STANDARD FORM OF AGREEMENT BETWEEN GCDC-WWS AND ENGINEER FOR PROFESSIONAL SERVICES

This Standard Form of Agreement for Professional Services ("Agreement") is made as of , 2013, ("Effective Date"), by and between Genesee County, County Agency, the Genesee County Drain Commissioner's Office – Division of Water and Waste Services, pursuant to Public Act 342 of the Michigan Public Acts of 1939, as amended ("GCDC-WWS") of G-4610 Beecher Road, Flint, Michigan 48532, and Wade Trim, Inc. ("Engineer"), of 555 South Saginaw Street, Suite 201, Flint, Michigan 48502, a Corporation in the State of Michigan. GCDC-WWS and Engineer are sometimes collectively referred to herein as the "Parties."

RECITALS

A. GCDC-WWS desires to engage a consulting engineering firm to provide general consulting and professional engineering services for the preliminary design, final design, bidding phase, construction phase, and operational phase of a project involving S.4005, a 60" pipeline from the Intermediate Pump Station to Jefferson Road (the "Project").

B. Engineer is an engineering firm who represents and warrants that it is an experienced and qualified design professional, and it is qualified to plan and design the Project.

C. The Project is to be located on real property now owned by GCDC-WWS, upon real property for which easement rights will be acquired by GCDC-WWS, or upon real property for which a right-of-way permit will be acquired by GCDC-WWS.

D. The Parties, in consideration of their mutual covenants herein, agree to the performance or furnishing of professional engineering services by Engineer with respect to the Project and for the payment for those services by GCDC-WWS as set forth herein.

E. This Agreement shall become effective on the Effective Date.

NOW, THEREFORE, the Parties agree as follows:

PARAGRAPH 1 - GENERAL

1.1 Standard of Care

Engineer shall perform for or furnish to GCDC-WWS professional engineering and related services in all phases of the Project as hereinafter provided. Engineer shall serve as GCDC-WWS's principal design professional and engineering representative for the Project providing professional engineering consultation and advice with respect thereto. Engineer may employ such Engineer's Consultants as Engineer deems necessary to assist in the performance or furnishing of professional engineering and related services hereunder. Engineer shall not be required to employ any Engineer's Consultant unacceptable to Engineer. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement shall be the care and skill ordinarily used by members of Engineer's profession, practicing under similar conditions at the same time and in the same locality.

1.2 Coordination with Other Documents

It is the intention of the Parties that the Standard General Conditions of the Construction Contract (EJCDC C-700, © 2002) shall be used as the Standard General Conditions for the Project and that all amendments thereof and supplements thereto shall be consistent therewith. Except as otherwise defined herein, the terms which have an initial capital letter in this Agreement and are defined in the Standard General Conditions, shall be used in this Agreement as defined in the Standard General Conditions.

1.3 Definitions

Wherever used in this Agreement the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

1.3.1 <u>Additional Services</u>. "Additional Services" means the services to be performed for or furnished to GCDC-WWS by Engineer described in Paragraph 3 of this Agreement.

1.3.2 <u>Agreement</u>. "Agreement" means this Standard Form of Agreement between GCDC-WWS and Engineer for Professional Services including those Exhibits listed in Paragraph 9 of this Agreement.

1.3.3 <u>Basic Services</u>. "Basic Services" means the services to be performed for or furnished to GCDC-WWS by Engineer described in Paragraph 2 of this Agreement and any other design services which are normally or customarily furnished and reasonably necessary for the Project.

1.3.4 <u>Construction Cost</u>. "Construction Cost" means the total cost to GCDC-WWS of those portions of the Project designed or specified by Engineer. Construction Cost does not include Engineer's compensation and expenses, the cost of land, the cost of rights-of-way or easements, compensation for or damages to properties, GCDC-WWS's legal, accounting, insurance counseling, or auditing services, interest and financing charges incurred in connection with the Project or the cost of other services to be provided by others to GCDC-WWS pursuant to Paragraph 4 of this Agreement.

1.3.5 <u>Contract Documents</u>. "Contract Documents" means those items so designated in the Standard General Conditions. Only printed or hard copies of the items listed in the Standard General Conditions are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

1.3.6 <u>Contractor</u>. "Contractor" means the person or entity with whom GCDC-WWS enters into a written agreement covering the Work to be performed or furnished with respect to the Project.

1.3.7 <u>Defective</u>. "Defective" means when modifying the word "Work," Work that is unsatisfactory, faulty or deficient in that it does not conform to the Contract Documents, does not meet the requirements of any applicable inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment, unless responsibility for the protection thereof has been assumed by GCDC-WWS at Substantial Completion in accordance with Paragraph 14.04 or Paragraph 14.05 of the Standard General Conditions.

1.3.8 <u>Drawings</u>. "Drawings" means that part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

1.3.9 <u>Effective Date</u>. "Effective Date" means the date set forth in the first paragraph of this Agreement.

1.3.10 <u>Engineer's Consultant</u>. "Engineer's Consultant" means a person or entity having a contract with Engineer to perform or furnish Basic Services or Additional Services as Engineer's independent professional associate or consultant engaged directly on the Project.

1.3.11 <u>Reimbursable Expenses</u>. "Reimbursable Expenses" means those expenses incurred directly in connection with the performance or furnishing of Basic Services and Additional Services for the Project for which GCDC-WWS is required to pay Engineer as indicated in Exhibit B, "Payments to Engineer for Services and Reimbursable Expenses" ("Exhibit B").

1.3.12 <u>Resident Project Representative or RPR</u>. "Resident Project Representative" or "RPR" means the authorized representative of GCDC-WWS or Engineer who will be assigned to observe the progress and the Work of the Contractor in conformance with performance as set forth in the Specifications at the Site during the Work. The term Resident Project Representative includes any assistants of Resident Project Representative agreed to by GCDC-WWS in writing. The duties and responsibilities of the Resident Project Representative are set forth in Exhibit C, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative" ("Exhibit C").

1.3.13 <u>Site</u>. "Site" means lands or areas indicated in the Contract Documents as being furnished by GCDC-WWS upon which the Work is to be performed, including rights-of-way and easements for access thereto and such other lands furnished by GCDC-WWS which are designed for the use of Contractor.

1.3.14 <u>Specifications</u>. "Specifications" means that part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

1.3.15 <u>Standard General Conditions</u>. "Standard General Conditions" means EJCDC C-700 Standard General Conditions of the Construction Contract (Copyright © 2002) National Society of Professional Engineers for EJCDC as amended and supplemented by the Supplementary Conditions for the Work.

1.3.16 <u>Work</u>. "Work" means the entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing and providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

PARAGRAPH 2 - BASIC SERVICES OF ENGINEER

2.1 Study and Report Phase

Not applicable to this Project.

2.2 Preliminary Design Phase

Upon written authorization from GCDC-WWS, Engineer shall:

2.2.1 Prepare a Preliminary Design Report (PDR) incorporating the Program's basis of design and recommended solution selected by GCDC-WWS and the specific modifications or changes in the scope, extent, character, or design requirements of the Project as determined by GCDC-WWS, prepare preliminary design documents consisting of final design criteria, preliminary Drawings and Specifications, and a written description of the Project.

2.2.2 Advise GCDC-WWS if additional reports, data, or other information or services of the types described in Paragraph 2.7.2 are necessary.

2.2.3 Based on the information contained in the preliminary design documents, submit an opinion of probable Construction Cost and any adjustments to probable Construction Cost. Submit to GCDC-WWS a preliminary estimate of Construction Cost referred to in this Paragraph 2, and provide GCDC-WWS with any adjustments thereto in a level of detail satisfactory to GCDC-WWS, the cost of each category of Work involved in constructing the Project, and include an estimate of the period of time required from the commencement to the completion of the Project.

2.2.4 Furnish the preliminary design documents to and review them with GCDC-WWS.

2.2.5 Submit to GCDC-WWS the preliminary design documents and a revised opinion of probable Construction Cost within the stipulated period set forth in Exhibit A, "Further Description of Basic Engineering Services and Related Matters ("Exhibit A")."

2.2.6 Engineer's services for the preliminary design phase shall be considered complete when the preliminary design documents have been reviewed and accepted in writing by GCDC-WWS.

The duties and responsibilities of Engineer during the preliminary design phase as set forth in this Paragraph 2.2 are amended and supplemented as set forth in Exhibit A.

2.3 Final Design Phase

After acceptance by GCDC-WWS of the preliminary design phase documents and revised opinion of probable Construction Cost and indication of any specific modifications or changes in the scope, extent, character, or design requirements of the Project desired by GCDC-WWS and upon written authorization from GCDC-WWS, Engineer shall:

2.3.1 On the basis of the accepted preliminary design documents, the modifications or changes in the scope, extent, character or design requirements of the Project as determined by GCDC-WWS and the revised opinion of probable Construction Cost, prepare for incorporation into the Contract Documents final Drawings showing the scope, extent and character of the Work to be performed and furnished by

Contractor as well as the Specifications which will be prepared, where appropriate, in general conformance with the sixteen division format of the Construction Specifications Institute. Final Drawings and Specifications, other construction documents or Contract Documents submitted by Engineer to GCDC-WWS for approval or to any prospective Bidders for bidding or negotiation phase shall be complete and unambiguous and in compliance with all applicable codes, ordinances, statutes, Laws and Regulations, except to the extent expressly and specifically otherwise stated in detail in writing by Engineer at the time of such submission. By submitting the same for the purpose of Contract Documents, Engineer certifies, represents and warrants that Engineer has informed GCDC-WWS in writing of any tests, studies, analyses or reports which are necessary or advisable to be performed by or for GCDC-WWS at that point in time.

2.3.2 Prepare the applications for non-environmental permits including technical criteria, written descriptions and design data for GCDC-WWS's use in filing and obtaining approvals of such governmental authorities as have jurisdiction to review or approve the final design of the Project.

2.3.3 Advise GCDC-WWS in writing of any adjustments to the opinion of probable Construction Cost and provide GCDC-WWS in writing with any adjustments to Construction Cost as a result of changes in scope, extent or character or design requirements of the Project.

2.3.4 Prepare for review and approval of the Agreement with Contractor, Contract Documents, Standard General Conditions and Supplementary Conditions, Bid Forms, Invitations to Bid and Instructions to Bidders and assist in the preparation of other related documents.

2.3.5 Furnish the documents listed in Paragraph 2.3.4 above, the Drawings and the Specifications and review them with GCDC-WWS.

2.3.6 Submit the documents listed in Paragraph 2.3.4 above, the Drawings and the Specifications and a revised opinion of probable Construction Cost within the stipulated period indicated in Exhibit A.

2.3.7 Coordinate all Drawings and design documents relating to Engineer's design for the Project, regardless of whether such Drawings and design documents are prepared or performed by Engineer or Engineer's Consultants. If preliminary design work has been performed by others who have been engaged by Engineer, Engineer is fully responsible for such work when Engineer performs subsequent phases of the Basic Services required by this Agreement as fully as if the preliminary design work had been performed by Engineer itself. Engineer shall coordinate and internally check all Drawings for the accuracy of all dimensional and layout information contained therein as fully as if each Drawing were prepared by Engineer. Engineer is fully responsible for the completeness and accuracy of all Drawings and Specifications submitted by and through Engineer for their compliance with all applicable codes, ordinances, statutes, Laws and Regulations.

2.3.8 Engineer's services under the final design phase shall be considered complete on the date when all submittals have been accepted in writing by GCDC-WWS.

The duties and responsibilities of Engineer during the final design phase as set forth in this Paragraph 2.3 are amended and supplemented as set forth in Exhibit A.

2.4 Bidding or Negotiating Phase

After acceptance by GCDC-WWS of the Drawings, Specifications, and other final design phase documentation (including the most recent opinion of probable Construction Cost), and upon written authorization of GCDC-WWS to proceed, Engineer shall:

2.4.1 Assist GCDC-WWS in advertising for and obtaining Bids for the Contract, Materials, equipment and services. Attend pre-Bid conferences, if any are scheduled. Assist GCDC-WWS in negotiating Bids for Materials and equipment.

2.4.2 Issue Addenda as appropriate to clarify, correct, or change the Bidding Documents.

2.4.3 Consult with GCDC-WWS as to the acceptability of Subcontractors, Suppliers, and other persons and entities proposed by Contractor for those portions of the Work as to which such acceptability is required by the Bidding Documents.

2.4.4 Attend the Bid opening, assist GCDC-WWS in evaluating Bids, investigate each Bidder's references, and issue a written recommendation of the award of the Bid to GCDC-WWS.

2.4.5 The bidding or negotiating phase shall terminate and the services to be performed or furnished thereunder shall be considered complete upon commencement of the construction phase, except as may otherwise be required to complete the services required by Paragraph 7.2.5 of Exhibit E.

The duties and responsibilities of during the bidding or negotiating phase as set forth in this Paragraph 2.4 are amended and supplemented as set forth in Exhibit A.

2.5 Construction Phase

During the construction phase:

2.5.1 <u>General Administration of Contract</u>. Engineer shall consult with and advise GCDC-WWS and act as GCDC-WWS's representative as provided in the Standard General Conditions. The duties, responsibilities, and limitations of authority of the Engineer may be restricted, modified, or extended by GCDC-WWS in its sole discretion, and notwithstanding anything herein to the contrary, in such event Engineer's compensation shall be equitably adjusted. GCDC-WWS may issue instructions to Contractor through Engineer who, in such event, shall have authority to act on behalf of GCDC-WWS in dealings with Contractor to the extent provided in this Agreement and Standard General Conditions. GCDC-WWS may communicate with or issue instructions to the Contractor directly.

