

ENGINEERING SERVICES AGREEMENT
FOR CONSTRUCTION OF PUBLIC IMPROVEMENTS

Updated April 2015

THIS AGREEMENT is made in Douglas County, Kansas, by and between the City of Lawrence, Kansas, hereinafter called the City, and GHD Services Inc. hereinafter called the Consultant. The City intends to construct an improvement project (hereinafter called the Project) in Lawrence, Kansas, described in Exhibit A.

The City hereby contracts with the Consultant for professional engineering services in connection with the Project, for such engineering services more particularly described herein in consideration of the mutual covenants herein set forth. By executing this Agreement, the Consultant represents to the City that the Consultant is professionally qualified to provide such and is licensed to practice engineering by all public entities having jurisdiction over the Consultant and the Project.

SECTION I - DEFINITIONS

As used in this Agreement, the following terms shall have the meanings ascribed herein unless otherwise stated or reasonably required by this contract, and other forms of any defined words shall have a meaning parallel thereto.

“Additional Services” means any services requested by the City which are not covered by Exhibit A of this Agreement.

“Agreement” means this contract and includes change orders issued in writing.

“City” means the City of Lawrence, Kansas.

“Consultant” means the company or individual identified on page 1. Consultant shall employ for the services rendered, engineers, architects, landscape architects, and surveyors licensed, as applicable, by the Kansas State Board of Technical Professions.

“Contract Documents” means those documents so identified in the Contract for Construction of this Project, including Engineering Documents. All terms defined in said General Conditions shall have the same meaning when used in this Agreement unless otherwise specifically stated or in the case of a conflict in which case the definition used in this Agreement shall prevail in the interpretation of this Agreement.

“Engineering Documents” means all plans, specifications, reports, drawings, tracings, designs, calculations, computer models, sketches, notes, memorandums or correspondence related to the work described in Exhibit A attached hereto.

“Engineering Services” means the professional services, labor, materials, supplies, testing and other acts or duties required of Consultant under this Agreement together with Additional Services as City may request and evidenced by a supplemental agreement pursuant to the terms of this Agreement.

“Project” is as described in Exhibit A.

“Subsurface Borings and Testing” means borings, probings and subsurface explorations, laboratory tests and inspections of samples, materials and equipment; and appropriate professional interpretations of all the foregoing.

“Utilities Engineer” means the person employed by the City with the title of Utilities Engineer who is licensed to practice engineering in the State of Kansas.

“Utilities Director” means the person employed by the City with the title of Utilities Director.

SECTION II - PAYMENT

A. COMPENSATION.

1. Maximum Total Fee and Expense: The City agrees to pay the Consultant a fee based on the actual hours expended on the Project at the rates indicated in the attached Hourly Rate Schedule; Exhibit B and the actual reimbursable expenses permitted under this Agreement and incurred on this Project, but not to exceed a maximum fee of \$226,182. This fee is based on the scope of services outlined in Exhibit A of this Agreement and shall be completed on or before 12/31/2018. Payment to Consultant shall not exceed the amounts in each phase as detailed in Exhibit B. Other methods of compensation are allowed only after written approval by the Utilities Director.
2. Hourly Rate: Any Additional Services which are not set forth in this Agreement will be charged on the basis of the hourly rate schedule attached hereto as Exhibit B and reimbursable expenses not contemplated in this Agreement will be charged at actual cost. No Additional Services or costs shall be incurred without proper written authorization of the City.
3. Reimbursable Expenses: Reimbursable expenses shall be included in the total maximum fee. Reimbursable expenses include expenses of transportation in

connection with the Project; expenses in connection with authorized out-of-town travel; long-distance communications; expenses of printing and reproductions, postage and facsimile transmissions; expenses of renderings and models requested by the City and other costs as authorized by the City. Reimbursable expenses will not include overhead costs or additional insurance premiums. Unit rates for reimbursable expenses shall be included in Exhibit B attached.

4. Sales Tax: Compensation as provided for herein is exclusive of any sales, use or similar tax imposed by taxing jurisdictions on the amount of compensation, fees or services. Should such taxes be imposed, the City shall reimburse the Consultant in addition to the contractual amounts provided. The City shall provide tax exempt number if required, and if requested by the Consultant.
5. Billing: Consultant shall bill the City monthly for all services and reimbursable expenses. It is understood by the Consultant that monthly pay requests must be received by the 5th day of the month. The bill submitted by Consultant shall itemize the services and reimbursable expenses for which payment is requested, notwithstanding any claim for interest or penalty claimed in a Consultant's invoice. The City agrees to pay the Consultant within ten (10) days of approval by the governing body. If the Consultant fails to submit an itemized bill for services and/or reimbursable expenses within sixty (60) days of completion of the services, the City shall have no duty to pay the Consultant for those services.

6. City's Right to Withhold Payment: In the event the City becomes credibly informed that any representations of the Consultant provided in its monthly billing are wholly or partially inaccurate, the City may withhold payment of disputed sums then, or in the future, otherwise due to the Consultant until the inaccuracy and the cause thereof is corrected to the City's reasonable satisfaction. In the event the City questions some element of an invoice, that fact shall be made known to the Consultant immediately. The Consultant will help effect resolution and transmit a revised invoice if necessary. The City shall pay the undisputed portion of any invoice as provided in Part 5 of this Section II.
7. Progress Reports: A written progress report, as set out in Exhibit C, must be submitted with each monthly pay request indicating which specific design tasks and their percentage have been completed to date, and tasks that will be performed the following month. This report will serve as support for payment to the Consultant.
8. Timing of Services: Consultant will perform the services in a timely manner; however, if during their performance, for reasons beyond the control of the Consultant, protracted delays occur, the parties agree that they will negotiate in writing an equitable adjustment of time and compensation, taking into consideration the impact of such delays.
9. Change in Scope: For substantial modifications in authorized Project scope, and/or substantial modifications of drawings and/or specifications previously accepted by the City, when requested by the City and through no fault of the

Consultant, the Consultant shall be compensated for time and expense required to incorporate such modifications at Consultant's standard hourly rates per Exhibit B. Provided, however, that any increase in contract price or contract time must be requested by the Consultant and must be approved through a written supplemental agreement prior to performing such services. Consultant shall correct or revise any errors or deficiencies in its designs, drawings or specifications without additional compensation when due to Consultant's negligence, error, or omission.

