PROFESSIONAL SERVICES AGREEMENT

For

City of Oskaloosa
GIS Wastewater Collection and Stormwater Infrastructure Mapping

Mr. Akhilesh Pal, P.E., Public Works Director
City of Oskaloosa
Public Works Department
804 South D Street
Oskaloosa, IA 52577
(641) 673-7472

Scott Mattes, Project Manager
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Johnston, IA 50131
HR Green Project Numbers:
40120071

October 10, 2016
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Attachment A: Scope of Services is stated in Statement of Qualifications for Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping

Attachment B: HR Green, Inc. 2016 Billing Rate Schedule
THIS AGREEMENT is between City of Oskaloosa (hereafter "CLIENT") and HR GREEN, INC. (hereafter "COMPANY").

1.0 Project Understanding

1.1 General Understanding

CLIENT would like to develop and implement an asset management plan for the sanitary sewer collection system and storm sewer system infrastructure that will assist in data management, inventory assessment, modeling and other functions. This project should allow the CLIENT to obtain a current inventory of the sanitary sewer collection and storm water sewer systems.

The objectives of this project include, but are not limited to, the following:

- Create an asset inventory of storm and sanitary assets located inside the administrative boundary of the City of Oskaloosa. Ninety-five percent (95%) of all point assets (manholes, inlets, outlets) collected in this inventory must have a horizontal accuracy within at least 2 cm and a vertical accuracy within at least 6 cm. COMPANY will use ESRI Data Reviewer to document Fixed and Floating positions.
- Develop specific GIS attributes for each sanitary and storm asset to include physical characteristics, condition assessment, certain spatial measurements (depth, diameter, etc.), and the ability to link photographs and city-collected video files to asset records in the GIS.
- Deliver the populated GIS database as well as a report summarizing the sanitary and storm assets inventoried for this project. The report should provide a summary of asset conditions.

COMPANY will assist CLIENT with meeting objectives of this project.

1.2 Design Criteria/Assumptions

Work activities will be completed in accordance with Scope of Services outlined in Attachment A.

Safety for COMPANY’s staff at or in site surroundings (i.e., traffic, environment, etc.) is the responsibility of the COMPANY and acceptable weather conditions for the field asset inventory (i.e., electronic GPS and data collector) will be required to perform the services. Delays due to weather or limited site access are outside of COMPANY’s control.

Rescheduling and completing work activities to meet safety and weather requirements will be billed according to COMPANY’s Standard Bill Rates.

2.0 Scope of Services

CLIENT agrees to employ COMPANY to perform the following services:

The Scope of Services is outlined in Attachment A to this Professional Service Agreement (AGREEMENT). COMPANY developed the Scope of Services to align with the CLIENT’s project objectives. The Required Services discussed in Attachment A are hereby incorporated into this AGREEMENT.
3.0 Deliverables and Schedules Included in this Contract

Deliverables and schedules are outlined with the work scope in Attachment A.

This schedule was prepared to include reasonable allowances for review and approval times required by the CLIENT and public authorities having jurisdiction over the project. This schedule shall be equitably adjusted as the project progresses, allowing for changes in the scope of the project requested by the CLIENT or for delays or other causes beyond the control of COMPANY including access to assets or weather.

4.0 Items not included in Agreement/Supplemental Services

COMPANY will provide Required Services as outlined in the Scope of Services to the point that the budget allows.

Supplemental services not included in the AGREEMENT can be provided by COMPANY under separate AGREEMENT, if desired.

5.0 Services by Others

COMPANY does not plan to utilize services by others.

6.0 Client Responsibilities

CLIENT will be responsible for submitting reports and documents to the Iowa DNR, if required. COMPANY sees itself as a partner in CLIENT’S stormwater and wastewater compliance efforts and requests that copies of information that the Iowa DNR provides the CLIENT be forwarded to the COMPANY for reference.

CLIENT will need to provide support for obtaining site access to all assets located on properties and right-of-way owned by third parties. In cases where site access is denied, COMPANY staff will return to collect these remaining assets at end of project IF budget remains. If no asset collection budget remains, this effort will be treated as a supplemental service and be billed according to the current HR Green Schedule of Hourly Fees.