2.5.2 <u>Visits to Site and Observation of Work</u>. In connection with observations of the Work while it is in progress, Engineer shall make visits to the Site at intervals appropriate to the various stages of the Work to review the Work in conformance with the standards defined in the Contract Documents and to determine if the Work is proceeding in accordance with the Contract Documents. Based on the information obtained during such visits and as a result of such observations, Engineer shall issue written reports of such visits and observations and shall otherwise keep GCDC-WWS informed in writing of the progress of the Work. If requested by GCDC-WWS, Engineer shall provide a Resident Project Representative at the Site to assist Engineer in connection with its duties set forth herein. The Resident Project Representative shall be responsible for continuous, frequent, and thorough inspections to assure the proper progress and the conformance of the Work with the standards defined in the Specifications.

2.5.3 <u>Defective Work</u>. Engineer shall have authority to disapprove of or reject the Work while it is in progress if Engineer believes that the Work will not produce a completed Project that conforms to the Contract Documents or that it will prejudice the integrity of the design concept of the completed Project as a functioning whole as set forth in the Contract Documents. If more than one prime contract is to be awarded for a portion of the Work designed or specified by Engineer, whether GCDC-WWS engages multiple prime contractors on the Project and/or GCDC-WWS enters into two (2) separate contracts for projects which are adjacent to each other and proceeding concurrently, if any part of the Work depends for proper execution or results upon the activities of any such other contractor its subcontractors, upon receipt of written notice from a contractor regarding any delay, defect, or deficiency in such work that renders it unavailable or unsuitable for such proper execution and results, Engineer shall review such notice, and if deemed necessary, shall direct the offending contractor or subcontractor to correct the Work, make changes in design, and/or suggest changes in construction procedure before the Work shall continue.

2.5.4 <u>Clarifications and Interpretations; Field Orders</u>. Engineer may only issue necessary clarifications and interpretations of the Contract Documents as appropriate for the orderly completion of the Work with the written consent of GCDC-WWS. Such clarifications and interpretations shall be consistent with the intent of and reasonably inferable from the Contract Documents. Engineer may only issue Field Orders authorizing variations from the requirements of the Contract Documents with the written consent of GCDC-WWS.

2.5.5 <u>Change Orders and Work Change Directives</u>. Engineer shall recommend Change Orders and Work Change Directives to GCDC-WWS in writing as appropriate and shall prepare Change Orders and Work Change Directives as required. Such Change Orders and Work Change Directives shall be reviewed by Engineer and approved by GCDC-WWS in writing prior to issuance to Contractor.

2.5.6 <u>Shop Drawings</u>. Engineer shall review and approve Contractor submittals, such as Shop Drawings, product data, Samples, and other data, as required by Engineer, for the purpose of: (A) assuring

compliance with applicable statutes, ordinances, codes, orders, rules, Laws and Regulations; and (B) assuring that the Work affected by and represented by such Contractor submittals is in compliance with the requirements of the Contract Documents. This review shall not include review of means or methods, coordination of the Work with other trades or construction safety precautions. Engineer shall be responsible for determining what aspects of the Work shall be the subject of Shop Drawings and submittals. Engineer shall not permit such aspects of the Work to proceed in the absence of approved Shop Drawings and submittals. Engineer's review as described in this Paragraph 2.5.6 shall be conducted promptly allowing sufficient time to permit a thorough review by GCDC-WWS which will in turn submit its comments to Engineer to be incorporated into Engineer's review as set forth in this Paragraph 2.5.6.

2.5.7 <u>Substitutes</u>. Engineer shall evaluate and determine the acceptability of Substitute Materials and equipment proposed by Contractor, subject to the provisions of Paragraph 3.2.2 and make a written recommendation to GCDC-WWS who shall make the final determination of use of such Substitute Materials or equipment.

2.5.8 <u>Inspections and Tests</u>. Engineer may require special inspections or tests of the Work and shall receive and review all certificates of inspections, tests and approvals required by rules, Laws and Regulations, ordinances, codes, orders, or the Contract Documents. Engineer's review of such certificates shall be for the purpose of determining that the results certified indicate compliance with the Contract Documents and constitute an evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Contract Documents.

2.5.9 <u>Applications for Payment</u>. Based upon Engineer's on-Site observations and upon review of Contractor's Applications for Payment and the accompanying data and schedules, Engineer shall recommend to GCDC-WWS in writing the amounts that Contractor should be paid. Such recommendation shall constitute Engineer's representation and warranty to GCDC-WWS, based on its observations and review, that the Work has progressed to the point indicated, the quality of the Work is 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 required by the Contract Documents and to any other qualifications stated in the recommendation and the conditions precedent to Contractor's being entitled to such payment have been fulfilled. In the case of Unit Price Work, Engineer's recommendation of payment shall include final determinations of quantities and classifications of the Work, subject to any subsequent adjustments allowed by the Contract Documents.

2.5.10 <u>Contractor's Completion Documents</u>. Engineer shall receive, review, and transmit to GCDC-WWS written comments regarding maintenance and operating instructions, schedules, guarantees, bonds, certificates, or other evidence of insurance required by the Contract Documents, certificates of inspection, tests and approvals, and marked-up record documents (including Shop Drawings, Samples and other data approved as provided under Paragraph 2.5.6) which are to be assembled by Contractor in accordance with the Contract Documents to obtain final payment.

2.5.11 <u>Substantial Completion</u> Following notice from Contractor that Contractor considers the Work ready for its intended use, the Parties, accompanied by Contractor, shall conduct an inspection of the Work to determine if it is Substantially Complete. If GCDC-WWS considers the work Substantially Complete, Engineer shall deliver a certificate of Substantial Completion to GCDC-WWS and Contractor.

2.5.12 <u>Final Notice of Acceptability of the Work</u>. Engineer shall conduct a final inspection to determine if the completed Work is acceptable so that Engineer may recommend, in writing, final payment to Contractor. Accompanying the recommendation for final payment, Engineer shall also provide to GCDC-WWS a notice in the form attached hereto as Exhibit D (the "Notice of Acceptability of Work") that the Work is acceptable.

2.5.13 <u>Duration of Construction Phase</u>. The construction phase shall commence with the execution of the Agreement and Contract Documents for the Project or any part thereof and shall terminate upon written recommendation by Engineer of final payment.

The duties and responsibilities of Engineer during the construction phase as set forth in this Paragraph 2.5 are amended and supplemented as set forth in Exhibit A.

2.6 Operational Phase

During the operational phase, Engineer shall, when requested by GCDC-WWS:

2.6.1 Provide assistance in connection with the refining and adjusting of any equipment or system.

2.6.2 Assist GCDC-WWS in training GCDC-WWS's staff to operate and maintain the Project.

2.6.3 Prepare a set of reproducible record Drawings in electronic format of GCDC-WWS's current version of AutoCAD and reproducible Mylar showing record information which Engineer considers significant based on the Drawings, Shop Drawings, and other record documents furnished by Contractor to Engineer which were annotated by Contractor to show all changes made during the Work.

2.6.4 In the company of GCDC-WWS, visit the Project to observe any apparent Defective Work in the then completed Work, assist GCDC-WWS in consultations and discussions with Contractor concerning the correction of such Defective Work, and make written recommendations as to the replacement or correction of Defective Work.

2.6.5 Provide miscellaneous services as requested by GCDC-WWS in connection with the Project closeout.

2.6.6 The operational phase shall commence upon final completion of the construction phase and shall terminate one (1) year after the date of Substantial Completion.

The duties and responsibilities of Engineer during the operational phase as set forth in this Paragraph 2.6 are amended and supplemented as set forth in Exhibit A.

2.7 Responsibility in Basic Services

2.7.1 Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all designs, Drawings, Specifications, and other services furnished by the Engineer under this Agreement. GCDC-WWS shall have the right to disapprove any portion of the Engineer's services in connection with the Project, including, but not limited to, the preliminary and final design phases, construction documents phase, bidding or negotiation phase, or construction phase, and any other design work or documents on any reasonable basis, including, but not limited to, aesthetics or because in the GCDC-WWS's opinion, the Construction Cost of such design is likely to render the Work or the Project infeasible. In the event that any phase of the Engineer's work or services is not approved by the GCDC-WWS, Engineer shall proceed, when requested by GCDC-WWS, with revisions to the design work or documents prepared for that phase to satisfy GCDC-WWS's objections. These revisions shall be made without adjustments to the compensation provided for hereunder, unless revisions are made to Drawings previously provided under previous phases, in which case such revisions services shall be paid as Additional Services. Should there be substantial revisions to the original design after the approval of the preliminary and final design Drawings, which changes substantially increase the scope of design services to be furnished hereunder, Engineer shall notify GCDC-WWS in writing and receive approval from GCDC-WWS before proceeding with any revisions necessitated by such changes. No payment of any nature whatsoever shall be made to Engineer for additional work or Additional Services without the written approval by GCDC-WWS.

2.7.2 GCDC-WWS shall furnish to Engineer, as and when requested by Engineer in writing for performance of Basic Services or as required by the Contract Documents, the following:

2.7.2.1 Data prepared by or services of third parties, including, without limitation, explorations and tests of subsurface conditions at or contiguous to the Site, drawings of physical conditions, in or relating to existing surface or subsurface structures at or contiguous to the Site or hydrographic surveys;

2.7.2.2 The services of an independent testing laboratory to perform all inspections, tests and approvals of Samples, Materials, and equipment prior to and after installation, or to evaluate the performance of Materials, equipment, and facilities of GCDC-WWS prior to specification and during the Work;

2.7.2.3 Appropriate professional interpretations of all of the foregoing;

2.7.2.4 Environmental assessments, floodplain, or wetland determinations with mitigative measures, audits, investigations, and impact statements, and other relevant environmental or cultural studies as to the Project, the Site and adjacent areas;

2.7.2.5 Field surveys for design purposes and property, boundary, easement, right-of-way, topographic and utility surveys or data, including relevant reference points;

2.7.2.6 Property descriptions;

2.7.2.7 Zoning, deed, and other land use restrictions; and

2.7.2.8 Other special data or consultations not covered in Paragraph 2.

Engineer shall review and confirm the sufficiency of any tests and information furnished to Engineer by or on behalf of GCDC-WWS pursuant to this Paragraph 2. Engineer may use such reports, data and information in performing or furnishing services under this Agreement.

PARAGRAPH 3 - ADDITIONAL SERVICES OF ENGINEER

3.1 Additional Services of Engineer

If authorized in writing by GCDC-WWS, Engineer shall furnish or obtain from third parties Additional Services of the types listed in Paragraph 3.1.1 through Paragraph 3.1.19, inclusive, as amended and supplemented as set forth in Exhibit A. These Additional Services are not included as part of Basic Services, except to the extent otherwise provided in Exhibit A. These Additional Services shall be paid for by GCDC-WWS as indicated in Paragraph 6 and are as follows:

3.1.1 Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans or advances in connection with the Project. Preparation or review of environmental assessments and impact statements and the review and evaluation of the effect on the design requirements of the Project of any such statements and documents prepared by others and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Project.

3.1.2 Services to make measured Drawings of or to investigate existing conditions or facilities or to verify the accuracy of Drawings or other information furnished by GCDC-WWS, except where such Drawings are necessary to permit the Engineer to properly perform other Basic Services.

3.1.3 Services resulting from evaluation by Engineer during the study and report phase at GCDC-WWS's request of alternative solutions in addition to those specified in Exhibit A.

3.1.4 Services resulting from significant changes in the scope, extent or character of the portions of the Project designed or specified by Engineer or its design requirements when such changes are issued solely as a result of some action or inaction on the part of GCDC-WWS, including, but not limited to, changes in size, complexity, GCDC-WWS's schedule, character of construction or method of financing. Revising previously accepted studies, reports, Drawings, Specifications, or Contract Documents, when such revisions are required by changes in rules, Laws and Regulations, ordinances, codes, or orders enacted subsequent to the preparation of such studies, reports, Drawings, Specifications, or Contract Documents, or are due to other causes beyond Engineer's control. Notwithstanding the foregoing, as part of its Basic Services, Engineer shall devote the hours at a mutually accepted cost as needed to revise the Drawings in light of any and all revisions to or enactment of codes, ordinances, Laws and Regulations, or other legislation requiring such revisions subsequent to approval of the preliminary design report.

3.1.5 Services resulting from facts revealed about conditions: (A) which are different from information about such conditions that GCDC-WWS previously provided to Engineer under Paragraph 2.7.2 and upon which Engineer was entitled to rely; or (B) as to which GCDC-WWS had responsibility to provide information under Paragraph 2.7.2 if such information was not previously provided.

3.1.6 Providing renderings or models for GCDC-WWS's use in addition to those specified in Exhibit A.
3.1.7 Preparing documents for alternate Bids requested by GCDC-WWS for the Work which is not executed or documents for out-of-sequence work.

3.1.8 Undertaking investigations and studies including, but not limited to, detailed consideration of operations, maintenance and overhead expenses, the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals, assistance in obtaining financing for the Project, evaluating processes available for licensing and assisting GCDC-WWS in obtaining process licensing, detailed quantity surveys of Materials, equipment and labor and audits or inventories required in connection with construction performed by or for GCDC-WWS.

