WORK ASSIGNMENT

WORK ASSIGNMENT NO.	

PROJECT NUMBER: 26040.00; Makiki Drive Culvert Replacement and associated swales

This Work Assignment is executed in accordance with the Master Services Agreement entered into by the City of Diamondhead, Mississippi and Pickering Firm, Inc. on the 19th day of August, 2016.

WHEREAS, each of said parties represents that it continues to have authority to execute this Work Assignment and that all certifications previously made in said Agreement remain in effect;

NOW THEREFORE, the parties hereto do further contract and agree to add the following items of work to the above Agreement under the additional terms and conditions as are hereinafter stated:

SPECIFIC SCOPE OF WORK FOR THIS WORK ASSIGNMENT OR PHASE

See 'Attachment A – Scope of Services'

WORK ASSIGNMENT TERM

No new Work Assignments shall be executed after October 31, 2021 at 11:59 P.M. CDT.

This WORK ASSIGNMENT shall be effective upon the latest date of execution hereof and continue until October 31, 2021 at 11:59 P.M. CDT. However, the Engineer may not begin work prior to receiving a Notice to Proceed.

DBE GOAL

The DBE goal established for this Work Assignment shall be zero percent (0%).

KEY PERSONNEL

CITY PROJECT MANAGER:	CONSULTANT PROJECT MANAGER: (Certified as a Professional Engineer to do business in the State of Mississippi)
Mike Reso	Cara Wagner, PE (MS #26030)

PROGRESS SCHEDULE

Applications, meetings, and other items requested by the client will be prepared and submitted in a timely fashion following client request.

MAXIMUM ALLOWABLE COST

Contract Maximums:

Under no circumstances shall the amount payable by the City for this assignment exceed **\$42,600** (Total of all Charges) plus the cumulative fee for Easement Plats as referenced below, without the prior written consent of both parties. The Labor Rates have been identified in Table 2: Rate Schedule for Labor Hours.

Table 1: Compensation for Services Breakdown

Basic Services		
Phase #	Phase Title	Fee (labor hour/unit cost)
ı	I Wetland Delineation \$ 5,0	
=	Wetland Permitting Assistance	\$ 7,800
III	Boundary and Topographic Survey	\$ 4,500
IV	Easement Plats*	\$ 2,000
٧	Engineering Assessment	\$2,500
VI	Engineering Design	\$10,800
VII	Project Bidding	\$4,000
IIX	Construction Engineering and Inspection	\$8,000

^{*}Easement Plat Fee shown is a "per each" fee. Based on GIS data, approximately 11 of these may be required for a total fee of \$22,000. Actual number of easements will be determined during design. Easement work will not begin without prior consent from the City.

Table 2: Rate Schedule for Labor Hours

NAMES	LABOR CLASSIFICATION	RATE
	Principal Engineer	\$ 135
	Professional Engineer	\$ 97
	Senior Project Manager	\$ 105
	Project Engineer	\$ 75
	Professional Land Surveyor	\$ 80
	Survey Crew Chief	\$ 47
	Instrument Person	\$ 35
	CAD Technician	\$ 50
	Clerical	\$ 43
	Resident Project Representative	\$ 70
	Engineering Technician	\$ 50

Agreement.	
SO EXECUTED AND AGREED THIS THE DAY OF	City of Diamondhead, Mississippi
	By:
WITNESS this, my signature, in execution hereof, this th	e <u>29th</u> day of <u>April</u> 20 <u>21.</u> Pickering Firm, Inc.
ATTEST:	Copm

Andy Phelan, PE

By: Cara Wagner, PE

Both parties hereto represent that they have authority to enter into this Work Assignment as "Exhibit C" of

the Agreement executed by and between the City and Engineer to which is now made a part of said

General Project Description

In general, the Engineer will perform environmental permitting, boundary and topographic survey, preparation of easement plats, engineering analysis, engineering design (including production of construction documents), bid phase, and construction engineering and inspection services relative to the replacement or rehabilitation of the culvert that crosses Makiki Drive just east of its intersection with Kui Place. Additionally, the incoming channels (roadside and through lot) and outflowing channel will be analyzed for appropriate capacity in the 25-year design storm event. Finally, a new swale traveling generally easterly behind the first 4-5 homes fronting Makiki Drive will be considered to assist with rear yard drainage.

Items not specifically outlined below are excluded from this proposal; subsequent services may be added, as mutually agreed upon by both parties, as either an amendment to this contract or as a separate contract.

Phase I – Wetland Delineation (\$5,000)

We understand the project to consist of a Wetland Delineation and a submittal of a Joint Permit Application and Notification to the Mississippi Department of Marine Resources (DMR) and the United States Army Corps of Engineers (USACE), in accordance with Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, for the proposed Makiki Drive Culvert and Channel Rehab project.