CLIENT will aid in locating lost, inaccessible, or difficult to reach assets on an as-needed basis during the asset inventory. In cases where assets cannot be reached on first attempt for these reasons, COMPANY staff will return to collect said assets at end of project IF budget remains. If no asset collection budget remains, this effort will be treated as a supplemental service and be billed according to the current HR Green Schedule of Hourly Fees.

CLIENT will provide access inside of all manholes. Manholes that cannot be accessed within five minutes of being located will be noted in the GIS as being inaccessible and will be considered addressed by the asset inventory. Any effort to subsequently revisit and inspect these manholes after they have been made accessible will be treated as a supplemental service and be billed according to the current HR Green Schedule of Hourly Fees.
CLIENT will provide COMPANY with access to CLIENT GIS data and offer timely GIS support to COMPANY in regards to this data.

CLIENT will be responsible for hardware and software updates to CLIENT-end personal computers, tablets, and smart phones as COMPANY’s maintenance responsibilities to the CLIENT only apply to server-end (COMPANY-end) software and systems. CLIENT responsibilities include making necessary web browser updates to maximize the performance of the CLIENT’s web-based GIS applications.

7.0 Professional Services Fee

7.1 Fees

The fee for services will be based on COMPANY standard hourly rates that are consistent with COMPANY’S lump sum contract and unit pricing for additional assets not included in the COMPANY’S Required Services. Supplemental Services will be billed according to the COMPANY’S Standard Published Bill Rates (see Attachment B). In the event that the project transitions into future year(s) the unit costs and Standard Bill Rates may be adjusted to be consistent with the COMPANY’S published bill rates for those years. These unit cost and Standard Bill Rates are subject to change upon 30 days' written notice. Non-salary expenses directly attributable to Supplemental Services required by the CLIENT such as: (1) living and traveling expenses of employees when away from the home office on business connected with the project; (2) identifiable communication expenses; (3) identifiable reproduction costs applicable to the work; and (4) subconsultant services will be charged in accordance with the rates current at the time the work is done. In the event that the project transitions into future year(s) the hourly rates will be adjusted to be consistent with COMPANY’S published rates for those years. Over the duration of this AGREEMENT, COMPANY’S rates in subsequent years will not exceed five percent of the previous year’s published rates.

7.2 Invoices

Invoices for COMPANY’s services shall be submitted, on a monthly basis. Invoices shall be due and payable upon receipt. If any invoice is not paid within 30 days, COMPANY may, without waiving any claim or right against CLIENT, and without liability whatsoever to CLIENT, suspend or terminate the performance of services. Accounts unpaid 45 days after the invoice date may be subject to a monthly service charge of 1.5% on the unpaid balance. In the event any portion of an account remains unpaid 75 days after the billing, COMPANY may institute collection action and CLIENT shall pay all costs of collection, including reasonable attorney’s fees.

7.3 Supplemental Services

Any work required by CLIENT but not included as part of this AGREEMENT shall be considered Supplemental Services. Supplemental Services will be billed on a Time and Material basis with prior written approval of CLIENT. See Attachment B for current published rates.

7.4 Exclusion

This fee does not include attendance at any meetings or public hearings other than those specifically listed in the Scope of Services (Attachment A). These work items are considered extra and are billed separately on an hourly basis.
7.5 Payment

CLIENT agrees to pay COMPANY on the following basis:

Per current Rate Schedule with an estimated fee of:

One hundred thirty-seven thousand dollars and zero cents ($137,000.00). To collect additional assets HR Green’s unit price is $30/asset for storm sewer assets and $55/asset for sanitary sewer assets.

The fee for Required Services will be based on COMPANY’S lump sum fee. Supplemental Services will be based on standard hourly rates that are consistent with COMPANY’S annual published rates. In the event that the project transitions into future year(s) the hourly rates will be adjusted to be consistent with COMPANY’S published rates for those years. Over the duration of this AGREEMENT, COMPANY’S rates in subsequent years will not exceed five percent of the previous year’s published rates.

8.0 Terms and Conditions

The following Terms and Conditions are incorporated into this AGREEMENT and made a part of it.

8.1 Standard of Care

Services provided by COMPANY under this AGREEMENT will be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing at the same time and in the same or similar locality.