3.1.9 Furnishing the services of Engineer's Consultants for other than Basic Services and furnishing data or services of the types described in Paragraph 2.7.2 when GCDC-WWS employs Engineer to provide such data or services in lieu of furnishing the same under Paragraph 2.7.2.

3.1.10 Services attributable to a variation in the number of contracts from the number specified in Exhibit A for work designed or specified by Engineer.

3.1.11 Services during out-of-town travel required of Engineer other than visits to the Site or GCDC-WWS's office as required by Paragraph 2.

3.1.12 Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review and value engineering as requested by GCDC-WWS. Performing or furnishing services required to revise studies, reports, Drawings, Specifications, or Contract Documents as a result of such review processes.

3.1.13 Determining the acceptability of Substitute Materials and equipment proposed during the bidding or negotiating phase when using Substitute Materials and equipment prior to the award of the Contract is allowed by the Bidding Documents.

3.1.14 Assistance in connection with Bid protests, rebidding, or renegotiating contracts for construction, Materials, equipment, or services, provided that such assistance is necessitated solely as a result of some action or inaction on the part of GCDC-WWS, except when such assistance is required to complete services required by Exhibit E.

3.1.15 Providing field surveys for design purposes, engineering surveys, and staking to enable Contractor to proceed with the Work and any type of property surveys or related engineering services needed for the transfer of interests in real property and providing other special field surveys.

3.1.16 Preparation of operating, maintenance, and staffing manuals to supplement Basic Services under Paragraph 2.6.3.

3.1.17 Preparing to serve or serving as a consultant or witness for GCDC-WWS in any litigation, arbitration, or other legal or administrative proceedings involving the Project, except for assistance in consultations which is included as part of Basic Services under Paragraph 2.1.3 and Paragraph 2.3.2.

3.1.18 Providing more extensive services required to enable Engineer to issue notices or certifications requested by GCDC-WWS hereunder.

3.1.19 Other Additional Services performed or furnished by Engineer in connection with the Project, including services which are to be furnished by GCDC-WWS under Paragraph 4 and services not otherwise provided for in this Agreement.

3.2 Required Additional Services

Any service that Engineer is required to provide to GCDC-WWS shall be Basic Services unless designated as a Contractor payment item or otherwise designated as an Additional Service in Paragraph 3.1 or Exhibit A.

When required by the Contract Documents in connection with the performance or furnishing of Engineer's services during the construction phase, Engineer shall perform or furnish Additional Services of the types listed in Paragraph 3.2.1 through Paragraph 3.2.6, inclusive. These Additional Services listed in Paragraph 3.2.1 through Paragraph 3.2.6, inclusive, are not included as part of Basic Services except to the extent provided in Exhibit A. Required Additional Services shall be paid for by GCDC-WWS as provided in Paragraph 6. Engineer shall promptly advise GCDC-WWS in writing and obtain specific authorization from GCDC-WWS in writing before starting the Additional Services listed in Paragraph 3.2.1 through Paragraph 3.2.1 through Paragraph 3.2.6, inclusive, below.

3.2.1 Services in connection with Work Change Directives and Change Orders to reflect changes requested by GCDC-WWS if, because of the method of compensation agreed upon by the Parties, the

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resulting change in compensation for Basic Services is not commensurate with the extent of the Additional Services rendered.

3.2.2 Services in making revisions to Drawings and Specifications occasioned by the acceptance of Substitute Materials, equipment, or services after the award of the Contract in evaluating and determining the acceptability of a Substitute which is inappropriate for the Project or an excessive number of Substitutes.

3.2.3 Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of Materials, equipment, or energy shortages.

3.2.4 Additional Services or extended services during the Work made necessary by Work damaged by fire or other cause to the extent such damages are not covered by insurance.

3.2.5 Services (other than Basic Services during the operational phase) in connection with any partial utilization of any part of the Project by GCDC-WWS prior to its Substantial Completion.

3.2.6 Evaluating an unreasonable Claim or an excessive number of Claims submitted by Contractor in connection with the Work, provided, however, if Claims are found, in part, due to Engineer's errors or omissions, there shall be no additional compensation due to the Engineer.

PARAGRAPH 4 - GCDC-WWS's RESPONSIBILITIES

Except as otherwise provided in Exhibit A, GCDC-WWS shall do the following:

4.1 Designate in writing a person to act as GCDC-WWS's representative with respect to the services to be performed or furnished by Engineer under this Agreement. Such person shall have complete authority to transmit instructions, receive information, interpret and define GCDC-WWS's policies and decisions with respect to Engineer's services for the Project.

4.2 With the assistance of Engineer, provide all criteria and full information as to GCDC-WWS's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability and any budgetary limitations. Furnish copies of all design and construction standards which GCDC-WWS shall require to be included in the Drawings and Specifications.

4.3 Assist Engineer by placing at Engineer's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.

4.4 Arrange for access to and make all provisions for Engineer to enter upon public and private property as required for Engineer to perform services under this Agreement.

4.5 Examine all written recommendations regarding all alternate solutions, studies, reports, sketches, Drawings, Specifications, proposals, and other documents presented by Engineer and render in writing decisions pertaining thereto.

4.6 Advise Engineer of the identity and scope of services of any independent consultants employed by GCDC-WWS to perform or furnish services in regard to the Project, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review.

4.7 Attend the pre-Bid meeting, Bid meeting, pre-construction meetings, construction progress, and other jobrelated meetings and Substantial Completion and final payment inspections.

4.8 Engineer shall give prompt written notice to the GCDC-WWS if the Engineer becomes aware of any default or defect in the Project, nonconformance with the Contract Documents or the Work.

4.9 Furnish or direct Engineer to provide Additional Services as required by Paragraph 3.1 of this Agreement or other services as required.

PARAGRAPH 5 - TIMES FOR RENDERING SERVICES

5.1 Engineer's services and compensation under this Agreement have been agreed to in anticipation of the orderly and continuous progress of the Project through completion of the construction phase. Unless specific periods of time or specific dates for providing services are specified in this Agreement, Engineer's obligation to render services hereunder shall extend for a period which may reasonably be required for the design, award of

construction contracts, construction, and initial operation of the Project including extra work and required extensions thereto.

5.2 If in this Agreement specific periods of time for rendering services are set forth or specific dates by which services are to be completed are provided and if such periods of time or dates are changed through no fault of Engineer, the rates and amounts of compensation provided for herein may, at GCDC-WWS's discretion, be subject to equitable adjustment. If GCDC-WWS has requested changes in the scope, extent, or character of the Project, the time of performance of Engineer's services may, at GCDC-WWS's discretion, be adjusted equitably.

5.3 If Engineer's services for design or during the Project are delayed in whole or in part by an act of GCDC-WWS:

5.3.1 For more than thirty (30) days through no fault of Engineer, Engineer may, at GCDC-WWS's discretion, be entitled to equitable adjustment of rates and amounts of compensation provided for elsewhere in this Agreement to reflect, among other things, reasonable costs incurred by Engineer in connection with such delay or suspension and reactivation and the fact that the time for performance under this Agreement has been revised; or

5.3.2 For more than one (1) year through no fault of Engineer, or if Engineer for any reason is required to render construction phase services more than one (1) year after Substantial Completion is achieved, the rates and amounts of compensation provided for elsewhere in this Agreement may, at GCDC-WWS's discretion, be subject to equitable adjustment to reflect, among other things, changes in the various elements that comprise such rates of compensation.

5.3.3 No adjustment shall be made whatsoever under this Paragraph 5 for any suspension or delay by any other cause, including the fault or negligence of the Engineer.

5.4 In the event that the work designed or specified by Engineer is to be performed or furnished under more than one contract, or if Engineer's services are to be separately sequenced with the work of one or more contractors (such as in the case of fast-tracking), GCDC-WWS and Engineer shall, prior to commencement of the final design phase, develop a schedule for performance of Engineer's services during the final design, bidding, or negotiating and construction phases in order to sequence and coordinate properly such services as are applicable to the work under such separate contracts. This schedule shall be prepared and included in Exhibit A whether or not the work under such contracts is to proceed concurrently.

PARAGRAPH 6 - PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES

6.1 Methods of Payment for Services and Reimbursable Expenses of Engineer

6.1.1 <u>For Basic Services</u>. GCDC-WWS shall pay Engineer for Basic Services performed or furnished under Paragraph 2 on the basis set forth in Exhibit B.

6.1.2 <u>For Additional Services</u>. GCDC-WWS shall pay Engineer for Additional Services performed or furnished under Paragraph 3 on the basis set forth in Exhibit B.

6.1.3 For Reimbursable Expenses. In addition to payments provided for in Paragraph 6.1.1 and Paragraph 6.1.2, GCDC-WWS shall pay Engineer for Reimbursable Expenses incurred by Engineer and Engineer's Consultants on the basis set forth in Exhibit B.

6.2 Other Provisions Concerning Payments

6.2.1 Preparation and Payment of Invoices.

6.2.1.1 Engineer shall submit monthly invoices to GCDC-WWS for the cost of services actually and properly performed and authorized Reimbursable Expenses actually and properly incurred pursuant to this Agreement for the prior month. These invoices shall be in a form acceptable to GCDC-WWS and shall be accompanied by supporting data as may be reasonably required by GCDC-WWS. Engineer expressly waives any right to payment for Additional Services unless authorized in writing by GCDC-WWS.

6.2.1.2 Upon approval of each invoice, or portion thereof, GCDC-WWS shall pay the approved amount, provided, however, in no event shall GCDC-WWS make any payment which shall cause

the total payments under this Agreement to exceed the authorized compensation for Basic Services as described in Exhibit B, unless GCDC-WWS has agreed in writing to payment of compensation exceeding the approved amount.

6.2.2 Payments Upon Termination.

6.2.2.1 <u>Termination by GCDC-WWS for Cause</u>. In the event of termination by GCDC-WWS for cause under Paragraph 8.1.1:

6.2.2.1.1 Upon the completion of any phase of Basic Services occurring prior to the effective date of the termination, progress payments due Engineer in accordance with this Agreement for all Basic Services performed or furnished by Engineer and Engineer's Consultants through the completion of such phase shall constitute total payment for Basic Services. Engineer also shall be paid for all completed and unpaid Additional Services and incurred and unpaid Reimbursable Expenses through the effective date of the termination.

6.2.2.1.2 During any phase of the Basic Services which is underway but not completed at the time of termination, Engineer shall be paid for such Basic Services performed or furnished in accordance with this Agreement by Engineer during that phase through the date of termination as reasonably determined by GCDC-WWS. Engineer also shall be paid for the charges of Engineer's Consultants employed to perform or furnish Basic Services to the extent such Basic Services have been performed or furnished in accordance with this Agreement through the effective date of the termination as reasonably determined by GCDC-WWS. Engineer also shall be paid for all completed and unpaid Additional Services and incurred and unpaid Reimbursable Expenses through the effective date of the termination.

6.2.2.2 <u>Termination by Engineer for Cause</u>. In the event of termination by Engineer for cause under Paragraph 8.1.1, Engineer shall be entitled to receive compensation calculated as set forth in Paragraph 6.2.2.1 and Paragraph 6.2.2.1.2, as applicable.

6.2.3 <u>Records of Engineer's Costs</u>. Records of Engineer's costs pertinent to Engineer's compensation under this Agreement shall be kept in accordance with generally accepted accounting practices. Copies shall be made available to GCDC-WWS at no cost upon request prior to final payment for Engineer's services. GCDC-WWS shall have the right to audit Engineer's books and records prepared or kept in connection with this Project at all reasonable times and places. These books and records shall be preserved by the Engineer for a period of three (3) years after final payment.

6.2.4 <u>Waiver</u>. GCDC-WWS's review, approval, acceptance of, or payment for any of the services required under this Agreement shall not be construed to operate as a waiver of the rights under this Agreement or of any cause of action arising out of the performance of this Agreement. Engineer shall be and remain liable to GCDC-WWS in accordance with applicable law for all damages to GCDC-WWS caused by the Engineer's negligent performance or non-performance of any of the services required to be furnished under this Agreement

6.2.5 <u>Cooperation</u>. At no cost to GCDC-WWS, the Engineer shall assist GCDC-WWS in the investigation and defense of any claims which arise from the designs prepared by Engineer.

6.2.6 <u>Right to Withhold or Nullify Payment</u>. GCDC-WWS may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any invoice for services and expenses to such extent as may be necessary to protect GCDC-WWS from loss on account of: (A) Defective Work not remedied by the Engineer; (B) claims filed or reasonable evidence indicating probable filing of claims as a result Engineer's errors, omissions, or negligence; and (C) damage to any contractor or third party as a result of Engineer's errors, omissions, or negligence. When the foregoing grounds are removed, if ever, payment shall be made for amounts withheld because of them, less any costs or expenses incurred, or damages suffered by GCDC-WWS as a result thereof.

PARAGRAPH 7 - OPINIONS OF COST

7.1 Opinions of Probable Construction Cost

Engineer's opinions of probable Construction Cost provided for herein shall be made on the basis of Engineer's experience and qualifications and represent Engineer's best judgment as an experienced and qualified professional engineer familiar with the construction industry.