For the delineation, the Engineer will perform the following:

- Mobilization to the site;
- Traversal of the project area and immediately surrounding areas;
- Establishment of representative sampling locations;
- Observation and identification of vegetation, soils, and hydrologic conditions at each sampling location;
- Record field data including photographs of site conditions and sampling locations;
- Identification of portions of the site qualifying as potential "waters of the U.S.", if present;
- Locating, flagging, and mapping of wetland boundaries, if present; and
- Mapping of the sampling locations and potential wetland boundaries using mobile GPS unit capable of sub-meter accuracy.

Upon completion of the field activities, we will submit our request for a jurisdictional determination (JD) from the USACE, Mobile District. This scope of work will be guided by Section 404 of the Clean Water Act.

Phase II – Wetland Permitting Assistance (\$7,800)

For the permitting phase, the Engineer will perform the following:

- Obtain and review any Environmental Assessments or other environmental studies that have been conducted in the project area.
- Provide a written report documenting potential impacts to wetlands and "other waters of the U.S."
- Solicit written correspondence from Federal, State, and Local resource agencies, as necessary, regarding proposed Project.
- Consult with the US Army Corps of Engineers, Department of Marine Resources, the Mississippi Department of Environmental Quality, and the US Fish and Wildlife Service.
- Consult with the Mississippi Secretary of State.
- Submit a Section 10/Section 404 Joint Permit Application and Notification to the Department of Marine Resources and the US Army Corps of Engineers.
- Provide permitting assistance, as required, to obtain the necessary permits for the construction phase of the project.

The following is specifically excluded from the aforementioned Scope of Work for this task order. However, these items can be provided if necessary, with a revision to the Scope of Work and fees. If the Client requests that any of these services be performed by the Consultant, then the Client will pay the Consultant for these authorized additional services on the basis of a negotiated lump sum fee or on the basis of the hourly rates plus reimbursable expenses.

1. Mitigation Plan

- Wetland mitigation assessment and planning for "other waters of the U.S." are not included in this proposal
- Wetland Acreage/Stream mitigation credits to be purchased are unknown at this time
- 2. A cultural resources survey and threatened and endangered species survey could be required by the US Army Corps of Engineers prior to Section 404 permit authorization.

Phase III - Boundary and Topographic Survey (\$4,500)

We will perform a topographic survey of the above referenced project site. The survey will define one-foot contours and will include all buildings, finished floor elevations, roads, drives, sanitary sewer and storm drainage features, along with other utilities and features necessary. Underground utilities will be plotted from records made available to us by local utility agencies. The survey will be performed in accordance with Standards of Practice for Surveying in Mississippi.

Our surveying services will not include:

- Complete boundary surveys. We will do a limited amount of boundary surveying in order to show approximate property lines. However, more surveying will likely be necessary if it is determined that easements are required.
- Investigation or location of underground utilities by means of excavation, ground penetrating radar, smoke testing, etc. Observed evidence of utilities, markings by MS One Call representatives, and information provided by the utility companies will be combined to develop a view of the underground utilities. However, lacking excavation, the exact location

of underground features cannot be accurately and completely depicted. In addition, in some jurisdictions, 811 utility locate requests from surveyors may be ignored or result in an incomplete response. Where more detailed information is required, the client is advised that excavation and/or a private utility locate request may be necessary.

- Investigation or location of underground structures or facilities which are not observable from the surface (gas tanks, treatment plants, etc).
- Wetlands delineations. We will coordinate with any qualified wetlands delineator to show applicable wetlands on the survey. We will not, however, be performing any wetlands delineation.

Phase IV – Easement Plats (\$2,000 per each)

At the City's discretion, legal description and plat for easements needed will be provided. This will include setting rods at the easement corner.

Phase V - Engineering Assessment (\$2,500)

Consultant will perform an initial site Investigation that will include verification of surveyed information as well as review of existing stormwater conveyances for obvious signs of overflows, repetitive failures, maintenance issues, and other visual observances that may affect the performance of the culverts, channels, or other unique drainage features.

Following the initial conditions assessment, Engineer will:

- 1. Review and assimilate reports, preliminary survey data, existing mapping, readily-available topographic information, and other relevant data provided by the CLIENT or by others;
- 2. Perform hydrologic and hydraulic analysis using computerized modeling software and produce expected existing water surface profiles, flow rates, and flow velocities for various storm events.
- 3. Develop recommendations for proposed improvements based on conditions and on capacity.

 Both upstream improvements and detention basin improvement recommendations will be made.
- 4. Develop preliminary opinion of costs for proposed improvements;
- 5. Produce documentation / engineering letterform report outlining existing conditions, proposed recommendations and effects of proposed recommendations;
- 6. Project meeting with the CLIENT, as required.