8.2 Entire Agreement

This AGREEMENT, and its attachments, constitutes the entire understanding between CLIENT and COMPANY relating to professional engineering services. Any prior or contemporaneous AGREEMENTS, promises, negotiations, or representations not expressly set forth herein are of no effect. Subsequent modifications or amendments to this AGREEMENT shall be in writing and signed by the parties to this AGREEMENT. If CLIENT, its officers, agents, or employees request COMPANY to perform extra work or services pursuant to this AGREEMENT, CLIENT will pay for the additional services even though an additional written AGREEMENT is not issued or signed.

8.3 Time Limit and Commencement of Work

This AGREEMENT must be executed within ninety (90) days to be accepted under the terms set forth herein. The work will be commenced immediately upon receipt of this signed AGREEMENT.

8.4 Suspension of Services

If the Project or COMPANY’S services are suspended by CLIENT for more than thirty (30) calendar days, consecutive or in the aggregate, over the term of this AGREEMENT, COMPANY shall be compensated for all services performed and reimbursable expenses incurred prior to the receipt of notice of suspension. In addition, upon resumption of services, CLIENT shall compensate COMPANY for expenses incurred as a result of the suspension and resumption of its services, and COMPANY’S schedule and fees for the remainder of the Project shall be equitably adjusted.

If COMPANY’S services are suspended for more than ninety (90) days, consecutive or in the aggregate, COMPANY may terminate this AGREEMENT upon giving not less than five (5) calendar days’ written notice to CLIENT.

If CLIENT is in breach of this AGREEMENT, COMPANY may suspend performance of services upon five (5) calendar days’ notice to CLIENT. COMPANY shall have no liability to CLIENT, and CLIENT agrees to make no claim for any delay or damage as a result of such suspension caused by any breach of this AGREEMENT by CLIENT. Upon receipt of payment in full of all outstanding sums due from CLIENT, or curing of such other breach which caused COMPANY to suspend services, COMPANY shall resume services and there shall be an equitable adjustment to the remaining project schedule and fees as a result of the suspension.
8.5 Book of Account

COMPANY will maintain books and accounts of payroll costs, travel, subsistence, field, and incidental expenses for a period of five (5) years. Said books and accounts will be available at all reasonable times for examination by CLIENT at the corporate office of COMPANY during that time.

8.6 Insurance

COMPANY will maintain insurance for claims under the Worker's Compensation Laws, and from General Liability and Automobile claims for bodily injury, death, or property damage arising from the negligent performance by COMPANY's employees of the functions and services required under this AGREEMENT.

8.7 Termination or Abandonment

Either party has the option to terminate this AGREEMENT. In the event of failure by the other party to perform in accordance with the terms hereof through no fault of the terminating party, then the obligation to provide further services under this Agreement may be terminated upon seven days written notice. If any portion of the work is terminated or abandoned by CLIENT, the provisions of this Schedule of Fees and Conditions in regard to compensation and payment shall apply insofar as possible to that portion of the work not terminated or abandoned. If said termination occurs prior to completion of any phase of the project, the fee for services performed during such phase shall be based on COMPANY's reasonable estimate of the portion of such phase completed prior to said termination, plus a reasonable amount to reimburse COMPANY for termination costs.

8.8 Waiver

COMPANY's waiver of any term, condition, or covenant or breach of any term, condition, or covenant, shall not constitute a waiver of any other term, condition, or covenant, or the breach thereof.

8.9 Severability

If any provision of this AGREEMENT is declared invalid, illegal, or incapable of being enforced by any Court of competent jurisdiction, all of the remaining provisions of this AGREEMENT shall nevertheless continue in full force and effect, and no provision shall be deemed dependent upon any other provision unless so expressed herein.

8.10 Successors and Assigns

All of the terms, conditions, and provisions hereof shall inure to the benefit of and be binding upon the parties hereto, and their respective successors and assigns, provided, however, that no assignment of this AGREEMENT shall be made without written consent of the parties to this Agreement.

8.11 Third-Party Beneficiaries

Nothing contained in this AGREEMENT shall create a contractual relationship with or a cause of action in favor of a third party against either CLIENT or COMPANY. COMPANY's services under this AGREEMENT are being performed solely for the CLIENT's benefit, and no other party or entity shall have any claim against COMPANY because of this Agreement or the performance or nonperformance of services hereunder. CLIENT and COMPANY agree to require a similar provision in all contracts with contractors, subcontractors, subconsultants, vendors and other entities involved in this project to carry out the intent of this provision.