7.2 Designing to Construction Cost Limit

If a Construction Cost limit is established between GCDC-WWS and Engineer, such Construction Cost limit and a statement of Engineer's rights and responsibilities with respect thereto shall be specifically set forth in Exhibit E, "Construction Cost Limit."

PARAGRAPH 8 GENERAL CONSIDERATIONS

8.1 Termination

The obligation to provide further services under this Agreement may be terminated:

8.1.1 For cause, by either party upon thirty (30) days' written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party. Notwithstanding the foregoing, this Agreement shall not terminate as a result of such substantial failure if the party receiving such notice begins, within seven (7) days of receipt of such notice, to correct its failure to perform and proceeds diligently to cure such failure within no more than thirty (30) days of receipt of written notice thereof, provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such thirty (30) day period and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided from herein shall extend up to, but in no case more than, sixty (60) days after the date of receipt of the written notice.

8.1.2 This Agreement may also be terminated upon seven (7) days' written notice without regard to any fault or failure to perform by any party solely at GCDC-WWS's discretion. Upon receipt of such written notice, Engineer shall immediately discontinue all services affected (unless the notice directs otherwise), deliver to GCDC-WWS copies of all data, Drawings, Specifications, reports, estimates, summaries, and such other information, documents, and Materials as may have been accumulated by the Engineer in performing this Agreement whether completed or in process and assign to GCDC-WWS any subcontracts, purchase orders, or other agreements which GCDC-WWS requests.

8.1.3 If the termination is at the reasonable discretion of GCDC-WWS, an equitable adjustment in the compensation of Engineer shall be made, but no amount shall be allowed for anticipated profit or unperformed services. In the event of termination during any phase of the Basic Services, Engineer shall be paid for services performed or furnished in accordance with this Agreement during that phase to date of termination on the basis of actual direct payroll wages plus non-payroll expenses at invoice cost.

8.1.4 If the termination is due to the failure of the Engineer to fulfill its contractual obligations, GCDC-WWS may take over and complete the services by contract or otherwise, and GCDC-WWS shall be compensated by Engineer for any losses or costs it incurs by virtue of this termination for failure to perform.

8.2 Reuse of Documents

Original Drawings and Specifications are the property of GCDC-WWS, and Engineer may not use the Drawings and Specifications for any purpose not relating to the Project without GCDC-WWS's written consent. Engineer shall furnish GCDC-WWS with such reproductions of Drawings and Specifications as GCDC-WWS may reasonably require. Upon completion of the Work or any earlier termination of this Agreement under this Paragraph 8, Engineer shall revise the Drawings to reflect changes made during the Work, and Engineer shall promptly furnish GCDC-WWS with one (1) complete set of reproducible record prints in electronic format of GCDC-WWS's current version of AutoCAD and reproducible Mylar. Prints shall be furnished, as an Additional Service, at any other time requested by GCDC-WWS. All such reproductions shall be the property of GCDC-WWS who may use them

without Engineer's permission for any proper purpose relating to the Project, including, but to limited to, additions to or completion of the Project.

8.3 Insurance

Engineer shall maintain throughout the period of the Project and for a period of three (3) years thereafter, a standard form of errors and omissions insurance policy upon terms and conditions satisfactory to GCDC-WWS with an insurance company licensed in Michigan and satisfactory to GCDC-WWS. Engineer shall also maintain insurance coverage for worker's compensation, comprehensive general liability, comprehensive automobile liability and owners and contractors protective liability insurance, upon terms and conditions and in amounts satisfactory to GCDC-WWS as set forth in Exhibit F. Engineer shall list GCDC-WWS as an additional insured on all such insurance policies. Engineer shall ensure that any and all consultants engaged or employed by Engineer carry and maintain similar insurance with reasonably prudent limits and coverage in light of the services to be performed by such consultants. Engineer shall submit to GCDC-WWS proof of such insurance to GCDC-WWS shall have accepted shall be a condition precedent to the Engineer's exercise or enforcement of any rights under this Agreement. All insurance policies shall include a provision requiring written notice to GCDC-WWS at least thirty (30) days prior to any cancellation, non-renewal, or material modification thereof. Engineer shall promptly forward to GCDC-WWS certificates showing the insurance coverages as required by Paragraph 8.3.

8.4 Governing Law; Interpretation

This Agreement shall be construed in accordance with and governed by the laws of the State of Michigan. The Parties hereto (a) consent to the personal jurisdiction of the state courts located in Flint, Michigan or federal courts located in Southeastern Michigan in connection with any controversy related to this Agreement including, but not limited to, counterclaims or third party demands raised as a result of third party counterclaims initiated in any other jurisdiction; (b) waive any argument that venue in any such forum is not convenient; (c) agree that any litigation initiated by GCDC-WWS or Engineer in connection with this Agreement may be brought in either the state court located in Flint, Michigan or federal court located in Detroit, Michigan; and (d) agree that a final judgment in any such suit, action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

8.5 Successors and Assigns

Except as set forth in Section 9.3 of this Agreement, the successors, transferees, and permitted assigns of the Parties are hereby bound to the other party to this Agreement and to the successors, transferee and permitted assigns of such other party in respect of all covenants, agreements, and obligations of this Agreement. Engineer shall not assign this Agreement without the written consent of GCDC-WWS. GCDC-WWS may assign this Agreement without the consent of Engineer.

8.6 Dispute Resolution

The Parties agree on a method and procedure for resolving disputes between them arising out of or relating to this Agreement as follows:

8.6.1 STEP 1. GCDC-WWS and Engineer shall promptly submit to the other party hereto any and all unsettled claims, counterclaims, disputes, and other matters in question between them arising out of or relating to this Agreement or the breach thereof ("Dispute"). Such submittals shall occur no later than thirty (30) days after the occurrence of the event giving rise to the Dispute or within thirty (30) days following the date that the Dispute became evident to GCDC-WWS or Engineer. Such submittals shall include all pertinent back-up and supporting documentation. Upon delivery of a submittal of a Dispute, GCDC-WWS and Engineer shall promptly meet to attempt to resolve the Dispute.

8.6.2 *STEP 2.* In the event that any Dispute is not resolved in *STEP 1* above, the Dispute shall be submitted to non-binding mediation by a mediator mutually acceptable to GCDC-WWS and Engineer.

8.6.3 STEP 3. Failing to agree on or reach a settlement with respect to the Dispute through STEP 1 and STEP 2 above within sixty (60) days of the submittal of a Dispute, the Dispute may be litigated to conclusion in a court having jurisdiction over the Dispute.

8.7 Allocation of Risks - Indemnification

Engineer shall indemnify, hold harmless, and defend GCDC-WWS, GCDC-WWS's agents, employees, representatives and any affiliated or related entities from and against any and all claims, losses, liabilities, damages, costs and expenses, including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals and all court or other dispute resolution costs, that have occurred in whole or in part as a result of or due to the breach of this Agreement by Engineer or due to the negligence or fault of Engineer, its agents, consultants, employees or representatives, regardless of whether or not such claim, loss, liability, damage, cost, or expense is caused in part by a party indemnified hereunder.

8.8 Notices

Any notice required under this Agreement shall be in writing, addressed to the appropriate party at the address which appears on the signature page to this Agreement (as modified in writing from time to time by such party), and given personally, by registered or certified mail, return receipt requested, by facsimile, or by a nationally recognized overnight courier service. All notices shall be effective upon the date of receipt.

8.9 Survival

All representations, warranties, covenants, and agreements made in or given by a party in this Agreement shall survive the completion of all services of Engineer under this Agreement or the termination of this Agreement for any reason.

8.10 Severability

Any provision or part of the Agreement held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon the Parties who agree that the Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

8.11 Engineer Cooperation

In the event of the termination of this Agreement, Engineer consents to GCDC-WWS's selection of another engineer of GCDC-WWS's choice to assist the GCDC-WWS in any way in completing the Project. Engineer further agrees to cooperate and provide any information requested by GCDC-WWS in connection with the completion of the Project and consents to and authorizes the making of any reasonable changes to the design of the Project by GCDC-WWS and such other engineer as GCDC-WWS may desire. Any services provided by Engineer, which are requested by GCDC-WWS after termination, shall be fairly compensated by GCDC-WWS.

8.12 Incidental or Consequential Damages

Notwithstanding anything to the contrary contained here in, neither party shall be liable for incidental or consequential damages whether arising in contract, tort (including negligence), statute, or strict liability.

8.13 Incorporation by Reference

The Contract Documents (including, but not limited to the definitions set forth therein) are incorporated by reference as though fully set forth herein, and Engineer specifically agrees and acknowledges that it has reviewed the Contract Documents and agrees to be bound by and comply with the Contract Documents. The Recitals set forth are incorporated by reference as though fully set forth herein and are a contractual part of this Agreement.

8.14 Construction

The Parties have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the Parties and no presumption or burden of proof shall arise favoring or disfavoring any Party by virtue of the authorship of any of the provisions of this Agreement. Any reference to any federal, state, local, or foreign statute or law shall be deemed also to refer to all rules and regulations promulgated there under, unless the context requires otherwise. The word "including" shall mean including without limitation.

8.15 Counterparts; Facsimile Signatures

This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original and all of which shall constitute the same instrument. This Agreement may be executed by facsimile signatures that shall be considered originals.

8.16 Headings

The headings of the articles, sections and paragraphs of this Agreement and of the Exhibits hereto are included for convenience of reference only and in no way define, limit or describe the scope of intent of any provision of this Agreement.

8.17 Construction and References

Words used in this Agreement, regardless of the number or gender specifically used, shall be deemed and construed to include any other number, singular or plural, and any other gender, masculine, feminine or neuter, as the context shall require. Unless otherwise specified, all references in this Agreement to articles, sections, paragraphs or clauses are deemed references to the corresponding articles, sections, paragraphs or clauses in this Agreement, and all references in this Agreement to exhibits are references to the corresponding exhibits attached to this Agreement.

8.18 Modification and Waiver

Any of the terms or conditions of this Agreement may be waived in writing at any time by the Party that is entitled to the benefits thereof. No waiver of any of the provisions of this Agreement shall be deemed to or shall constitute a waiver of any other provisions hereof (whether or not similar). Oral modifications of this Agreement are not permitted. Modification or amendment of this Agreement shall require the written approval of GCDC-WWS and Engineer.

8.19 No Third-Party Beneficiaries

This Agreement is not intended to confer upon any person or entity, other than the Parties hereto, any rights or remedies of any kind or nature whatsoever.

8.20 Interpretation

For purposes of interpretation of this Agreement, neither GCDC-WWS nor Engineer shall be deemed to have been the drafter of this Agreement.

8.21 Negotiated Agreement

This Agreement has been prepared and negotiations have occurred in connection with said preparation pursuant to the joint efforts of the Parties. This Agreement therefore shall not be construed against any Party to this Agreement.

PARAGRAPH 9 - EXHIBITS AND SPECIAL PROVISIONS

9.1 This Agreement is subject to the provisions of the following Exhibits which are attached to and incorporated into the Agreement:

- 9.1.1 Exhibit A, "Further Description of Basic Engineering Services and Related Matters," consisting of 3 pages.
 - 9.1.1.1 Attachment to Exhibit 1, "Scope of Services" consisting of 9 pages.
- 9.1.2 Exhibit B, "Payments to Engineer for Services and Reimbursable Expenses," consisting of 3 pages.
- 9.1.3 Exhibit C, "Duties, Responsibilities and Limitations of Authority of Resident Project Representative," consisting of 3 pages.
- 9.1.4 Exhibit D, "Notice of Acceptability of Work," consisting of 1 page.
- 9.1.5 Exhibit E, "Construction Cost Limit," consisting of 1 page (NOT APPLICABLE).
- 9.1.6 Exhibit F, "Insurance," consisting of 1 page.

9.2 This Agreement (consisting of pages 1 to 18, inclusive and the Exhibits identified above) constitutes the entire agreement between GCDC-WWS and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.

PARAGRAPH 10 – AGREEMENT MAY BE TRANSFERRED TO THE KAREGNONDI WATER AUTHORITY

10.1 Assignment of Agreement to Karegnondi Water Authority

This Agreement shall be transferable by GCDC-WWS to the Karegnondi Water Authority without the written consent of Engineer after GCDC-WWS provides Engineer with at least five (5) calendar days notice pursuant to Section 8.8 of this Agreement prior to this Agreement being transferred to the Karegnondi Water Authority.