10. Additional Services: The Consultant shall provide, with the City's concurrence, services in addition to those listed in Exhibit A, when such services are requested, in writing, by the City. Prior to entering into any Additional Services, the Consultant must submit a proposal outlining the Additional Services to be provided, estimation of total hours and a maximum fee based upon the hourly rate schedule attached hereto as Exhibit B. Payment to the Consultant, as compensation for these Additional Services, shall be in accordance with the attached hourly rate schedule attached as Exhibit B. Reimbursable expenses incurred in conjunction with Additional Services shall be paid separately and those reimbursable expenses shall be paid at actual cost. Records of reimbursable expenses and expenses pertaining to Additional Services and services performed on an hourly basis shall be made available to the City if so requested in writing. Production of these documents shall be made at the Consultant's office during normal

business hours within a reasonable time at a date and time mutually convenient to both parties.

11. Supplemental Agreement: This Agreement may be amended to provide for additions, deletions and revisions in the services or to modify the terms and conditions thereof by written amendment signed by both parties. The contract price and contract time may only be changed by a written supplemental agreement approved by the City, unless it is the result of an emergency situation in which case the Utilities Director may give verbal and facsimile approval to be followed by a written and approved supplemental agreement. If notice of any change affecting the general scope of the services or provisions of this Agreement, including but not limited to, contract price or time, is a requirement of any insurance policy held by the Consultant as a requirement of this Agreement, the giving of such notice shall be the Consultant's responsibility.

SECTION III - RESPONSIBILITIES OF CONSULTANT

A. SCOPE OF SERVICES: The Consultant shall furnish and perform the various professional duties and services in all phases of the Project to which this Agreement applies, as specifically provided in Exhibit A and which are required for the completion of the Project

B. GENERAL DUTIES AND RESPONSIBILITIES

1. Personnel: The Consultant shall assign only qualified personnel to perform any service concerning the Project. At the time of execution of this

Agreement, the parties anticipate that the following individual will perform as the principal on this Project, Jeffrey Coon. As principal on this Project, this person shall be the primary contact with the Utilities Director, Utilities Engineer, or another person so designated, and shall have authority to bind the Consultant. So long as the individual named above remains actively employed or retained by the Consultant, he/she shall perform the function of principal on this Project.

2. Independent Contractor: The Consultant is an independent contractor and as such is not an employee of the City.
3. Special Services: The Consultant may be called on to serve as a Consultant or witness in any litigation, arbitration, legal or administrative proceeding arising out of this Project. The Consultant shall not be paid extra by the City if the appearance is to defend Consultant's professional engineering services. If the Consultant is requested in writing by the City to appear as a witness, the Consultant will be paid its hourly fee as reflected on the hourly rate schedule attached hereto as Exhibit B.
4. Subsurface Borings and Material Testing: If tests additional to those provided in Exhibit A are requested by the City for design, the Consultant shall prepare specifications for the taking of the additional borings. Such Subsurface Borings and Testing, as defined herein, shall be provided by the Consultant through other contractors. Payment to the Consultant will be negotiated in writing.

5. Service by and Payment to Others: Any work authorized in writing by the City and performed by a third party other than the Consultant, or their subconsultants in connection with the proposed Project, shall be contracted for and paid for by the City directly to the third party or parties. Fees for extra work shall be subject to negotiation between the City and the third party. Fees shall be approved by the City prior to the execution of any extra work. Although the Consultant may assist the City in procuring such services of third parties, the Consultant shall in no way be liable to either the City or such third parties in any manner whatsoever for such services or for payment thereof.
6. Subcontracting of Service: The Consultant shall not subcontract or assign any of the architectural, engineering or consulting services to be performed under this Agreement without first obtaining the written approval of the City regarding the services to be subcontracted or assigned and the firm or person proposed to perform the services. Neither the City nor the Consultant shall assign any rights or duties under this Agreement without the prior written consent of the other party. Unless otherwise stated in the written consent to an assignment, no assignment will release or discharge the assignor from any obligation under this Agreement.
7. Endorsement: The Consultant shall sign and seal all final plans, specifications, estimates and engineering data furnished by the Consultant. The Consultant warrants to the best of its knowledge, information and belief that its performance will be done in a professional manner. Any review or

approval by the City of any documents prepared by the Consultant, including but not limited to the plans and specifications, shall be solely for the purpose of determining whether such documents are consistent with the City's construction program and intent. No review of such documents shall relieve the Consultant of their responsibility for the accuracy. It will be the Consultant's responsibility to verify the existence of any and all rights-of-way and easements, including temporary construction easements, that are necessary for the Project construction. Rights-of-way and easements shown on the construction plans shall have proper legal verification to prove their existence.

8. Professional Responsibility: The Consultant will exercise reasonable skill, care and diligence in the performance of its services as is ordinarily possessed and exercised by a licensed professional performing the same services under similar circumstances.
9. Inspection of Documents: The Consultant shall maintain all Project records for inspection by the City during the contract period and for three (3) years from the date of final payment.

SECTION IV - CITY OF LAWRENCE RESPONSIBILITIES

A. GENERAL DUTIES AND RESPONSIBILITIES

1. Communication: The City shall provide to the Consultant information and criteria regarding the City's requirement for the Project; examine and timely respond to the Consultant's submissions; and give notice to the Consultant,

who shall respond promptly, whenever the City observes or otherwise becomes aware of any defect in the services.

2. Access: The City will provide access agreements for the Consultant to enter public and private property when necessary.
3. Duties: The City shall furnish and perform the various duties and services in all phases of the Project which are outlined and designated in Exhibit A as the City's responsibility.
4. Program and Budget: The City shall provide full information stating the City's objectives, schedule, budget with reasonable contingencies, and necessary design criteria.
5. Other consultants: The City may contract with "specialty" consultants when such services are requested by the Consultant.
6. Testing: Any tests required to supplement the scope of services or tests required by law shall be furnished by the City.
7. Legal, Insurance, Audit: The City shall furnish all legal, accounting and insurance counseling services as may be necessary at any time for the Project. The City shall furnish all bond forms required for the Project.
8. Project Representative: The Utilities Director, or the Utilities Director's designee, shall represent the City in coordinating this Project with the Consultant, with authority to transmit instructions and define policies and decisions of the City.