8.12 Governing Law and Jurisdiction

CLIENT and COMPANY agree that this AGREEMENT and any legal actions concerning its validity, interpretation and performance shall be governed by the laws of the State of Iowa without regard to any conflict of laws provisions, which may apply the laws of other jurisdictions.

It is further agreed that any legal action between CLIENT and COMPANY arising out of this Agreement or the performance of the services shall be brought in a court of competent jurisdiction in the State of Iowa.

8.13 Dispute Resolution

Mediation. In an effort to resolve any conflicts that arise during the design or construction of the project or following the completion of the project, CLIENT and COMPANY agree that all disputes between them arising out of or relating to this Agreement shall be submitted to non-binding mediation unless the parties mutually agree otherwise. CLIENT and COMPANY further agree to include a similar mediation provision in all agreements with independent contractors and consultants retained for the project and to require all independent contractors and consultants also to include a similar mediation provision in all AGREEMENTS with subcontractors, sub-consultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.
Arbitration. In the event the parties to this AGREEMENT are unable to reach a settlement of any dispute arising out of the services under this AGREEMENT, involving an amount of less than $50,000, in Mediation, then such disputes shall be settled by binding arbitration by an arbitrator to be mutually agreed upon by the parties, and shall proceed in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association currently in effect. If the parties cannot agree on a single arbitrator, then the arbitrator(s) shall be selected in accordance with the above-referenced rules.

8.14 Attorney's Fees

If litigation arises for purposes of collecting fees or expenses due under this AGREEMENT, the Court in such litigation shall award reasonable costs and expenses, including attorney fees, to the party justly entitled thereto. In awarding attorney fees, the Court shall not be bound by any Court fee schedule, but shall, in the interest of justice, award the full amount of costs, expenses, and attorney fees paid or incurred in good faith.

8.15 Ownership of Instruments of Service

All reports, plans, specifications, field data, field notes, laboratory test data, calculations, estimates and other documents including all documents on electronic media prepared by COMPANY as instruments of service shall become the property of CLIENT. COMPANY shall retain these records for a period of five (5) years following completion/submission of the records, during which period they will be made available to the CLIENT at all reasonable times. Except as otherwise provided herein, engineering documents, drawings, and specifications prepared by COMPANY as part of the Services shall become the sole property of CLIENT, however, that both CLIENT and COMPANY shall have the unrestricted right to their use. COMPANY shall retain its rights in its standard drawing details, specifications, data bases, computer software, and other proprietary property protected under the copyright laws of the United States. Rights to intellectual property developed, utilized, or modified in the performance of services shall remain the property of COMPANY. CLIENT shall have the unlimited right to the use of intellectual property developed, utilized, or modified in the performance of the Services at no additional cost to CLIENT. CLIENT must comply with COMPANY GEOSPATIAL NONDISCLOSURE AGREEMENT as discussed in Section 8.23.

8.16 Reuse of Documents

All project documents including, but not limited to, plans and specifications furnished by COMPANY under this project are intended for use on this project only. Any reuse, without specific written verification or adoption by COMPANY, shall be at CLIENT's sole risk, and CLIENT shall defend, indemnify and hold harmless COMPANY from all claims, damages and expenses including attorney's fees arising out of or resulting therefrom.

Under no circumstances shall delivery of electronic files for use by CLIENT be deemed a sale by COMPANY, and COMPANY makes no warranties, either express or implied, of merchantability and fitness for any particular purpose. In no event shall COMPANY be liable for indirect or consequential damages as a result of CLIENT's use or reuse of the electronic files.

8.17 Information Provided by Others

CLIENT shall furnish, at CLIENT’s expense, all information, requirements, reports, data, surveys and instructions required by this AGREEMENT. COMPANY may use such information, requirements, reports, data, surveys and instructions in performing its services and is entitled to rely upon the accuracy and completeness thereof. COMPANY shall not be held responsible for any errors or omissions that may arise as a result of erroneous or incomplete information provided by CLIENT and/or CLIENT’s consultants and contractors.

COMPANY is not responsible for accuracy of any plans, surveys or information of any type including electronic media prepared by any other consultants, etc. provided to COMPANY unless specifically engaged by COMPANY for use in preparation of plans. CLIENT agrees, to the fullest extent permitted by law, to indemnify and hold harmless COMPANY from any damages, liabilities, or costs, including reasonable attorneys’ fees and defense costs, arising out of or connected in any way with the services performed by other consultants engaged by CLIENT.