- 10.1.1 Engineer to Invoice GCDC-WWS. After receipt of the written notification that this Agreement is being transferred to the Karegnondi Water Authority by GCDC-WWS pursuant to Section 10.1 of this Agreement, the Engineer shall submit a final invoice to GCDC-WWS by certified mail or Overnight Courier within five (5) business days. The final invoice submitted by Engineer shall include all work performed pursuant to Sections 6.1.1, 6.1.2, and 6.1.3 of this Agreement by Engineer through the date the final invoice is submitted to GCDC-WWS by Engineer.
- 10.1.2 <u>GCDC-WWS to Pay Engineer</u>. GCDC-WWS shall pay Engineer the amount set forth in the final invoice submitted by Engineer pursuant to Section 10.1.1 of this Agreement no later than thirty (30) calendar days after the day of receipt of the final invoice. If GCDC-WWS disagrees with the amount of the final invoice by Engineer, the Parties shall dissolve the disagreement pursuant to Section 8.6 of this Agreement. As soon as possible, after payment of the final invoice by GCDC-WWS, GCDC-WWS shall notify both the Karegnondi Water Authority and Engineer of the total amount remaining to be paid to Engineer pursuant to Section 6.1 of this Agreement.
- 10.1.3 Engineer to Provide Status Update. Engineer shall include with the final invoice a written status of any Additional Services pursuant to Section 6.1.2 of this Agreement that it was performing for GCDC-WWS, including, the estimated cost to finish the Additional Service(s). Engineer shall not continue to work on any Additional Services pursuant to Section 6.1.2 of this Agreement without the written authorization of the Chief Executive Officer of the Karegnondi Water Authority pursuant to Section 10.1.4 of this Agreement.
- 10.1.4 <u>Karegnondi Notification to Engineer</u>. The Chief Executive Officer of the Karegnondi Water Authority shall have ten (10) business days from the next business day after the final invoice is received by GCDC-WWS to notify Engineer in writing if it intends not to continue with any Additional Services pursuant to Section 6.1.2 of this Agreement that Engineer was working on for GCDC-WWS. Failure of the Chief Executive Officer of the Karegnondi Water Authority to notify Engineer within the ten (10) business days from the next business day after the final invoice is received by GCDC-WWS shall constitute approval for the Engineer to continue to work on any

Additional Service(s) pursuant to Section 6.1.2 of this Agreement. The Karegnondi Water Authority and Engineer shall be bound by the cost provided by Engineer to GCDC-WWS for all Additional Work pursuant to Section 6.1.2 of this Agreement. If the Karegnondi Water Authority provides Engineer with written approval to proceed with the Additional Work pursuant to Section 6.1.2 of this Agreement or if the Karegnondi Water Authority fails to notify Engineer within ten (10) business days from the next business day after the final invoice is received by GCDC-WWS to cease working on the Additional Work pursuant to Section 6.1.2, Engineer shall thereafter begin to perform work for the Karegnondi Water Authority pursuant to Section 6.1.2 that it was performing for the GCDC-WWS.

10.2 Payment by Karegnondi Water Authority to Engineer

The Karegnondi Water Authority shall submit payments to Engineer for the work being performed pursuant to Section 6.1.1, 6.1.2, and 6.1.3 of this Agreement, if applicable, pursuant to the payment schedule negotiated by GCDC-WWS and Engineer, unless the Karegnondi Water Authority and Engineer mutually agree to a new payment.

IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective as of the Effective Date.

GCDC-WWS: Genesee County Drain Commissioner By: DIRECTOR 3210 Tohis Attest:

Address for giving Notices: G-4610 Beecher Road Flint, Michigan 48532

ENGINEER: Wade Trim, Inc. By: esident Jason R. Ke P Attest:

Address for giving Notices: Jason Kenyon, P.E. 555 S. Saginaw Street, Suite 201 Flint, Michigan 48502

License No .:

(where applicable)

Agent for Service of Process

(If Engineer is an entity, attach evidence of authority to sign)

Designated Representative:
Name: Matthew T. Raysin, P.E.
Title: Division Engineer Address: G-4610 Blecher RO.
Address: G-4610 Blecher KO.
Flint my 48532
Phone: 810. 732-7870
Facsimile: 810.732.9773

Designated Representative:

Name:	 	
Title:	 	
Address:		
Phone:		
Facsimile:		

This is EXHIBIT A, consisting of <u>3</u> pages, referred to in the Agreement between GCDC-WWS and ENGINEER for Professional Services, dated <u>449</u> 2013

Initials:	no
GCDC-WWS	110
ENGINEER	all
	1

FURTHER DESCRIPTION OF BASIC ENGINEERING SERVICES AND RELATED MATTERS

Paragraphs 2, 3, 4, and 5 of the Agreement are amended and supplemented, and the time periods for the performance of the Basic Services as set forth in Paragraph 5 of the Agreement are established, all as set forth below.

PRIME CONTRACT S.4005

Time Frame

A.	Study and Report Phase	N/A	months	N/A
В.	Preliminary Design Phase	16	weeks	06/24/13 to 10/16/13
C.	Final Design Stage	26	weeks	10/16/13 to 04/17/14
D.	Bidding Phase	11	weeks	04/17/14 to 07/13/14
E.	Construction Phase		months	TBD
F.	Operational Phase		months	TBD

PARAGRAPH A2 - BASIC SERVICES OF ENGINEER

2.2 Preliminary Design Phase

The preliminary design phase establishes the general size and scope of the Project and its basic location on the Site. The preliminary design phase services of Engineer are supplemented as follows.

- 1. Preparation of preliminary design documents consisting of verification of final design criteria, preliminary Drawings, Specifications, and a written description of the Project. These documents shall be submitted for review and approval by GCDC-WWS for the submission to the Michigan Department of Environmental Quality ("MDEQ").
- 2. Conduct a conference with GCDC-WWS to review design requirements, and conduct a Site inspection to identify design challenges and verify design parameters.
- 3. Advise GCDC-WWS if additional reports, data, or other information or services are necessary for final design, and provide to GCDC-WWS the costs for the Engineer to acquire needed data. These reports shall include, but not be limited to the following: exploration and tests of subsurface conditions (soil borings), including appropriate professional interpretations of tests and soil boring logs..
- 4. Obtain any additional field surveys necessary for design purposes.
- 5. Preparation of preliminary opinions of probable Construction Cost for the Project.
- 6. Five (5) sets of Engineer's preliminary design documents shall be submitted for review to GCDC-WWS as well as copies in electronic format, as specified by GCDC-WWS.
- 7. The preliminary design documents shall be submitted to GCDC-WWS in accordance with the project schedule outline above.
- 2.3 Final Design Phase

The final design phase establishes the services required to complete the design of improvements to the Project. The final design services of Engineer are supplemented as follows.

1. Detailed conferences with GCDC-WWS. Engineer shall meet periodically to review progress and to receive input from GCDC-WWS and the regulatory agencies.

2. Review pre-procured materialShop Drawings and certifications, and conduct furtherSite surveys to determine existing conditions, if necessary.

- 3. Prepare a preliminary schematic and layout Drawings for the Project.
- 4. Review and assist the Program Manager in revising the "basis of design" for S.4005 to accommodate system sizing based on flow projections. The design is to be developed to meet anticipated P. A. 399 permit requirements and soil erosion permit requirements.
- 5. Review acceptability of Major Equipment components with GCDC-WWS.

- 6. Prepare final design documents including Contract Documents, final Specifications, and final Drawings. Engineer shall supply electronic pdf copies of the Drawings and final Specifications in Biddable condition. Engineer shall also provide Drawings and Specifications in electronic format (AUTOCAD and Word, respectively). Final design shall include all general/civil, architectural, structural, mechanical, electrical, and instrumentation and control for a complete Project.
- 7. Furnish engineering data and an application for an MDEQ P.A. 399 construction permit.
- 8. Preparation of a final opinion of probable Construction Cost.
- 9. Furnish GCDC-WWS with five (5) copies of the Construction Drawings and Specifications for final review by GCDC-WWS and MDEQ.
- 10. Meet with GCDC-WWS's staff to review the final draft of Contract Documents. Revise the Bidding Documents to include GCDC-WWS's comments.
- 11. Prepare applications for non-environmental permits required to initiate and complete the Project and assist the Progam Manager's Environmental Permit Coordinator to complete the environmental permits required to initiate and complete the Project. GCDC-WWS shall pay for all application and permit issuance fees.
- 12. Submit five (5) sets of Contract Documents to GCDC-WWS for review.
- 13. The number of Contracts for Work designed or specified by Engineer, upon which Engineer's compensation has been established under the Agreement, is one (1).
- 2.4 Bidding or Negotiating Phase

The bidding or negotiating phase services of Engineer are supplemented as follows.

- 1. Prepare the Bid advertisement, and assist GCDC-WWS in the preparation of a list of prospective Bidders. The cost of publication shall be paid for by GCDC-WWS.
- 2. Arrange a pre-Bid conference with the GCDC-WWS, MDEQ, and plan holders. This conference shall be held at least ten (10) days prior to the Bid date. Engineer shall answer questions from plan holders, and issue any Addenda required to clarify discrepancies in the Bidding Documents.
- 3. Attend the Bid opening, and prepare a tabulation of the Bids
- 4. Review the qualifications and acceptability of low Bidder, named Subcontractors, and equipment Suppliers.
- 5. Provide a recommendation for the award of the Bid for GCDC-WWS's use.
- 6. Prepare conformed Contract Documents for signature by GCDC-WWS and the successful Bidder.
- 2.5 <u>Construction Phase</u>

Engineer shall provide a Resident Project Representative for the Project. The construction phase services of Engineer are supplemented as follows and will also be further refined at a later date following completion of the Final Design Phase:

- 1. Consultation and advice during the Work.
- 2. Conduct progress meetings at the Site on a weekly, bi-weekly, or monthly basis, as deemed necessary by GCDC-WWS and Engineer. Prepare meeting agenda, and prepare and distribute meeting minutes.
- 3. Preparation of elementary sketches required to resolve actual field conditions encountered.
- 4. Review material data sheets, equipment Shop Drawings, and detailed installation drawings for compliance with the Specifications and design concepts.
- 5. Review laboratory and shop test reports of Materials and equipment.
- 6. Issue bulletins and Change Orders which are required. Assist GCDC-WWS in negotiating Change Order prices. Provide independent opinions of cost for Change Order work.
- 7. Prepare record Drawings for the Project. Provide GCDC-WWS with a Mylar copy of the record Drawings.
- 8. The construction phase services shall commence within ninety (90) to one hundred thirty (130) days following completion of the final design phase.

PARAGRAPH 2 – BASIC SERVICES OF ENGINEER

- 1. The following services listed in Paragraph 2 of the Agreement are hereby specifically removed from Paragraph 2 and shall be performed or furnished by Engineer as part of Additional Services under Paragraph 3.1 or Paragraph 3.2:
- 2. The following services listed in Paragraph 2 of the Agreement are hereby specifically deleted from Paragraph 2 and shall be performed or furnished by GCDC-WWS as part of GCDC-WWS's responsibilities under Paragraph 4: _____

PARAGRAPH 3 – ADDITIONAL SERVICES OF ENGINEER

- 1. The Additional Services of Engineer listed in Paragraph 3.1.1, Paragraph 3.1.2, Paragraph 3.1.14 and Paragraph 3.1.15 of the Agreement are hereby specifically removed as Additional Services, and such Additional Services, set forth in the aforementioned Paragraphs, shall be performed or furnished by Engineer as part of Basic Services under Paragraph 2 of the Agreement.
- Paragraph 3 of the Agreement is hereby amended to provide that the following services shall be performed or furnished by Engineer as part of Additional Services under Paragraph 3.1 or Paragraph 3.2: _____
- 3. The following services listed in Paragraph 3, "Additional Services," are hereby specifically deleted from Paragraph 3 and shall be performed or furnished by GCDC-WWS as part of GCDC-WWS's responsibilities under Paragraph 4:
- 4. Engineer intends to employ each of the independent consultants listed below to perform or furnish services in regard to the Project for the respective scope of services listed below for each. Payments to Engineer for services in Paragraph 6 hereof are based on the participation in the Project of GCDC-WWS's independent consultants as described herein.

Consultant Scope of Service

Professional Services Industries, Inc. (PSI) Geotechnical Engineering

PARAGRAPH 4 - GCDC-WWS's RESPONSIBILITIES

- 1. GCDC-WWS's responsibilities listed in Paragraph 4.4.1, Paragraph 4.4.4 and Paragraph 4.4.5 of the Agreement are hereby specifically removed as GCDC-WWS's responsibilities and such responsibilities set forth in the aforementioned Paragraphs shall be performed or furnished by Engineer as a part of Basic Services under the Agreement.
- 2. The following services listed in Paragraph 4 of the Agreement are hereby specifically removed from Paragraph 4 and shall be performed or furnished by Engineer as part of Additional Services under Paragraph 3.1 or Paragraph 3.2:

Scope of Services

Lake Huron Water Initiative

Genesee County Drain Commissioner – Division of Water & Waste Services

The Genesee County Drain Commissioner's Office – Division of Water and Waste Services (GCDC-WWS) is requesting proposals from pre-qualified design professionals for the design of the Lake Huron Water Initiative (LHWI) project. Based on the requirements outlined by the in the Request for Proposal issued by GCDC-WWS (Owner), and our knowledge of Contract S.4005, we have divided our Scope of Services into three sections:

- 1. Task A Preliminary Design Phase
- 2. Task B Final Design Phase
- 3. Task C Bidding Assistance Phase

Task A – Preliminary Design Phase

The Preliminary Design Phase of this project will require the undertaking of a number of tasks associated with development of the design up to the 30% design milestone, as outlined below.

A1 – Project Management

Staffing

In terms of staffing for S.4005, Wade Trim has designated **Chris Bosserd**, **PE**, as the Design Project Manager (DPM). Chris is a civil engineer with 15 years of experience in municipal and industrial projects, including the design and construction of large-diameter pipelines and underground utilities, water distribution systems, and roadway resurfacing and restoration projects. Throughout the course of the project Chris will be readily available and will be committed to remaining the primary contact throughout the design and bidding phases of the project. As the project progresses, Chris will provide the necessary supervision for the Project Team to ensure the services requested are being delivered in a professional manner, on schedule, and on budget.

The Project Team, which is shown in the organization chart on the following page, consists of a number of technically skilled and dedicated individuals that will be committed to this project for the duration.