SECTION V - GENERAL PROVISIONS

A. TERMINATION

1. Notice: The City reserves the right to terminate this Agreement for either cause or for its convenience and without cause or default on the part of the Consultant, by providing written notice of such termination to the Consultant. Upon receipt of such notice from City, the Consultant shall, at City's option as contained in the notice: immediately cease all services and meet with City to determine what services shall be required of the Consultant in order to bring the Project to a reasonable termination in accordance with the request of the City. The Consultant shall also provide to the City digital and mylar copies of all drawings and documents completed or partially completed at the date of termination. The Consultant is entitled to terminate this agreement by providing thirty (30) days written notice.
2. Compensation for Convenience Termination: If City shall terminate for its convenience, as herein provided, City shall compensate Consultant for all services completed to date prior to receipt of the termination notice. Compensation shall not include anticipatory profit or consequential damages, neither of which will be allowed.
3. Compensation for Default Termination: If the City shall terminate for cause or default on the part of the Consultant, the City shall compensate the Consultant for the reasonable cost of services completed to date of its receipt of the termination notice. Compensation shall not include anticipatory profit or consequential damages, neither of which will be allowed. The City also

retains all its rights and remedies against the Consultant including but not limited to its rights to sue for damages, interest and attorney fees.

4. Incomplete Documents: Neither the Consultant, nor its subconsultant, shall be responsible for errors or omissions in documents which are incomplete as a result of an early termination under this section, the Consultant having been deprived of the opportunity to complete such documents and certify them as ready for construction.

B. DISPUTE RESOLUTION

City and the Consultant agree that disputes relative to the Project should first be addressed by negotiations between the parties. If direct negotiations fail to resolve the dispute, the party initiating the claim that is the basis for the dispute shall be free to take such steps as it deems necessary to protect its interests provided, however, that notwithstanding any such dispute the Consultant shall proceed with the services as per this Agreement as if no dispute existed.

C. OWNERSHIP OF ENGINEERING DOCUMENTS

All Engineering Documents prepared in connection with this Project shall be the property of the Consultant, whether the Project for which they are made is executed or not; however, the Consultant shall provide the City a copy of all Engineering Documents as requested by the City and related to services for which the consultant has been compensated.

Reports, plans, specifications and related documents are the Consultant's copyrighted instruments, and the Consultant, at its option, may so identify them by

appropriate markings. Provided that the Consultant is paid in full for its services, then the City may reuse these final documents without any additional compensation. However, such reuse shall be for City use and the Consultant shall have no liability for City alteration to the documents or for any use other than as intended pursuant to the terms hereof.

D. INSURANCE

Unless otherwise specified, the City shall be shown as an additional insured on all applicable insurance policies except professional liability and worker's compensation. All general and automobile liability insurance shall be written on an occurrence basis unless otherwise agreed to in writing by the City. The City shall be given written thirty (30) days notice of any insurance policy cancellation.

1. Professional Liability: The Consultant shall maintain, throughout the duration of this Agreement, Professional Liability Insurance in an amount not less than one million dollars (\$1,000,000), per claim and annual aggregate, and shall provide the City with certification attached to this Agreement.

2. Commercial General Liability

Each Occurrence \$500,000

General Aggregate \$500,000

The policy must also include personal injury; products/completed operations; contractual liability and independent contractors.

3. Worker's Compensation: The Consultant shall retain Worker's Compensation Insurance in the statutory amounts.

4. Employer's Liability:
- | | | |
|---------------------------|-----------|-----------------|
| Bodily Injury by Accident | \$100,000 | (each accident) |
| Bodily Injury by Disease | \$500,000 | (policy limit) |
| Bodily Injury by Disease | \$100,000 | (each employee) |
5. Automobile Insurance: The Consultant shall maintain a policy in the minimum amounts as required for general liability to protect against claims for bodily injury and/or property damage arising out of the ownership or use of any owned, hired and/or non-owned vehicle.
6. Industry Ratings: City will only accept coverage from an insurance carrier which offers proof that it:
- Is licensed to do business in the State of Kansas;
 - Carries a Best's Policyholder rating of A or better; and
 - Carries at least a Class X financial rating; or is a company mutually agreed upon by the City and Consultant.
7. Subconsultant's Insurance: If a part of this Agreement is to be sublet, the Consultant shall either:
- Cover all subconsultants in its insurance policies; or
 - Require each subconsultant not so covered to secure insurance which will protect against all applicable hazards or risks of loss in the amount so designated.

Whichever option is chosen, the Consultant shall indemnify and hold harmless the City as to any and all damages, claims, or losses, including attorney's fees, arising out of the negligent acts or omissions of its subconsultants.

E. INDEMNITY

1. Indemnify and Hold Harmless: For purposes of this Agreement, the Consultant hereby agrees to indemnify and hold harmless the City and its employees and officials from any and all loss to the extent caused or incurred in whole or in part as a result of the negligence or wrongful acts of the Consultant, its officers, subsidiaries, employees and subconsultants/assignees and their respective officers and employees, in the performance of services pursuant to this Agreement.

In the case of any claims against the City or its employees and officials indemnified under this Agreement, by an employee of the Consultant, its officers, subsidiaries, or subconsultant/assignees, the indemnification obligation contained in this Agreement shall be limited to those losses caused by the negligence of the Consultant but shall not be limited by any limitation on amount or type of damages, compensation or benefits payable by or for the Consultant, its officers, subsidiaries, or subconsultant/assignees, under workers' compensation acts, disability benefit acts, or other employee benefit acts, as allowed by law. The Consultant's obligation hereunder shall not

include amounts attributable to the fault or negligence of the City or any third party for whom the Consultant is not responsible.

F. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties and supersedes all prior agreements, whether oral or written, covering the same subject matter. This Agreement may not be modified or amended except in writing mutually agreed to and accepted by both parties to this Agreement.