COMPANY is not responsible for accuracy of topographic surveys provided by others. A field check of a topographic survey provided by others will not be done under this contract unless indicated in the Scope of Work.

8.18 Force Majeure

CLIENT agrees that COMPANY is not responsible for damages arising directly or indirectly from any delays for causes beyond COMPANY's control. CLIENT agrees to defend, indemnify, and hold COMPANY, its consultants, agents, and employees harmless from any and all liability, other than that caused by the
nегligent acts, errors, or omissions of COMPANY, arising out of or resulting from the same. For purposes of this AGREEMENT, such causes include, but are not limited to, strikes or other labor disputes; severe weather disruptions or other natural disasters or acts of God; fires, riots, war or other emergencies; failure of any government agency to act in timely manner; failure of performance by CLIENT or CLIENT’S contractors or consultants; or discovery of any hazardous substances or differing site conditions. Severe weather disruptions include but are not limited to extensive rain, high winds, snow greater than two (2) inches and ice. In addition, if the delays resulting from any such causes increase the cost or time required by COMPANY to perform its services in an orderly and efficient manner, COMPANY shall be entitled to a reasonable adjustment in schedule and compensation.

8.19 Hazardous Materials
CLIENT hereby understands and agrees that COMPANY has not created nor contributed to the creation or existence of any or all types of hazardous or toxic wastes, materials, chemical compounds, or substances, or any other type of environmental hazard or pollution, whether latent or patent, at CLIENT’s premises, or in connection with or related to this project with respect to which COMPANY has been retained to provide professional engineering services. The compensation to be paid COMPANY for said professional engineering services is in no way commensurate with, and has not been calculated with reference to, the potential risk of injury or loss which may be caused by the exposure of persons or property to such substances or conditions. Therefore, to the fullest extent permitted by law, CLIENT agrees to defend, indemnify, and hold COMPANY, its officers, directors, employees, and consultants, harmless from and against any and all claims, damages, and expenses, whether direct, indirect, or consequential, including, but not limited to, attorney fees and Court costs, arising out of, or resulting from the discharge, escape, release, or saturation of smoke, vapors, soot, fumes, acid, alkalies, toxic chemicals, liquids gases, or any other materials, irritants, contaminants, or pollutants in or into the atmosphere, or on, onto, upon, in, or into the surface or subsurface of soil, water, or watercourses, objects, or any tangible or intangible matter, whether sudden or not.

In consideration of the substantial risks to the Consultant in rendering its services in connection with the Project due to the presence or suspected presence of hazardous materials (as defined in this AGREEMENT) at or near the jobsite, the Client agrees to make no claim and hereby waives, to the fullest extent permitted by law, any claim or cause or causes of action of any kind, including but not limited to negligence, breach of contract or warranty, either express or implied, strict liability or any other causes, against the Consultant, its officers, directors, partners, employees and subconsultants (collectively, Consultant), which may arise out of or may be connected to the presence of such hazardous materials. The Client acknowledges that the Consultant is not and shall not be required to be in any way an arranger, generator, operator or transporter of hazardous materials present at or near the Project site (as these terms are defined in applicable federal or state statutes and all related regulations).

8.20 Limitation of Liability
CLIENT agrees, to the fullest extent permitted by law, to limit the liability of COMPANY and COMPANY’S officers, directors, partners, employees, shareholders, owners and subconsultants to CLIENT for any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys’ fees and costs and expert witness fees and costs, so that the total aggregate liability of COMPANY and its officers, directors, partners, employees, shareholders, owners and subconsultants to all those named shall not exceed COMPANY’S total available insurance limit under any applicable insurance coverage. It is intended that this limitation apply to any and all liability or cause of action however alleged or arising, unless otherwise prohibited by law.

8.21 Environmental Audits/Site Assessments
Environmental Audit/Site Assessment report(s) are prepared for CLIENT’s sole use. CLIENT agrees to defend, indemnify, and hold COMPANY, its consultants, agents, and employees harmless against all damages, claims, expenses, and losses arising out of or resulting from any reuse of the Environmental Audit/Site Assessment report(s) without the written authorization of COMPANY.