Meetings

We understand that there will be a number of meetings that will be scheduled by the Project Management (PM) Team and may require representation from the entire LHWI project team, or design contract-specific design teams. As the DPM, Chris will attend and participate in all planned meetings scheduled by the PM, including but not limited to the Kick-off Meeting and Design Review Meetings (30%, 60%, 90% and 100%), as well as the overall LHWI Project and Coordination Meetings.

Bethany Schroeder, PE, will assist Chris in his role as the DPM. With 17 years of experience, Bethany (Beth) has a diverse knowledge of project management, design and plan development related to roadway, storm water, sanitary sewer, and water main projects and will be able to quickly and efficiently assist Chris, when needed.

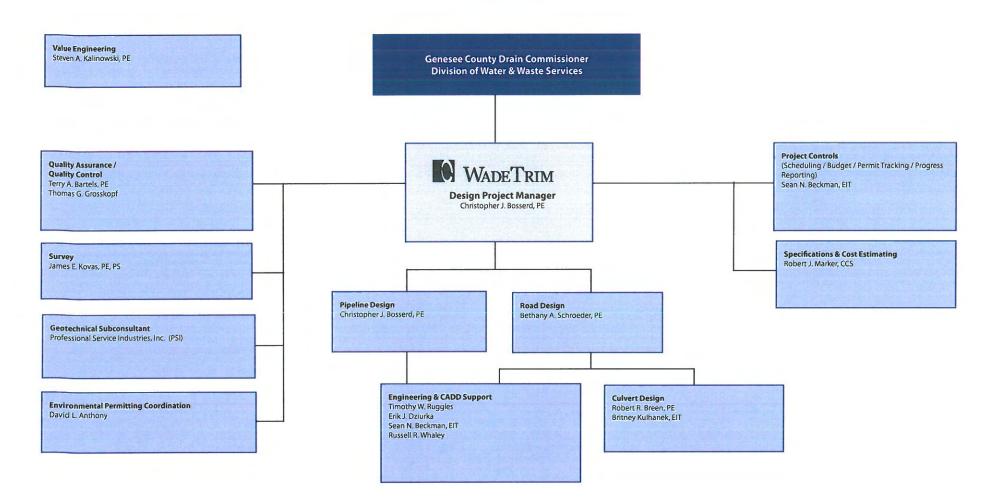
As part of the responsibilities for Contract S.4005, our Project Team will prepare and distribute meeting agendas for any meeting that we facilitate. As requested, agendas will be prepared and distributed no less than one day before the meeting in accordance with the standard format provided by the PM. Following the conclusion of any meeting facilitated by Wade Trim as part of Contract S.4005, a meeting summary will be prepared and distributed in accordance with the standard format provided by PM no later than one week after a meeting is held.

Coordination

It is our understanding that the Contract S.4005, which has a point of beginning adjacent to the Intermediate Pump Station (IPS) and will end at the intersection of Kings Mill and Jefferson Road, will be adjacent to Contract S.4004 to the east (at the IPS), and Contract S.4006 to the west. Given this, Wade Trim will work with the consultants assigned to each contract to coordinate connection points, schedule, design and construction details, and any other items related to design, with the assistance of the PM.

Additionally, Wade Trim is aware that we will be required to coordinate elements of our design with members of the PM team, including obtaining environmental permits, and pipeline design related to corrosion protection and surge protection.

Lake Huron Water Initiative Project Team Contract S.4005



Communication & Project Extranet

It is our understanding that project communication is to be primarily conducted electronically, with the exception of documents requiring original signatures. As requested, Chris will act as the single point of contact between Wade Trim (DP), our Project Team, the PM and the Owner. Furthermore, all communications between Wade Trim and these entities will be carried out in accordance with the communication plan that is to be established by the PM.

In regard to transferring files between Wade Trim and the PM, the members of our Project Team are all proficient in the use of ProjectWise, the basis for the Project Extranet established by the PM. As such, Wade Trim will use the Project Extranet to transmit the required deliverables to the PM.

However, as requested, we will also transmit all of the required deliverables to the Owner via USB flash drives or email, notifying the PM of the deliverable and the method of transmittal to the Owner. The type of transmittal (i.e., email versus USB flash drive) will be dictated by the size and type of the deliverable. For example, agendas and meeting minutes will be distributed to the Owner via email; 60% design plans will be distributed to the Owner via a USB flash drive.

Wade Trim acknowledges that paper copies of project correspondence, reports, plans, specifications, and permits are anticipated and will provide them in regard to submittals to regulatory agencies, or by specific request by the Owner.

Administration

Invoices for our professional services will be prepared monthly, in accordance with the requirements outlined in the RFP. Wade Trim will utilize the standard invoice format provided by the PM and submit each invoice by the second Friday of the month for processing. Each invoice will be accompanied by a summary of earned value and/or engineering efficiency in accordance with the standard format provided by the PM.

Reporting

Wade Trim will prepare and submit Weekly Progress Reports, Monthly Reports, Design Progress Reports, and any other informational reports or technical communications required by the PM or the Owner during the course of the LHWI project. In accordance with the RFP, the following information will be provided as part of the reporting requirement:

- 1. Weekly Progress Reports will be submitted to the PM each Friday throughout the course of the project in accordance with the standard format provided by the PM. Each report will include a short summary of schedule, accomplishments, and look-ahead, as well as issues or concerns.
- 2. Monthly Reports will be submitted to the PM on the second Friday of each month in accordance with the standard format provided by the PM. Each report will include detailed schedule updates, engineering staffing, budget status, and a monthly forecast.
- Project Design Reports (PDR) will be submitted to the PM and the Owner along with each design progress submittal (i.e., 30%, 60%, 90%, and 100% design deliverables). Each report will include a narrative summary of the design status and outline any critical issues or concerns related to the design, as well as an update on Engineering Productivity and Deliverables forms provided by the PM.

Project Schedule

We have reviewed the detailed project schedule prepared by the PM for the overall project and are aware of the baseline target dates for each of the LHWI Contracts, including Contract S.4005. It is our understanding that throughout the course of this project (e.g., Task A, Task B and Task C), Wade Trim will utilize Primavera to prepare and submit monthly Progress Schedules to the PM and Owner for review and approval. As part of the project schedule submittal, Wade Trim will prepare a detailed schedule narrative that highlights the following, if appropriate and applicable:

- Changes in the critical path;
- Expected schedule changes;
- Potential delays;
- Opportunities to expedite the schedule;
- Coordination issues the PM and the Owner should be aware of or can assist with;

- Other schedule-related issues that Wade Trim wishes to communicate to the PM and the Owner; and
- Corrective actions proposed to return the project to the schedule.

We acknowledge that if our work falls behind that schedule due to factors within or outside of our control, Wade Trim shall take such actions as possible to improve the progress of the work. In addition, we acknowledge that the PM and the Owner may require Wade Trim to submit a revised schedule demonstrating the proposed plan to make up any delay(s) in schedule progress and to ensure completion of the work within the allotted Agreement time that is within our control.

Our proposed scheduled has been included as **Exhibit A** and outlines the estimated time it will take to complete each of the designated tasks outlined in the RFP, as well as those tasks Wade Trim has determined to be contract specific.

Cost Estimating

We have reviewed the preliminary cost estimate that has been prepared by the PM for the overall project and are aware of the baseline costs for each of the LHWI Contracts, including Contract S.4005. It is our understanding that throughout the course of the project's major milestones (e.g., Task A, Task B and Task C), Wade Trim will prepare and submit detailed cost estimates in regard to Contract S.4005 as the design process progresses in accordance with standard forms provided by the PM. Furthermore, we will provide an updated resource-based construction cost estimate at the 30% design submittal, as well as later estimates that are consistent with the bid proposal pay items for the design at 60%, 90%, and 100%.

As part of the Quality Assurance/Quality Control process described below, estimates will be reviewed by staff experienced in developing opinions of construction cost for the type of work included in Contract S.4005.

Permitting - Environmental

Based on our understanding of the permitting requirements set forth in the RFP, Wade Trim acknowledges that Environmental Permitting for the Program will be completed by the PM's "Environmental Permit Coordinator" (EPC), who will be responsible for obtaining the following permits and approvals:

- 1. Floodplains (NREPA Part 31)
- 2. Inland Lakes and streams (NREPA Part 301)
- 3. Wetlands (NREPA Part 303)
- 4. Threatened and Endangered Species (NREPA Part 365)
- 5. Water Construction Permit (Act 399)
- 6. Drain Crossing Permits in St. Clair and Lapeer County

Wade Trim understands that environmental permits and communications with the regulatory agencies will be orchestrated by the EPC, but we will be required to coordinate base map data sharing and review permit submittals with the EPC for the impacted agencies which may include, but are not limited, to the United States Army Corps of Engineers, MDEQ, St. Clair County and Lapeer County Drain Commissioner's offices. Furthermore, we will coordinate with the EPC and Owner to review the list of permits and environmental concerns developed, as well as tracking the permit process during design.

Please note that we have assumed that mitigation related to the environmental permitting process will not be required as part of Contract S.4005. Given this, if mitigation is required there will be an additional fee associated with the time and effort necessary to plan and specific the mitigation efforts needed for coordination with the PM's EPC.

Permitting - Non-Environmental

Wade Trim also acknowledges that it will be responsible for preparing and submitting the necessary documentation (including permit applications) for the following non-environmental permits and approvals for Contract S.4005 (with portions located in St. Clair County and Lapeer County). These non-environmental related permits may include, but are not limited to:

- 1. Road Permits, as required, in St. Clair and Lapeer County
- 2. Soil Erosion and Sedimentation Control Permits in St. Clair and Lapeer County
- 3. M-53 (Van Dyke Road) Crossing Permit from the Michigan Department of Transportation

4. Permits, as required, for local utilities (i.e., Enbridge Pipeline) or railroad crossings.

In addition to the permits listed above, Wade Trim is aware that it will also be responsible for preparing and submitting permit applications for the Notice of Coverage and the National Pollution Discharge Elimination System Permit from the MDEQ.

Easements

Wade Trim recognizes that the anticipated alignment for the transmission main for Contract S.4005 is to be in the center of the designated roadways for the majority of this specific contract. We understand, however, that the final pipe alignment must be approved by the PM, Owner, and local County Road Commissions involved.

We are not aware of any permanent easements that the Owner is in the process of obtaining for this portion of the project. However, if it becomes evident through the course of design that additional permanent easements will be required in order to avoid disturbing an existing structure(s), for the placement and construction of a new structure(s), or for re-alignment of the transmission main due to unavoidable conflicts, Wade Trim will notify both the PM and the Owner no later than the 30% design submittal that additional easements are necessary.

In terms of temporary easements needed during construction, Wade Trim will prepare the necessary easement documents in accordance with the sample easement documents provided by the PM as part of the RFP.

Quality Assurance/Quality Control (QA/QC)

Wade Trim acknowledges that quality assurance and quality control will be a critical component of this project and Contract S.4005 and has assigned three of our senior-level staff members to this task to ensure that it is conducted in accordance with the requirements set forth in the QA/QC documents provided by the PM.

With over 35 years of experience working with Michigan communities to expand and rehabilitate their infrastructure, and over 25 years of QA//QC experience regarding potable water projects, **Terry Bartels, PE**, and will lead our design QA/QC efforts in regard to Contract S.4005. He has been involved in all phases of potable water and roadway projects including planning, design, construction and startup, including long distance pumping of potable water. Given his background, Terry is able to apply a wide range of design and construction techniques to projects and understands the value of various techniques bring to different projects. Furthermore, Terry has been involved in the Wade Trim Quality Program since 1993, an ongoing process where areas of improvements are identified, steps are taken to improve the process, and the results are measured.

Terry will be supported by **Tom Grosskopf**, a senior construction administrator with over 37 years of construction experience. Tom brings unparalleled knowledge and familiarity with the construction process, as well as protecting the interests of clients before and during construction. His experience includes sanitary sewer, water main, drain improvements and roadway resurfacing and reconstruction projects from the perspective of construction project management and administration, as well as constructability.

Value Engineering (VE)

It is our understanding that a Value Engineering Team will be formed by the Owner for this project, encompassing one representative from each Design Professional. Wade Trim has a number of experienced engineers with specialized expertise to review designs and identify potential cost saving ideas for this project. For the LHWI project we recommend **Steve Kalinowski, PE,** as our representative for the VE Team. With more than 34 years of experience, Steve has the expertise necessary in regard to evaluating and designing solutions to address complex problems or project limitations.

It is anticipated that the VE effort will be at the 30% and 60% milestones. Given this, a budget of 40 hours of effort for each milestone has been included for VE in our accompanying fee schedule. Please note that the design fees associated with Task A and Task B do not take into account any additional hours that may result from recommendations or alternative evaluations performed by the VE Team. Similarly, the design fees associated with Task A and Task B also do not account for any additional time that may be required to prepare or updated cost estimates based on VE recommendations or alternative evaluations.

A1 – Project Management Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. Agendas and Meeting Summaries for the 30% Design County Review Meeting, 30% Design Review Meeting, and the Progress and Coordination Meetings;
- 2. Monthly Invoices with summary of Earned Value and/or Engineering Efficiency;
- 3. Weekly and Monthly Progress Reports, as well as Informational Reports as required; and
- 4. CPM Schedules in Primavera format, including a Baseline Schedule and Progress Schedules.