G. APPLICABLE LAW

This Agreement is entered into under and pursuant to, and is to be construed and enforceable in accordance with, the laws of the State of Kansas.

H. ASSIGNMENT OF AGREEMENT

This Agreement shall not be assigned or transferred by either the Consultant or the City without the written consent of the other.

I. NO THIRD PARTY BENEFICIARIES

Nothing contained herein shall create a contractual relationship with, or any rights in favor of, any third party.

J. FEDERAL LOBBYING ACTIVITIES (Only applies to projects receiving federal funds via the City): N/A

K. COVENANT AGAINST CONTINGENT FEES

The Consultant warrants that they have not employed or retained any company or person, other than a bona fide employee working for the Consultant, to solicit or

secure this Agreement, and that they have not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the City may terminate this Agreement without liability or may, in its discretion, deduct from the contract price or otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

L. COMPLIANCE WITH LAWS

Consultant shall abide by all applicable federal, state and local laws, ordinances and regulations applicable to this Project until the Engineering Services required by this Agreement are complete. Consultant shall secure all occupational and professional licenses, permits, etc., from public and private sources necessary for the fulfillment of its obligations under this Agreement.

M. TITLES, SUBHEADS AND CAPITALIZATION

Title and subheadings as used herein are provided only as a matter of convenience and shall have no legal bearing on the interpretation of any provision of the Agreement. Some terms are capitalized throughout the Agreement but the use of or failure to use capitals shall have no legal bearing on the interpretation of such terms.

N. SEVERABILITY CLAUSE

Should any provision of this Agreement be determined to be void, invalid unenforceable or illegal for whatever reason, such provisions shall be null and void;

provided, however, that the remaining provisions of this Agreement shall be unaffected thereby and shall continue to be valid and enforceable.

0. HAZARDOUS MATERIALS

The Consultant and the Consultant's subconsultants shall have no responsibility for the discovery, presence, handling, removal, or disposal or exposure of persons to hazardous materials in any form at the Project site.

P. AFFIRMATIVE ACTION


The Consultant agrees to comply with the provisions of K.S.A. 44-1030, in the Kansas Acts Against Discrimination, and Section 10-113 et seq of the Code of the City of Lawrence, Kansas, Affirmative Action in Public Contracts.

Q. EXECUTION OF CONTRACT

The parties hereto have caused this Agreement to be executed in duplicate this

28th day of March, 2018.

CONSULTANT

By:  _____

CITY OF LAWRENCE, KANSAS

By: _____

Thomas M. Markus

City Manager

APPROVED AS TO FORM:

Toni Ramirez. Wheeler

City Attorney



March 26, 2018

Reference No. 11152783

Ms. Sarah Graves
Project Engineer
Utilities Department, City of Lawrence
PO Box 708
Lawrence, Kansas 66044

Dear Ms. Graves:

**Re: Proposed Scope of Work and Cost Estimate
2018 Environmental Consulting Services
Farmland Nitrogen Plant Remediation
1608 North 1400 Road
Lawrence, Kansas 66046
Consent Order 10-E-94 BER
KDHE Project Code: C4-023-00009**

1. Introduction

GHD Services Inc. (GHD) is pleased to provide this scope of services and the attached cost estimate in support of the remediation the City of Lawrence (the City) is performing at the former Farmland Nitrogen Plant (Farmland/Site). After a thorough qualifications review and interviewing process, the City selected GHD as their environmental consultant for the Site, which is being overseen by the Kansas Department of Health and Environment (KDHE) under Consent Order 10E-94 BER (the Order).

2. Project Understanding

Under the Order, the City agreed to be responsible for the required remediation, including the continued operation and maintenance of all active remediation systems, as well as all reporting requirements of the Resource Conservation and Recovery Act (RCRA) and National Pollutant Discharge Elimination System (NPDES) permits for the Site. Current active remediation systems include groundwater recovery wells, sumps, interceptor trenches, aboveground storage tanks (ASTs) and all other systems related to the hydraulic containment and land application of contaminated groundwater and/or surface water.

Based on our review of the documents provided by the City, GHD has concluded that a long-term comprehensive remediation plan must be multifaceted to be successful. The current plan is no longer a long-term viable alternative for the storage and disposition of collected groundwater containing ammonia, nitrate and nitrite (chemicals of concern (COCs)). The current system is generating water faster than it can be land applied, thus exceeding on-site storage capacity. Discharge to the Kansas River of the untreated groundwater is taking place under an emergency authorization that is due to expire in April 2018. The strategy GHD is proposing will replace the current strategy with multiple contingencies in the event one or



more of the options should become inoperative, unavailable, or infeasible due to changing regulations, weather, land use practices or other unforeseen conditions. Our objective is to develop a strategy that will achieve regulatory closure and eventually restore the benefit of the Site as an economic resource.

This initial phase of work is planned to be implemented over an 8-month period from the point of authorization. A detailed time and materials cost estimate with a schedule outlining major project milestones and deliverables are attached.

Upon completion of this scope of work, GHD expects to have the Site reviewed, alternatives analyzed and prioritized, multiple alternatives recommended to the State for approval, while maintaining engagement with community stakeholders. Interim actions, in addition to those already in place and under separate work authorizations, may be implemented as opportunities to initiate remedies present themselves (for example, field pilot testing of wetlands or soil composting).

3. Scope of Work

GHD has prepared the following scope of work to assist the City with complying with the terms of the Order and subsequent agreements and approvals by and between Kansas Department of Health and Environment (KDHE) and the City. We based the proposed scope on our review of the City's request for proposal (and other project information provided by the City) and subsequent clarifying discussions with the City's project staff.

This scope of services is planned to be implemented over a period of approximately 8 months.

3.1 Project Management, Meetings, Reporting, Document Review, and Quality Assurance of Technical Procedures

Travis Kogl, P.G., with GHD, will provide project management, including staffing and scheduling, budgeting, invoicing, and staff resources coordination.

David Hempleman, P.E., with GHD, will provide task management of day to day operations and assist Mr. Kogl in project management.