Phase VI – Engineering Design (\$10,800)

Utilizing information acquired in previous phases and per any other deliverable subject to any CLIENT-directed modifications or changes in the scope, extent, character, or design requirements of or for the Project, and upon written authorization from CLIENT, for the general scope of work described above, the Engineer shall:

- Prepare engineering drawings and specifications indicating the scope, extent, and character of
 the work to be performed and furnished by the contractor. 1 set of the engineering documents
 and any other deliverables will be provided to the CLIENT for review. Following their review,
 CLIENT shall submit to the Engineer any comments regarding the Design Phase documents and
 any other deliverables.
- 2. Provide an updated engineer's Opinion of Probable Construction Cost with final construction documents.
- 3. Prepare and furnish bidding documents for review by CLIENT, its legal counsel, and other advisors, and assist CLIENT in the preparation of other related documents. CLIENT shall submit to Engineer any comments and instructions for revisions and Engineer will revise the bidding documents accordingly. 1 Final copy of the bidding documents, including a final Opinion of Probable Construction Cost, will be provided to the CLIENT.

Phase VII - Bidding Phase (\$4,000)

After acceptance by CLIENT of the final bidding documents prepared in Phase II and the final Opinion of Probable Construction Cost, and upon written authorization by the CLIENT to proceed, Engineer shall:

- 1. Assist CLIENT in advertising for and obtaining bids or proposals for the Work and, where applicable, maintain a record of prospective bidders to whom Bidding Documents have been issued, and receive and process contractor deposits or charges for the bidding documents.
- 2. Issue addenda as appropriate to clarify, correct, or change the bidding documents.
- 3. Provide information or assistance needed by CLIENT in the course of any negotiations with prospective contractors.
- 4. Consult with CLIENT as to the acceptability of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors for those portions of the Work as to which such acceptability is required by the bidding documents.
- 5. If bidding documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by bidders.
- 6. Attend the Bid opening, prepare Bid tabulation sheets, and assist CLIENT in evaluating Bids or proposals and in assembling and awarding contracts for the Work.
- 7. The Bidding Phase will be considered complete upon commencement of the Construction Phase or upon cessation of negotiations with prospective contractors.

Phase VIII - Construction Phase (including RPR) (\$8,000)

- A. Upon successful completion of the Bidding Phase, and upon written authorization from CLIENT, Engineer shall:
 - General Administration of Construction Contract: Consult with CLIENT and act as CLIENT's
 representative as provided in the Construction Contract. The extent and limitations of the
 duties, responsibilities, and authority of Engineer as assigned in the Construction Contract
 shall not be modified, except as Engineer may otherwise agree in writing. All of CLIENT's
 instructions to Contractor will be issued through Engineer, which shall have authority to act
 on behalf of CLIENT in dealings with Contractor to the extent provided in this Agreement
 and the Construction Contract except as otherwise provided in writing.
 - 2. Resident Project Representative (RPR): Provide the services of an RPR, as needed, at the Site to assist the Engineer and to provide more extensive observation of Contractor's work.
 - 3. Selecting Independent Testing Laboratory: Assist CLIENT in the selection of an independent testing laboratory, where necessary
 - 4. *Pre-Construction Conference:* Participate in a Pre-Construction Conference prior to commencement of Work at the Site.

- 5. *Schedules:* Receive, review, and determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the Progress Schedule, Schedule of Submittals, and Schedule of Values.
- 6. *Visits to Site and Observation of Construction:* In connection with observations of Contractor's Work while it is in progress:
 - a. Engineer will make visits to the Site at intervals appropriate to the various stages of construction, as Engineer deems necessary, to observe as an experienced and qualified design professional the progress of Contractor's executed Work. Such visits and observations by Engineer, and the Resident Project Representative, are not intended to be exhaustive or to extend to every aspect of Contractor's Work in progress or to involve detailed inspections of Contractor's Work in progress beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by the Resident Project Representative. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Contract Documents, and Engineer shall keep CLIENT informed of the progress of the Work.
 - b. The purpose of Engineer's visits to, and representation by the Resident Project Representative, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for CLIENT a greater degree of confidence that the completed Work will conform in general to the Contract Documents and that Contractor has implemented and maintained the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents. Engineer shall not, during such visits or as a result of such observations of Contractor's Work in progress, supervise, direct, or have control over Contractor's Work, nor shall Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by Contractor, for security or safety at the Site, for safety precautions and programs incident to Contractor's Work, nor for any failure of Contractor to comply with Laws and Regulations applicable to Contractor's furnishing and performing the Work. Accordingly, Engineer neither guarantees the performance of any Contractor nor assumes responsibility for any Contractor's failure to furnish or perform the Work in accordance with the Contract Documents.
- 7. Defective Work: Reject Work if, on the basis of Engineer's observations, Engineer believes that such Work (a) is defective under the standards set forth in the Contract Documents, (b) will not produce a completed Project that conforms to the Contract Documents, or (c) will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 8. Clarifications and Interpretations; Field Orders: Issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of

Contractor's work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. Subject to any limitations in the Contract Documents, Engineer may issue field orders authorizing minor variations in the Work from the requirements of the Contract Documents.