A2 – Site Investigations

It is our understanding that Wade Trim will be responsible for conducting field checks to verify that the information provided is accurate and up-to-date, and conducting all supplemental investigations to obtain data information required to complete the design tasks associated with Contract S.4005.

A2 – Site Investigation Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. An impact report summarizing where temporary impacts and permanent impacts will be initially anticipated in regard to Contract S.4005, as well as where potential impacts were avoided, based on the preliminary design requirements/guidelines;
- 2. Supplemental survey incorporated into design base files;
- Additional geotechnical investigative work specific to Contract S.4005, including boring logs; laboratory test results for soil classification resistivity, pH, moisture content, and ion concentrations; design recommendations; and
- 4. Utilities incorporated into design base files.

A3 – 30% Design

As part of the 30% Design task Wade Trim will develop preliminary design plans and profiles for Contract S.4005, including a preliminary alignment for the transmission main between the Intermediate Pump Station (Contract S.4004) and the intersection of Kings Mille and Jefferson Road (Contract S.4006), valve structures, drain and/or stream crossings, and other major site elements. Wade Trim will also:

- 1. Identify areas of alignment concerns related to constructability, easements, or rights-ofway and review with the PM;
- Identify staging, storage, access, and offsite access corridors, as well as potential spoil disposal areas;
- 3. Identify preliminary quantities of materials necessary for material procurement by Owner;
- Develop preliminary Storm Water Pollution Prevention (SWPP) Plan and Grading and Erosion Control Plan and incorporate erosion and sediment control requirements into the drawings;
- 5. Develop traffic maintenance plans;
- 6. Coordinate draft environmental permit applications with the PM's EPC;
- 7. Develop a list of non-environmental permit applications specific to Contract S.4005;
- 8. Coordinate site grading and storm water management and route/site drainage requirements with the design professional responsible for the Intermediate Pump Station, specifically where the transmission main for Contract S.4005 will connect to the yard piping associated with Contract S.4004;
- 9. Develop supplemental and additional specifications, as needed, and coordinate modifications and additions with PM; and
- 10. Incorporate standard details provided by PM and develop supplemental details, as needed.

In regard to the supplemental survey that will be required as part of Contract S.4005, Wade Trim will conduct limited in-field surveys of areas along the route that require additional elevation data needed for purposes of design (i.e., culvert sizes, culvert inverts, ditch bottoms, etc.), as indicated in the base plan topographic files. Additionally, Wade Trim will re-establish horizontal and vertical control, based on the information provided in the RFP, in order to corroborate the control previously established and to set more permanent benchmarks.

A3 – 30% Design Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. 30% design plans, including incorporation of supplemental survey data;
- 2. Supplemental specifications, as needed;
- 3. 30% QA/QC completed forms;
- 4. Updated Project Schedule;
- 5. 30% Construction Cost Estimate;
- 6. List of Required Non-Environmental Permits; and
- 7. Preliminary Design Report and current Progress Report.

Please note that deliverables will be prepared in accordance with the general design standards outlined in the RFP, including the standard specifications, standard details, typical cross sections for road reconstruction, and CADD standards.

Task B – Final Design Phase

B1 – Project Management

During the Final Design Phase (i.e., 60%, 90% and 100% design), Wade Trim will proceed with the design of Contract S.4005 in accordance with the standards outlined in Task A1 above.

B1 – Project Management Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- Agendas and Meeting Summaries for 60% Design County Review Meeting and 60% Design Review Meeting, 90% and 100% Design Review Meetings, and the Progress and Coordination Meetings;
- 2. Monthly Invoices with summary of Earned Value and/or Engineering Efficiency;
- 3. Weekly and Monthly Progress Reports, as well as Informational Reports as required; and
- 4. CPM Schedules in Primavera format, including a Baseline Schedule and Progress Schedules.

B2 - 60% Design

As part of the 60% Design task Wade Trim will expand and further refine the design plans and profiles for Contract S.4005 based on the decisions and concepts established during the preliminary 30% design task. Wade Trim will complete and finalize the preliminary calculations of the previous phase, as well as finalize the size and location valve structures, drain and/or stream crossings, and other major site elements. Specific activities will also include:

- 1. Finalizing the transmission main alignment;
- 2. Refine staging, storage, access, and offsite access corridors;
- 3. Finalize quantities of materials necessary for material procurement by Owner;
- 4. Refine Storm Water Pollution Prevention (SWPP) Plan and Grading and Erosion Control Plan and incorporate erosion and sediment control requirements into the drawings;
- 5. Refine traffic maintenance plans;
- 6. Refine coordination of site grading and storm water management and route/site drainage requirements with the design professional responsible for the Intermediate Pump Station, specifically where the transmission main for Contract S.4005 will connect to the yard piping associated with Contract S.4004;
- 7. Prepare draft non-environmental permit applications;
- 8. Refine supplemental and additional specifications, as needed; and
- 9. Coordinate and review with the PM any modifications to the previously submitted design.

B2 – 60% Design Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. 60% plans with corresponding complete profiles and details;
- 2. Draft specifications;
- 3. Final list of quantities for material procurement by Owner;
- 4. 60% QA/QC completed forms;
- 5. Updated Project Schedule;
- 6. 60% Construction Cost Estimate;
- 7. Prepare Draft Non-Environmental Permit Applications; and
- 8. Updates to the Preliminary Design Report and the current Progress Report.

B3 – 90% Design

As part of the 90% Design task Wade Trim will expand and further refine the design plans and profiles for Contract S.4005 based on the decisions and concepts established during the preliminary 60% design task. It is our understanding that this phase will result in an essentially complete design, with the exception of changes to be incorporated based on Owner, PM, and internal reviews. Given this, Wade Trim will provide 90% plans and specifications for Owner and PM to review and approve; prepare and coordinate bidding documents with the Owner and PM; update the Preliminary Design Report, and facilitate the 90% Design Review Meeting.

B3 – 90% Design Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. 90% plans with completed profiles and details;
- 2. Final Review Specifications;
- 3. 90% QA/QC completed forms;
- 4. Updated Project Schedule;
- 5. 90% Construction Cost Estimate;
- 6. Finalize Non-Environmental Permit Applications; and
- 7. Updates to the Preliminary Design Report and the current Progress Report.

B4 – 100% Final Design

At this point the plans and specifications that have been developed for Contract S.4005 will be finalized and readied for bidding and construction. As such, Wade Trim will provide 100% final plans and specifications for Owner and PM to review and approve, finalize the Preliminary Design Report, and facilitate the 100% Final Design Review Meeting.

B4 – 100% Final Design Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. 100% plans with final profiles and details, including original electronic files in AutoCAD 2013 format, hard copies, and PDFs made directly from the electronic files;
- 2. Final Specifications, including original electronic files in Microsoft Word format, hard copies, and PDFs made directly from the electronic files;
- 3. 100% QA/QC completed forms;
- 4. 100% Construction Cost Estimate;
- 5. Finalize Non-Environmental Permit Applications; and
- 6. Final version of the Preliminary Design Report

Task C – Bidding Phase

C1 – Project Management

During the Bidding Phase, Wade Trim will assist the GCDC-WWS through the bidding phase and facilitate the management of Contract S.4005 in accordance with the standards outlined in Task A1 above.

C1 – Project Management Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. Monthly Invoices with summary of Earned Value and/or Engineering Efficiency;
- 2. Weekly and Monthly Progress Reports, as well as Informational Reports as required; and
- CPM Schedules in Primavera format, including a Baseline Schedule and Progress Schedules.

C2 – Bid Phase Assistance

During the Bidding Phase Wade Trim will provide the following professional services, in accordance with the requirements outlined in the RFP:

- 1. Provide the PM with pertinent information for the Advertisement for Bid;
- 2. Prepare and submit a draft agenda for a pre-bid conference to the PM for review and approval prior to issuance;
- 3. Facilitate a pre-bid conference during which time perspective bidders will be provided with technical information in regard to S.4005;
- 4. Prepare and distribute a summary from the pre-bid conference to the PM, Owner, and meeting attendees;
- 5. Receive questions and Requests for Information (RFIs) from perspective bidders relevant to Contract S.4005;
- 6. Provide the technical interpretation of the contract bid documents and track RFI responses made to perspective bidders;
- 7. Prepare and a draft addenda (addendum) to the PM for review and approval prior to issuance;
- 8. Finalize addenda (addendum) after obtaining approval from PM;
- 9. Attend the bid opening;
- 10. Compile a bid tab of all bids submitted by perspective bidders for the bid opening and communicate the numerical results to PM and Owner; and
- 11. Make a recommendation of award to the PM and Owner based on an evaluation of the bids submitted by perspective bidders.

Please note that Wade Trim has an established procedure for receiving and answering perspective bidders' questions and RFIs, as well as the responses given. Our procedure includes a written log of all questions submitted by perspective bidders (i.e., the day and time received, the bidder who asked the question, the question itself, the person responsible for formulating a response, the date the response was prepared, the date the response was issued to the bidder, and the method of distribution of the response).

Wade Trim has budgeted a limited amount of time for the preparation of addenda (addendum). However, if a substantial change in scope is made specific to Contract S.4005, Wade Trim has not accounted for the time and effort that may be associated with preparing an addendum to address said change in scope that will require a substantial amount of labor effort.

C2 – Bid Phase Deliverables

Wade Trim will prepare and submit the following deliverables to the PM and Owner, as requested:

- 1. Pre-Bid Conference Agenda
- 2. Pre-Bid Conference Summary
- 3. Bid Tabulation and technical interpretations of the plans and specifications.
- 4. Log of all perspective bidders' questions and answers provided.
- 5. Award Recommendation, including qualification checks completed and reasons for making the recommendation.

Initials: GCDC-WWS ENGINEER

Paragraph 6 of the Agreement is amended and supplemented to include the following agreement of the Parties:

PARAGRAPH 6 – PAYMENTS TO ENGINEER FOR SERVICES AND REIMBURSABLE EXPENSES

Salary Cost Times a Factor Method of Payment

(with additional payments on a Salary Cost basis for Resident Project Representative ("RPR") services and Additional Services and additional payments for Reimbursable Expenses)

6. Methods of Payment for Services and Reimbursable Expenses of Engineer

- 6.1 For Basic Services. GCDC-WWS shall pay to Engineer as Basic Services an amount equal to Engineer's Salary Costs (as hereinafter defined) multiplied by a factor <u>3.0</u> for all Basic Services performed by Engineer's employees engaged directly on the Project, except for services of the RPR performed or furnished under Paragraph 2.5.2.1 of the Agreement. The authorized monetary limit for compensation payable for Basic Services pursuant to this Paragraph B6.1.1 is \$ <u>1,105,845.00</u>.
- **6.1.1.1** In addition to the compensation set forth in Paragraph B6.1.1 above, for field surveys and for service of the Engineer's Consultants, Engineer shall receive the following compensation as set forth in 6.1.2:
- **6.1.1.2** *RPR Services.* GCDC-WWS shall pay to Engineer for services of the RPR performed or furnished under Paragraph 2.5.2.1 of the Agreement, an amount equal to Engineer's Salary Costs multiplied by a factor of ______ for all RPR services performed or furnished by Engineer's employees engaged directly in RPR services. The authorized limit for compensation payable for RPR services is \$______.
- **6.1.1.3** *Total Compensation for Basic Services.* Engineer's total compensation for Basic Services rendered pursuant to Paragraphs B6.1.1 through B6.1.3, inclusive, is \$ **1,105,845.00**.
- **6.1.2** For Additional Services. GCDC-WWS shall pay to Engineer as Additional Services for the services of Engineer's employees engaged directly on the Project performed or furnished pursuant to Paragraph 3.1 or Paragraph 3.2 of the Agreement (except for services as a consultant or witness under Paragraph 3.1.17 of the Agreement), an amount equal to the allowances listed below as authorized in writing by GCDC-WWS and for Administrative expenses multiplied by a factor of <u>1.05</u> plus Reimbursable Expenses. The allowances are listed below:

Engineering Surveys for Design	\$
Soil Borings	\$105,000.00
Wetlands Surveys	\$

- 6.1.2.1 The authorized fee of the Engineer for participation in the value engineering process is \$16,138.00.
- 6.1.2.2 The authorized fee of the Engineer for services related to providing input to update the operation and maintenance manual is \$_____.
- **6.1.3** For Reimbursable Expenses. GCDC-WWS shall pay to Engineer the mileage expenses to and from the Site by the RPR in an amount equal to the then existing mileage expenses paid by GCDC-WWS to its employees and all pre-approved (by GCDC-WWS) out of pocket expenses.
- **6.1.4** Salary Costs. "Salary Costs" means salaries and wages (basic, premium and incentive) paid to personnel plus the cost of customary and statutory benefits including, but not limited to, social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto.
- **6.1.5** Adjustment of Salary Costs. The current hourly Salary Costs of the Engineer's employees are summarized by classification on the attached table. The Salary Costs shall be adjusted annually and equitably to reflect changes in the various elements that comprise such Salary Costs. All such adjustments shall be consistent with Salary Cost increases by other similar engineering firms throughout the geographic area.

6.2 Other Provisions Concerning Payments

Payments Upon Termination. In the event of termination of the Agreement during any phase of Basic Services or Additional Services, Engineer shall be paid for the Basic Services or Additional Services (as applicable) performed or furnished in accordance with this Agreement during that phase on the basis of Engineer's Salary Costs times a factor of <u>3.0</u> for services performed or furnished during the applicable phase to the date of termination of the Agreement.