Mr. Kogl and Mr. Hempleman will provide project management activities as follows:

- Coordinate GHD staffing and scheduling, coordinate Consent Order and permit compliance activities with the City's staff, review and update budgets, prepare and submit monthly invoices and monthly status reports to the City.
- Serve as environmental technical liaison between the City and KDHE. Participate in status meetings between the City and KDHE as the City's technical environmental consultant.
- Represent the project as the City's environmental consultant at City Commission meetings. GHD assumes that we will attend two commission meetings during this scope of work.
- Perform a comprehensive review and organization of all project documents provided by the City.



- Perform technical quality audits of field sampling and data collection procedures.
- Perform quality assurance technical review and commentary on all related remediation reports prepared by the City, prior to their submittal to the State.
- For this scope, GHD assumes that we will participate/attend a total of eight meetings with the City and four meetings with KDHE.

3.2 Stakeholder Engagement

On behalf of the City, as technical consultant, GHD will engage with identified community stakeholders to discuss and explain technical approaches and remedial objectives. Through our review of the project documents, GHD will re-evaluate the risks that were relied upon to determine the basis of the groundwater recovery from the Kansas River alluvial aquifer. Re-establishing the actual and perceived risks to public health and the environment will allow for the recovery or containment of contaminated groundwater which poses the most risk, versus groundwater that poses no or minimal risk. It is essential to establish reasonable risk-based final corrective action goals that will satisfy regulatory closure criteria for the appropriate end-use of the Site.

Furthermore, GHD will prepare for and participate in meetings with the public, stakeholders, and other interested parties, as needed to solicit input and to share general details and progress of the project. For the purpose of budget estimating, GHD assumes that we will attend four separate meetings with the Stakeholder group.

3.3 Generate EQuIS Database, Develop Three-dimensional Visualization, Update Conceptual Site Model, and Data Gap Analysis

GHD will review and assemble an EQuIS™ database of available chemical data for the project and organize available stratigraphic and elevation data. Once assembled, GHD will develop, under the supervision of the Project's Professional Geologist Brian Sandberg, a three-dimensional visualization of the subsurface stratigraphy, which will include the general areas of nitrate and ammonia contamination in soil and groundwater.

The 3-D visualization will form the basis for updating the site conceptual model (SCM) to identify previously unnoticed potential contaminant source areas (i.e., data gaps). The updated SCM will be used to prepare preliminary designs for recommended remedial technologies and alternatives.

The assembled chemical database and stratigraphic data will be reviewed with the City to identify and address any data gaps. Once deemed complete, the draft version of the 3-D visualization will be prepared and presented to the City for their review and comment. Upon incorporating the City's input, GHD will present the visualization to KDHE during a project status meeting. Any remaining data gaps will be discussed and approaches to resolve the data gaps will be developed with input from KDHE.

This task may trigger the need to propose additional assessment activities. If so, a separate scope of work will be submitted for the City's consideration before proceeding with those activities.



3.4 Current Systems and Data Collection Evaluation/Optimization/Streamlining Support

The City has scheduled a contractor to clean and inspect both ASTs (AST #5 and AST #6) sometime during the last week of March 2018. The conditions of the tanks will be important in determining their continued future use as part of any remediation program of the Site. GHD will evaluate the inspection reports, and write an opinion memo describing our recommendation for their future use. Prior to finalizing the memo, GHD will incorporate the City's review comments.

GHD will review existing groundwater collection and storage systems and offer opinions in a memo to the City as to strategies that will maximize recovery of contaminated groundwater while minimizing recovery of less-impacted and non-impacted surface and groundwater. This will involve a thorough design review of the collection trenches and surface drainage patterns. Prior to finalizing this opinion memo, GHD will incorporate the input of the City staff's review of the draft version.

3.5 Prepare Cost Benefit Analysis of Soil and Groundwater Alternatives

Engineering cost/benefit (C/B) analyses are performed to critically and objectively compare remediation technologies for all COCs based on: implementability, long-term and short-term effectiveness and reliability, and cost.

GHD will develop a comprehensive list of detailed remedial technologies that may be appropriate based on our experience with similar sites across North America. GHD will perform an initial qualitative screening of the comprehensive list to recommend up to five technologies which we believe will be most appropriate and likely to achieve the remedial goals in the most effective, least costly, shortest timeframe. The recommended list of technologies to be retained for detailed C/B analysis will be reviewed and discussed with KDHE prior to performing the analyses. Since the soil and groundwater are impacted with the same contaminants at comparatively similar concentrations, it is anticipated that the some of the same technologies may be recommended for both media – soil and groundwater.

Once KDHE agrees with the final list of recommended technologies for soil and groundwater, GHD will subject each technology to a rigorous quantitative C/B analysis. Results of the C/B analyses will be used to comparatively rank the technologies to each other and detailed in a summary report for KDHE.

The potential technologies to treat contaminated soil include, for example:

- in-situ and ex-situ denitrification,
- composting,
- phytoremediation,
- excavation with off-site land application as fertilizer at agronomic rates,
- excavation and off-site disposal in a landfill, and
- engineered wetlands.



The current combined flow rate of nitrate-containing groundwater from the two trenches and PW-9 is currently generating approximately 25 gpm, or approximately 13 million gallons per year. GHD will evaluate options for the treatment of groundwater, to include, for example:

- engineered wetlands,
- as a supplement to soil composting,
- continued/expanded land application program,
- discharge of untreated water to the City's sanitary sewer treatment plant, and
- construction of a truck or rail loading rack to facilitate alternative methods of transportation of nitrate-laden water for beneficial re-use.

David Hempleman, Project Professional Chemical Engineer, and Bob Januska, Project Professional Process Engineer, will perform and/or supervise other engineers to complete this task.

The C/B analysis report will be the final deliverable document under this scope of work, and is intended to satisfy the preliminary design (30% complete), which, upon KDHE approval, will be used to determine the next course of action for implementing permanent corrective actions for the Site.

3.6 Optional Contingency

At the City's request, GHD recommends an additional contingency task (equal to 10% of the estimated project total cost) to be included in the initial authorization. This Optional Contingency task will only be used under separate written authorization under this proposal from the City Project Manager to address mutually agreed, unforeseeable, out-of-scope issues that may arise, and which do not require a formal work authorization.

