECHNICAL COORDINATION		4	8	16	16						8	50		$ 6,070
E.	TRAFFIC OPERATIONS ANALYSIS		4	8	16	25						4	57		$ 7,150
F.	DESIGN ANALYSIS	8	8	30	15	40		20	40			20	181		$ 21,140
G.	DRAINAGE ANALYSIS	20	20	30	80	200			40			20	410		$ 50,500
H.	UTILITY COORDINATION	8		20	20	40		20	20			20	148		$ 17,000
I.	ROADWAY PLANS	40	70	120	140	200		600	600			40	1810		$ 204,050
J.	SIGNALIZATION PLANS	8	30	40	40	60		40	40			10	268		$ 34,200
K.	PERMITTING	8	20	30	60	120		20	20			30	308		$ 37,000
L.	TRAFFIC CONTROL CONCEPTS	4	4	20	10			20	30				88		$ 11,120
M.	BID ASSISTANCE	8	8	20	20	20						20	96		$ 12,240
N.	INITIAL IMPROVEMENTS - SW 49th AVE AT MARION OAKS TRL	4	20	25	40	80		40	60			10	279		$ 33,100
		122	189	513	441	845	120	920	990	360	380	272	5144		$ 646,870