Exhibit "B" Attachment 1

WADE TRIM AVERAGE HOURLY RATE SCHEDULE LHWI Engineering Services Contract S.4005 Effective June 2013

Labor Cost Classification Code		Average Rate Per Hour
236, 336	Professional Engineer III	\$40-\$55
235, 335	Professional Engineer II	\$31-\$40
234, 334	Professional Engineer I	\$25-\$31
233, 333	Engineer III	\$30-NA
232, 332	Engineer II	\$24-\$28
231	Engineer I	\$20-\$24
286, 386	Professional Surveyor III	\$35-\$45
285, 385	Professional Surveyor II	\$32-\$35
284, 384	Professional Surveyor I	\$25-\$32
283, 383	Surveyor III	\$25-\$32
282, 382	Surveyor II	\$21-\$25
281	Surveyor I	\$16-\$21
226	Technician VI	\$22-\$27
225	Technician V	\$20-\$22
224	Technician IV	\$16-\$20
223	Technician III	\$13-\$16
222	Technician II	\$10-\$13
221	Technician I	\$7-\$10
203	Senior Principal	\$55-\$70
202	Principal	\$45-\$55
201	Senior Professional	\$50-\$68
216, 316	Administrative Manager	\$45-\$60
215, 315	Administrative Supervisor II	\$28-\$45
214, 314	Administrative Supervisor I	\$22-\$28
213, 313	Project Administrator III	\$27-\$35
212	Project Administrator II	\$20-\$27
211	Project Administrator I	\$15-\$20

Genesee County Drain Commissioner - Division of Water and Waste Services ESTIMATE OF ENGINEERING FEES SUMMARY

Wade Trim, Inc.

CONTRACT NO. S.4005 - Raw Water Transmission Main from Intermediate Pump Station to Jefferson Rd DATE: June 06, 2013 REVISED: June 27, 2013

Summary of Engineering Fees

Task Description	Basic Services Hours	Bas	sic Services Labor	Additional Services Reimbursable Expenses	Additional Services Value Engineering	5	Subconsultant Allowance	Total	% of Total
A1 - Project Management Preliminary Design	1,055	\$	116,810	\$ 5,840				\$ 122,650	10%
A2 - Site Investigations	880	\$	103,454	\$ 5,173				\$ 108,626	8%
A2.1 - Site Investigations Allowance		\$	-	\$ -		\$	105,000	\$ 105,000	8%
A2.2 - Value Engineering Preliminary Design	-	\$	-	\$ -	\$8,06	9		\$ 8,069	1%
A3 - 30% Design	2,960	\$	295,720	\$ 14,786				\$ 310,506	24%
B1 - Project Management Final Design	1,188	\$	136,619	\$ 6,831				\$ 143,450	11%
B1.1 - Value Engineering Final Design		\$	-	\$ -	\$8,06	9		\$ 8,069	1%
B2 - 60% Design	1,915	\$	177,984	\$ 8,899				\$ 186,883	15%
B3 - 90% Design	1,368	\$	127,567	\$ 6,378				\$ 133,946	10%
B4 - 100% Design	1,040	\$	100,351	\$ 5,018				\$ 105,368	8%
C1 - Project Management Bidding Phase	184	\$	19,259	\$ 963				\$ 20,222	2%
C2 - Bid Phase Assistance	232	\$	28,082	\$ 1,404				\$ 29,487	2%
Total	10,822	\$	1,105,845	\$ 55,292	\$ 16,138	\$	105,000	\$ 1,282,275	100%

This is EXHIBIT C, consisting of <u>3</u> pages, referred to in the Agreement between GCDC-WWS and ENGINEER for Professional Services, dated <u>12013</u>

Initials: GCDC-WWS ENGINEER	
VID	

DUTIES, RESPONSIBILITIES AND LIMITATIONS OF AUTHORITY OF RESIDENT PROJECT REPRESENTATIVE

Engineer shall furnish a full-time Resident Project Representative ("RPR") approved by GCDC-WWS, assistants and other field staff to assist Engineer in observing progress and quality of the Work. Engineer shall ensure that there are no defects or deficiencies in the Work, assure the proper progress of the Work and determine if the Work is proceeding in accordance with the Contract Documents. Engineer shall not permit the Work of the Contractor, any Subcontractor, any Supplier or any other person or organization performing or furnishing any of the Work to deviate from the requirements of the Contract Documents.

A. General

RPR is Engineer's agent at the Site, shall act as directed by and under the supervision of Engineer, and shall confer with Engineer regarding its actions. RPR's dealings in matters pertaining to the Work shall in general be with Engineer and Contractor, keeping GCDC-WWS advised in writing of all pertinent developments. RPR's dealings with Subcontractors shall only be with the written approval of the Contractor. RPR shall communicate with GCDC-WWS with the knowledge of, and under the direction of, Engineer.

B. Duties and Responsibilities of RPR

- Schedules: Review schedules as required by Paragraph 2.05 of the General Conditions and as amended by the Supplementary Conditions, if applicable. Review the Progress Schedule, payment schedules, Contractor Work schedules and updates, Contractor submittal logs and updates, schedule of Shop Drawings, Schedule of Submittals, Schedule of Values, and all other Project submittals prepared by Contractor, and consult with Engineer concerning acceptability of such submittals. Receive and distribute monthly Contractor submittals (i.e., construction photos, submittal logs, schedule updates, and narratives).
- 2. Conferences and Meetings: Attend conferences and meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings, and prepare and circulate copies of minutes thereof.
- 3. Liaison:
 - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of Contract Documents, and assist Engineer in serving as GCDC-WWS's liaison with Contractor when Contractor's operations affect GCDC-WWS's on-Site operations.
 - b. Assist in obtaining from GCDC-WWS additional details or information when required for proper execution of the Work.
 - c. Issue and receive written field communications to and from Contractor with the written approval of GCDC-WWS.
- 4. Shop Drawings and Samples:
 - a. Ensure receipt of and record date of receipt of Shop Drawings and Samples.
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - c. Advise Engineer and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.
- 5. Review of Work, Rejection of Defective Work, Inspections, and Tests:
 - a. Observe initial operation of the Project. Observe all equipment start-up and testing. Obtain the equipment manufacturer's certificate of proper installation and operation, including start-up reports from the equipment manufacturer.
 - b. Conduct on-Site observations of the Work in progress to assist Engineer in determining if the Work is proceeding in accordance with the Contract Documents. Coordinate process and equipment shut-downs with Contractor and GCDC-WWS.

- c. Report to Engineer whenever RPR believes that any Work will not produce a completed Project that conforms to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as set forth in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test, or approval required to be made. Advise Engineer of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection, or approval.
- d. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof. Observe, record, and report to Engineer appropriate details relative to the test procedures and start-ups.
- e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, and record the results of these inspections, and report to Engineer.
- f. Observe the Work for compliance with the Drawings and Specifications.
- g. Obtain all on-Site test results as authorized by GCDC-WWS.
- 6. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed. Consider, evaluate, and report to Engineer, Contractor's requests for modification. Transmit to Contractor clarifications and interpretations as issued by Engineer and as approved by GCDC-WWS in writing.
- 7. *Modifications:* Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications, and report RPR's recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
- 8. Records:
 - a. Maintain a complete Project file at the Site, including a complete and orderly file of all correspondence, reports, memos (including file and telephone), reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Change Directives, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, RFIs, CMRs, RFQs, schedules, field communications, meeting minutes, progress reports, daily inspection reports, test reports and results, payment requests, Shop Drawing submittals received from and delivered to Contractor, and other Project related documents.
 - b. Prepare daily diary reports of the Work when on the Site. Such reports shall include the following information: (A) Contractor and Subcontractor's hours on Site; (B) weather conditions; (C) data relative to questions of extras or deductions; (D) lists of visitors to the Site; (E) list of visiting manufacturer reps; (F) daily Work activity; (G) decisions; (H) general observations; (I) specific observations; (J) test procedures; (K) test results; (L) numbers of Contractor and Subcontractor personnel by classification; (M) list of Contractor and Subcontractor equipment by type and model; and (N) all other pertinent information.
 - c. Record names, addresses, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of Materials and Major Equipment.
 - d. Ensure that Contractor and all Subcontractors obtain and maintain the insurance policies with the coverages as required by the Standard General Conditions.
 - Review stored Materials for compliance with storage and maintenance requirements. Ensure receipt of lien release forms from Contractor for stored Materials which have been paid for by GCDC-WWS.

9. Reports:

- a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the Progress Schedule and schedule of Shop Drawings and Sample submittals.
- b. Consult with Engineer in advance of scheduled major tests, inspections, or the start of important phases of the Work.
- c. Draft proposed Change Orders and Work Change Directives, obtaining backup Material from Contractor and recommend to Engineer Change Orders, Work Change Directives, and Field Orders.

- d. Report immediately to Engineer and GCDC-WWS the occurrence of any accident or incident.
- e. Provide written notice to GCDC-WWS of Claims, document the Claims history for future use, and respond to Claims as directed by GCDC-WWS.
- f. Issue notices of non-conformance for Work not conforming to the Drawings and Specifications with the written approval of GCDC-WWS.
- 10. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and Materials and equipment delivered at the Site but not incorporated in the Work.
- 11. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these forgoing documents delivered to Engineer for review and forwarding to GCDC-WWS prior to final payment for the Work.

12. Completion:

- a. Conduct Substantial Completion inspections, prepare Substantial Completion punch lists, and recommend to Engineer the issuance or non-issuance of a Certificate of Substantial Completion.
- b. Observe whether Contractor has performed inspections required by rules, Laws and Regulations, ordinances, codes, or orders applicable to the Work, including but not limited to those to be performed by public agencies having jurisdiction over the Work.
- c. Conduct a final inspection with Engineer, GCDC-WWS, and Contractor, and prepare a final list of items to be completed or corrected.
- d. Observe whether all items on final list have been completed or corrected, and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

C. Limitations of Authority by RPR

The RPR shall not:

- Authorize any deviation from the Contract Documents or substitution of Materials or equipment (including "or-equal" items), unless authorized by Engineer and approved in writing by GCDC-WWS.
- Exceed the limitations of Engineer's authority as set forth in the Agreement or the Contract Documents.
- 3. Undertake any of the responsibilities of the Contractor, Subcontractors, Suppliers, or Contractor's superintendent.
- Advise on, issue directions relative to, or assume control over, any aspect of the means, methods, techniques, sequences or procedures of the Work, unless such advice or directions are specifically required by the Contract Documents.
- 5. Advise on, issue directions regarding, or assume control over, safety precautions and programs in connection with the Work.
- 6. Accept Shop Drawing or Sample submittals from anyone other than Contractor.
- 7. Authorize GCDC-WWS to occupy the Project in whole or in part.
- 8. Participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by Engineer.

This is EXHIBIT D , consisting of <u>1</u> page, referred to	
in the Agreement between GCDC-WWS and ENGINEER	
in the Agreement between GCDC-WWS and ENGINEER for Professional Services, dated 49 2013	

Initials: GCDC-WWS ENGINEER _

vs fro

NOTICE OF ACCEPTABILITY OF WORK

PROJECT	
CONTRACT	
CONTRACT DATE	
GCDC-WWS's CONTRACT NO.	
CONTRACTOR	
ENGINEER	

Engineer represents and warrants to GCDC-WWS and Contractor that the completed Work furnished and performed by Contractor under the above-mentioned Contract is acceptable in accordance with the provisions of the above-mentioned Contract.

ENGINEER	
Ву:	
Its:	
Dated:	, 20

This is EXHIBIT F, consisting of 1 page, referred to in the Agreement between GCDC-WWS and Engineer for Professional Services, dated 2019

> Initials: GCDC-WWS

Paragraph 8.3 of the Agreement is amended and supplemented to include the following agreement of the Parties.

8.3 Insurance

The insurance policies and the limits of liability for such insurance policies required to be obtained and maintained by Engineer in accordance with Paragraph 8.3 of the Agreement are as follows:

1.	Workers' Compensation:	Statutory
2.	Employer's Liability:	\$ <u>1,000,000.00</u>
3.	General Liability: General Aggregate: Each Occurrence (Bodily Injury and Property Damage):	\$ <u>1,000,000.00</u> \$ <u>1,000,000.00</u>
4.	Excess Umbrella Liability: Each Occurrence: General Aggregate:	\$ <u>1,000,000.00</u> \$ <u>1,000,000.00</u>
5.	Automobile Liability: a. Bodily Injury: Each Person Each Accident Property Damage:	\$ <u>500,000.00</u> \$ <u>500,000.00</u>
	 Each Accident or b. Combined Single Limit (Redibulations) and Preparty Demography 	\$ <u>500,000.00</u>
6.	(Bodily Injury and Property Damage): Each Accident Other (specify): Professional Liability	\$ <u>1,000,000.00</u> \$ <u>1,000,000.00</u> /occurrence \$ <u>2,000,000.00</u> /Aggregate

The GCDC-WWS shall be named as an additional insured on Engineer's policies of insurance as described above and as set forth in Paragraph 8.3 of the Agreement. Engineer shall promptly deliver to GCDC-WWS Certificates of Insurance evidencing the coverage required herein.

GCDC-WWS will not carry insurance covering the Project until the Project is completed.