4. Assumptions and Limitations

GHD has prepared this proposed scope of work and estimated costs based on the review of most of the project documents provided by the City, and based on the following limitations and assumptions:

- According to the City's Request for Proposal (RFP), GHD is limiting the geographic area addressed by this scope of services to the areas identified as Area A and Area B on the northern part of the former Farmland site.
- The City and State agency will provide timely review, commentary and approvals of requests for input on all agency submittals or changes in scope, as needed.
- GHD assumes no additional field data will be necessary and is not proposing to perform any field sampling or testing under this scope of work. The City will continue to perform all routine sampling, operation and maintenance associated with ongoing compliance activities.



- GHD assumes that we will have unrestricted access to the Site to make any and all Site visits to observe and inspect all portions of the property and remediation activities as such visits relate to the scope of services.
- All topographic survey information is assumed complete and accurate and no additional topographic survey data or fieldwork will be necessary.
- Bench and field scale pilot testing are not proposed under this scope of work.
- GHD assumes the City will prepare all reports required under the Order and provide GHD a timely opportunity to review and comment on each report prior to submittal.
- Uncontrollable risk includes operation of new rural water supply well field immediately down gradient from the Site.
- All draft and final deliverables will be submitted in electronic PDF format.

5. Cost Estimate

GHD proposes to conduct the scope of work on a time-and-materials basis to be billed monthly at the unit rates on the attached fee schedule and in accordance with the terms of the pending Professional Services Agreement (PSA) between GHD and the City. The estimated costs (excluding the optional contingency task) to perform the scope of work are \$205,620, and are summarized by task on the attached table.

6. Closing

GHD appreciates the opportunity to provide these services. Please approve this request by signing the where indicated and return it to me and retain a copy for your records.

If you have any questions or would like to discuss this scope and budget authorization request in more detail, please do not hesitate to contact me at (785) 783-8982.

Sincerely,

GHD

A handwritten signature in blue ink that reads "Travis Kogl". The signature is fluid and cursive, with the first name "Travis" and last name "Kogl" clearly legible.

Travis Kogl, P.G.
Associate

TK/mk/01

Encl.

cc: Mike Staffileno, Principal, GHD

Cost Estimate - April - November 2018
City of Lawrence - Farmloand Nitrogen Plant Remediation Project
Lawrence, Kansas

Task	<u>unit rate</u>	<u>unit</u>	<u>Estimated</u>	<u>Estimated</u>
			Quantity	Cost
1. Project Management, Meetings, Reporting, Document Review, and Quality Assurance of Technical Procedures				
Project Manager	\$ 195.00	hour	80	\$ 15,600.00
Professional Chemical Engineer	\$ 176.00	hour	80	\$ 14,080.00
Professional Process Engineer	\$ 220.00	hour	20	\$ 4,400.00
Professional Geologist	\$ 176.00	hour	20	\$ 3,520.00
Project Assistant	\$ 65.00	hour	16	\$ 1,040.00
Travel Expenses Allowance, cost plus 10% markup	\$ 5,000.00	Lump Sum	1	\$ 5,000.00
Task 1 Subtotal				\$ 43,640.00
 2. Stakeholder Engagement				
Project Manager	\$ 195.00	hour	64	\$ 12,480.00
Professional Chemical Engineer	\$ 176.00	hour	64	\$ 11,264.00
Project Assistant	\$ 65.00	hour	16	\$ 1,040.00
CADD/GIS/Modeler, Senior	\$ 131.00	hour	16	\$ 2,096.00
Task 2 Subtotal				\$ 26,880.00
 3. Generate EQUS Database, Develop Three-dimensional Visualization, Update Conceptual Site Model, and Data Gap Analysis				
Project Manager	\$ 195.00	hour	10	\$ 1,950.00
Professional Geologist	\$ 176.00	hour	20	\$ 3,520.00
Project Geologist	\$ 127.00	hour	40	\$ 5,080.00
Project Assistant	\$ 65.00	hour	40	\$ 2,600.00
Database Analyst	\$ 142.00	hour	40	\$ 5,680.00
CADD/GIS/Modeler, Senior	\$ 131.00	hour	20	\$ 2,620.00
CADD/GIS/Modeler, Junior	\$ 111.00	hour	60	\$ 6,660.00
Task 3 Subtotal				\$ 28,110.00
 4. Current Systems and Data Collection Evaluation/Optimization/Streamlining Support				
Project Manager	\$ 195.00	hour	16	\$ 3,120.00
Professional Chemical Engineer	\$ 176.00	hour	50	\$ 8,800.00
Professional Process Engineer	\$ 220.00	hour	40	\$ 8,800.00
Project Engineer	\$ 127.00	hour	50	\$ 6,350.00
Project Assistant	\$ 65.00	hour	8	\$ 520.00
CADD/GIS/Modeler, Senior	\$ 131.00	hour	20	\$ 2,620.00
Task 4 Subtotal				\$ 30,210.00

Cost Estimate - April - November 2018
City of Lawrence - Farmloand Nitrogen Plant Remediation Project
Lawrence, Kansas

5. Prepare Cost/Benefit Analyses of Soil and Groundwater Alternatives

Project Manager	\$ 195.00	hour	20	\$	3,900.00
Professional Chemical Engineer	\$ 176.00	hour	70	\$	12,320.00
Professional Process Engineer	\$ 220.00	hour	70	\$	15,400.00
Professional Geologist	\$ 176.00	hour	40	\$	7,040.00
Project Engineer	\$ 127.00	hour	80	\$	10,160.00
Project Geologist	\$ 127.00	hour	80	\$	10,160.00
Project Assistant	\$ 65.00	hour	20	\$	1,300.00
CADD/GIS/Modeler, Senior	\$ 131.00	hour	20	\$	2,620.00
CADD/GIS/Modeler, Junior	\$ 111.00	hour	80	\$	8,880.00
Travel Expenses Allowance, cost plus 10% markup	\$ 5,000.00	Lump Sum	1	\$	5,000.00