- Change Orders and Work Change Directives: Recommend change orders and work change directives to CLIENT, as appropriate, and prepare change orders and work change directives as required.
- 10. Shop Drawings and Samples: Review and approve or take other appropriate action in respect to Shop Drawings and Samples and other data which Contractor is required to submit, but only for conformance with the information given in the Contract Documents and compatibility with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's submittal schedule that Engineer has accepted.
- 11. Substitutes and "or-equal": Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor.
- 12. Inspections and Tests: Require such special inspections or tests of Contractor's work as deemed reasonably necessary, and receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Contract Documents. Engineer's review of such certificates will be for the purpose of determining that the results certified indicate compliance with the Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents. Engineer shall be entitled to rely on the results of such tests.
- 13. Disagreements between CLIENT and Contractor: Render formal written decisions on all duly submitted issues relating to the acceptability of Contractor's work or the interpretation of the requirements of the Contract Documents pertaining to the execution, performance, or progress of Contractor's Work; review each duly submitted Claim by CLIENT or Contractor, and in writing either deny such Claim in whole or in part, approve such Claim, or decline to resolve such Claim if Engineer in its discretion concludes that to do so would be inappropriate. In rendering such decisions, Engineer shall be fair and not show partiality to CLIENT or Contractor and shall not be liable in connection with any decision rendered in good faith in such capacity.
- 14. Applications for Payment: Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:
 - a. Determine the amounts that Engineer recommends Contractor be paid. Such recommendations of payment will be in writing and will constitute Engineer's representation to CLIENT, based on such observations and review, that, to the best of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Contract Documents

(subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe Contractor's Work. In the case of unit price work, Engineer's recommendations of payment will include final determinations of quantities and classifications of Contractor's Work (subject to any subsequent adjustments allowed by the Contract Documents).

- b. By recommending any payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Contract Documents. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to supervise, direct, or control Contractor's Work in progress or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or to determine that title to any portion of the Work in progress, materials, or equipment has passed to CLIENT free and clear of any liens, claims, security interests, or encumbrances, or that there may not be other matters at issue between CLIENT and Contractor that might affect the amount that should be paid.
- 15. Contractor's Completion Documents: Receive, review, and transmit to CLIENT maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, Shop Drawings, Samples and other data approved as provided under Paragraph 10 above, and transmit the annotated record documents which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment. The extent of such review by Engineer will be limited as provided in Paragraph 11 above.
- 16. Substantial Completion: Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with CLIENT and Contractor, visit the Project to determine if the Work is substantially complete. If after considering any objections of CLIENT, Engineer considers the Work substantially complete; Engineer shall deliver a certificate of Substantial Completion to CLIENT and Contractor.
- 17. Final Notice of Acceptability of the Work: Conduct a final visit to the Project to determine if the completed Work of Contractor is acceptable so that Engineer may recommend, in writing, final payment to Contractor.
- B. *Duration of Construction Phase:* The Construction Phase will commence with the execution of the first Construction Contract for the Project or any part thereof and will terminate upon written

recommendation by Engineer for final payment to Contractors. Engineer shall be entitled to an equitable increase in compensation if Construction Phase services (including Resident Project Representative services) are required after the original date for completion and readiness for final payment of Contractor as set forth in the Construction Contract. For purposes of this proposal, a construction phase of not more than 30 days was assumed.

C. Limitation of Responsibilities: Engineer shall not be responsible for the acts or omissions of any Contractor, Subcontractor or Supplier, or other individuals or entities performing or furnishing any of the Work, for safety or security at the Site, or for safety precautions and programs incident to Contractor's Work, during the Construction Phase or otherwise. Engineer shall not be responsible for the failure of any Contractor to perform or furnish the Work in accordance with the Contract Documents.

Additional Services

Any service not specifically outlined above is excluded from Pickering Firm, Inc.'s scope of work. In the event you request additional services over and above the subject scope of work, we will perform said additional services under a new work assignment or an amendment to this work assignment. Additional Services may include, but are not limited to: preparation of right-of-way or easement acquisition documents, environmental assessments, project permitting, engineering design of proposed improvements not outlined above.