Task 5 Subtotal **\$ 76,780.00**

Project Total **\$ 205,620.00**

3.6 Optional Contingency, estimated at 10% of total project cost **\$ 20,562.00**

Estimated Total Project Cost **\$ 226,182.00**

2018 GHD Project Schedule April - November 2018
City of Lawrence - Farmloand Nitrogen Plant Remediation Project
Lawrence, Kansas

Task	Subtask	April	May	June	July	August	September	October	November
1. Project Management, Meetings, Reporting, Document Review, and Quality Assurance of Technical Procedures	Project commencement: April 15, 2018	█							
	Monthly budget, invoice , resource allocation; monthly projectn status reports City project status meetings, monthly (8) KDHE project status meetings (4)	█	█	█	█	█	█	█	█
2. Stakeholder Engagement	Preparation with the City		█						
	Participating at Stakeholder/Gatekeeper meetings (4) Participating at Public/City Council Meetings (2)	█			█		█		█
3. Generate EQulS Database, Develop Three-dimensional Visualization, Update Conceptual Site Model, and Data Gap Analysis	Database Generation	█	█						
	Data Gap analysis (Data Gap assessment, if needed)		█	█	█				
	3-D Visual development		█	█	█				
	Present 3-D Visualization to the City Present 3-D Visualization to KDHE			█	█	█			
4. Current Systems and Data Collection Evaluation/Optimization/Streamlining Support	Evaluate tank inspection results	█							
	Submit Technical Evaluation Memo (to City) - Tanks' Evaluation Memo		█						
	Evaluate interception trenches, existing ponds, alluial pumping wells, and surface storm water drainage patterns Submit Technical Evaluation Memo (to City) - Current Systems Evaluation		█	█	█				
5. Prepare Cost/Benefit Analyses of Soil and Groundwater Alternatives	Prepare initial list of detailed technologies and assembled remedial alternatives		█						
	Submit comprehensive list of five or more technologies and alternatives to the City - recommend five for detailed C/B analysis			█	█				
	Submit comprehensive list of five or more technologies and alternatives to the KDHE - recommend five for detailed Cost/Benefit analysis			█	█				
	KDHE review				█				
	Receive KDHE comment/approval of five alternatives for detailed analysis					█			
	Perform detail C/B Analysis of five technologies/alternatives Submit prioritized C/B Analysis of five alternatives to KDHE KDHE review/approval					█	█	█	█
3.6 Optional Contingency, estimated at 10% of total project cost	Contingency- out of scope services,interim actions, as needed and agreed								
	Project End: November 15, 2018								

- Notes:
- Bold text indicates deliverable submitted**
 - Data gap assessment
 - Review time shaded
 - City Decision needed
 - KDHE Decision needed
 - Contingency



2017/2018 USA Fee Schedule

Principals: \$217.00 - \$245.00

Associates: \$179.00 - \$226.00

Specialist: \$187.00 - \$226.00

Engineers:

- ◆ Level A \$117.00
- ◆ Level B \$127.00
- ◆ Level C \$139.00 - \$159.00
- ◆ Level D \$165.00 - \$176.00
- ◆ Level E \$183.00 - \$193.00
- ◆ Level F \$213.00 - \$223.00

Geologists/Hydrogeologists:

- ◆ Level A \$117.00
- ◆ Level B \$127.00
- ◆ Level C \$139.00 - \$159.00
- ◆ Level D \$165.00 - \$176.00
- ◆ Level E \$183.00 - \$193.00
- ◆ Level F \$213.00 - \$223.00

Environmental Chemists/Scientists/Planners:

- ◆ Level A \$112.00
- ◆ Level B \$122.00
- ◆ Level C \$133.00 - \$143.00
- ◆ Level D \$154.00 - \$164.00
- ◆ Level E \$181.00 - \$191.00
- ◆ Level F \$213.00 - \$223.00

Industrial Hygienists/Safety Professionals:

- ◆ Level A \$112.00
- ◆ Level B \$122.00
- ◆ Level C \$133.00 - \$148.00
- ◆ Level D \$159.00 - \$169.00
- ◆ Level E \$183.00 - \$193.00
- ◆ Level F \$213.00 - \$223.00

Information Technologists:

- ◆ Level A \$112.00
- ◆ Level B \$122.00
- ◆ Level C \$133.00 - \$143.00
- ◆ Level D \$154.00 - \$164.00
- ◆ Level E \$181.00 - \$191.00
- ◆ Level F \$213.00 - \$223.00

Database Analysts:

- ◆ Level A \$96.00
- ◆ Level B \$106.00
- ◆ Level C \$122.00 - \$142.00
- ◆ Level D \$157.00 - \$177.00
- ◆ Level E \$192.00 - \$202.00
- ◆ Level F \$205.00 - \$222.00

Technicians/Technologists:

- ◆ Level A \$83.00
- ◆ Level B \$101.00
- ◆ Level C \$116.00
- ◆ Level D \$128.00 - \$148.00
- ◆ Level E \$158.00 - \$168.00
- ◆ Level F \$196.00 - \$211.00

Draft/CADD:

- ◆ Level A \$78.00
- ◆ Level B \$88.00
- ◆ Level C \$99.00
- ◆ Level D \$111.00
- ◆ Level E \$121.00
- ◆ Level F \$131.00

Technical Apprentices: \$83.00 - \$93.00

Administrative Support: \$65.00



March 22, 2018

Reference No. 11152783

Ms. Sara Graves
 Project Engineer
 Utilities Department, City of Lawrence
 PO Box 708
 Lawrence, Kansas 66044

Dear Ms. Graves:

**Re: Standard Engineering Services Agreement
 Acknowledgement of Insurance Carriers
 Farmland Remediation Project**

GHD Services Inc. (GHD) is providing our insurers' ratings to be used as an attachment to the Standard Engineering Services Agreement for the above-referenced project. GHD offered (and the City agreed to accept) this letter as an attachment to the Standard Engineering Services Agreement contract so that future misunderstandings over the contract's insurance coverage requirements may be avoided.

Copies of our current certificates of insurance and policy coverage details are attached. Our current insurers, their ratings, and coverage type, are summarized as follows:

Coverage	Carrier	AM Best	Fitch IFS Rating	Kansas License Type
Commercial General Liability	Allied World Assurance Company (U.S.) Inc.	A-XV	A	Excess Lines
Automobile Liability	Zurich American Insurance Company	A+-XV	AA-	Stock Fire & Casualty Insurance Companies of Other States
Workers Compensation/Employer's Liability	Zurich American Insurance Company	A+-XV	AA-	Stock Fire & Casualty Insurance Companies of Other States
Professional Liability	Lexington Insurance Company	A-XV	A	Excess Lines



Please do not hesitate to contact me if further discussion or clarification is required.

Sincerely,

GHD

A handwritten signature in blue ink, appearing to read "Travis Kogl", is enclosed in a light blue rectangular box.

Travis Kogl

Project Manager

TK/mk/02

Encl.

cc: Mike Staffileno, GHD



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
11/10/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis of Massachusetts, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	CONTACT NAME: PHONE (A/G. No. Ext): 1-877-945-7378 FAX (A/G. No): 1-888-467-2378 E-MAIL ADDRESS: certificates@willis.com	
	INSURER(S) AFFORDING COVERAGE NAIC #	
INSURED GHD Services Inc. 2055 Niagara Falls Blvd., Ste 3 Niagara Falls, NY 14304 USA	INSURER A: Allied World Assurance Company (U.S.) Inc. 19489	
	INSURER B: Zurich American Insurance Company 16535	
	INSURER C: Lexington Insurance Company 19437	
	INSURER D: AIG Specialty Insurance Company 26883	
	INSURER E: INSURER F:	

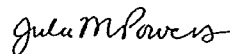
COVERAGES **CERTIFICATE NUMBER:** W4355027 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	Y	Y	0310-4497	12/01/2017	12/01/2018	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000 MED EXP (Any one person) \$ 25,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input checked="" type="checkbox"/> HIRED AUTOS ONLY Coll Ded: 500 <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY Comp Ded: 250	Y	Y	BAP 3757423-02	07/01/2017	07/01/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Hired Physical Damag \$ 100000
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N No	N/A	WC 0380936-02	07/01/2017	07/01/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	Professional Liability			031710989	12/01/2017	12/01/2018	Each Claim/Aggregate 2,000,000.00

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

SEE ATTACHED

CERTIFICATE HOLDER To Whom It May Concern-GHD Services Inc	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 



ADDITIONAL REMARKS SCHEDULE

AGENCY Willis of Massachusetts, Inc.		NAMED INSURED GHD Services Inc. 2055 Niagara Falls Blvd., Ste 3 Niagara Falls, NY 14304 USA	
POLICY NUMBER See Page 1		EFFECTIVE DATE: See Page 1	
CARRIER See Page 1	NAIC CODE See Page 1		

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
 FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Additional Insured status can be granted as above only where required by written contract.

General Liability policy can be Primary and Non-contributory with any other insurance in force for or which may be purchased by Additional Insured where required by contract or agreement.

Waiver of Subrogation can be applied as above in favor of Certificate Holder where required by contract or agreement.

INSURER AFFORDING COVERAGE: AIG Specialty Insurance Company NAIC#: 26883
 POLICY NUMBER: CPO 14247915 EFF DATE: 12/01/2017 EXP DATE: 12/01/2018

ADDITIONAL INSURED: Y
 SUBROGATION WAIVED: Y

TYPE OF INSURANCE:	LIMIT DESCRIPTION:	LIMIT AMOUNT:
Pollution Liability	Each Occ/Aggregate	2,000,000.00



Coverage Extension Endorsement

Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer No.	Add'l. Prem	Return Prem.
BAP 3757423-02	7/1/2017	7/1/2018	7/1/2017		---	---

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

**Business Auto Coverage Form
Motor Carrier Coverage Form**

A. Amended Who Is An Insured

1. The following is added to the **Who Is An Insured** Provision in **Section II – Covered Autos Liability Coverage**:

The following are also "insureds":

- a. Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow for acts performed within the scope of employment by you. Any "employee" of yours is also an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.
 - b. Anyone volunteering services to you is an "insured" while using a covered "auto" you don't own, hire or borrow to transport your clients or other persons in activities necessary to your business.
 - c. Anyone else who furnishes an "auto" referenced in Paragraphs **A.1.a.** and **A.1.b.** in this endorsement.
 - d. Where and to the extent permitted by law, any person(s) or organization(s) where required by written contract or written agreement with you executed prior to any "accident", including those person(s) or organization(s) directing your work pursuant to such written contract or written agreement with you, provided the "accident" arises out of operations governed by such contract or agreement and only up to the limits required in the written contract or written agreement, or the Limits of Insurance shown in the Declarations, whichever is less.
2. The following is added to the **Other Insurance** Condition in the Business Auto Coverage Form and the **Other Insurance – Primary and Excess Insurance Provisions Condition** in the Motor Carrier Coverage Form:

Coverage for any person(s) or organization(s), where required by written contract or written agreement with you executed prior to any "accident", will apply on a primary and non-contributory basis and any insurance maintained by the additional "insured" will apply on an excess basis. However, in no event will this coverage extend beyond the terms and conditions of the Coverage Form.

All other terms, conditions, provisions and exclusions of this policy remain the same.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – SCHEDULED PERSON OR
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization:

Where required by written contract

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or
- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: Where required by written contract
Location And Description of Completed Operations: Where required by written contract
Additional Premium: N/A

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".

ENDORSEMENT NO. 4

This endorsement, effective 12:01 AM, December 1, 2017

Forms a part of Policy No: CPO 14247915

Issued to: GHD HOLDINGS U.S. LLC

By: AIG SPECIALTY INSURANCE COMPANY

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED(S) ENDORSEMENT

It is hereby agreed that Section VI. **DEFINITIONS**, Paragraph K. **Insured** is amended by adding the following scheduled entity(s) as additional **Insured(s)** but solely as respects liability arising out of the **Covered Operations** performed by or on behalf of the **Named Insured**.

Additional **Insured(s)**

As required by written contract executed prior to a Claim or Loss.

All other terms, conditions, and exclusions shall remain the same.



AUTHORIZED REPRESENTATIVE
or countersignature (in states where applicable)