8.22 DGPS Signal Accuracy
Regional RTN, local RTK, or Omnistar Data Service may be interrupted, or the validity of the data changed, by local conditions such as blockage by trees and buildings or radio interference. Published system accuracies are dependent on the CLIENT’S GPS receiver and CLIENT’S location. The Regional RTN, local RTK, or Omnistar Data Services coverage is approximate and CLIENTS intending to operate on the extremes of the published coverage area are advised to verify the anticipated Data Services performance with vendor prior to use.
8.23 Intellectual Property Ownership of Tendered Materials

COMPANY retains title and full intellectual property ownership of all tendered documents and materials, including without limitation, analysis methods and equations, calculations, print layouts, layer operational definitions, drawings, models, plans, set of tools, etc. All such documents and materials are considered confidential and CLIENT shall not copy such documentation or materials or disclose them to third parties without COMPANY'S prior written consent. CLIENT shall sign the HR GREEN GEOSPATIAL NONDISCLOSURE AGREEMENT and take reasonable precautions to prevent unauthorized access and use of the software and documentation by third parties. To the extent permitted by HR Green Geospatial Nondisclosure Agreement and relevant law, CLIENT shall not, nor allow any third party to copy, decompile, disassemble or otherwise reverse engineer the COMPANY'S analysis, reports, maps, or other products, or attempt to do so.

8.24 The COMPANY is not a Municipal Advisor registered with the Security and Exchange Commission (SEC) as defined in the Dodd-Frank Wall Street Reform and Consumer Protection Act. When the CLIENT is a municipal entity as defined by said Act, and the CLIENT requires project financing information for the services performed under this AGREEMENT, the CLIENT will provide the COMPANY with a letter detailing who their independent registered municipal advisor is and that the CLIENT will rely on the advice of such advisor. A sample letter can be provided to the CLIENT upon request.
This AGREEMENT is approved and accepted by the CLIENT and COMPANY upon both parties signing and dating the AGREEMENT. Work cannot begin until COMPANY receives a signed agreement. The effective date of the AGREEMENT shall be the last date entered below.

Sincerely,

HR GREEN, INC.

[Signature]
Scott Mattes, P.E.

Approved by: [Signature]

Printed/Typed Name: Andrew Marsh, PE

Title: Vice President Date: 10/10/16

CITY OF OSKALOOSA

Accepted by: [Signature]

Printed/Typed Name: David Krutzfeldt

Title: Mayor Date: [Signature]
Attachment A: Scope of Services is stated in Statement of Qualifications for Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping
STATEMENT OF QUALIFICATIONS FOR GIS WASTEWATER COLLECTION & STORMWATER INFRASTRUCTURE MAPPING

Prepared for the City of Oskaloosa, IA

In Response to the Request for Qualifications, Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping

September 29, 2016

Scott Mattes, P.E., CIH
Project Manager
5525 Merle Hay Road
Suite 200
Johnston, IA 50131
Phone 515.657.5277
Email smattes@hrgreen.com
HRGreen.com
September 29, 2016

City of Oskaloosa Public Works
Attn: Akhilesh Pal
804 South D Street
Oskaloosa, IA 50219

RE: Statement of Qualifications for Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping

Dear Akhilesh Pal:

On behalf of the HR Green, Inc. (HR Green) team, we are pleased to present the enclosed Statement of Qualifications for Professional Services for Geographic Information Systems (GIS) Wastewater Collection and Stormwater Infrastructure Mapping. In addition to being a full-service engineering firm, our staff has in-depth knowledge of GIS, NASSCO (National Association of Sewer Service Companies) certification for standardized infrastructure ratings, and proven leadership that has helped communities implement their vision for asset management utilizing GIS.

Key elements that set HR Green apart:

- **Technical Expertise** – HR Green has extensive experience executing similar GIS projects involving database development, existing data conversion, field data collection, quality validation checks, and web mapping portal design. While this experience provides an excellent starting point for delivering a high-quality product to the City of Oskaloosa, HR Green GIS specialists leverage their NASSCO credentials and support staff from a full-service engineering firm to exceed the city’s specific needs. We have the technical expertise to adapt your GIS to meet your challenges and deliver efficient asset management solutions.

- **Resources** – HR Green has a project team very familiar with GIS development for wastewater and stormwater utility infrastructure and project implementation. Our team of NASSCO-certified GIS specialists bring both breadth and depth of experience to the table and has developed project-wide GIS deployments for numerous municipal clients. Our Trimble GPS field equipment is nearly identical to the equipment used by the City and municipal water department. Because of our state-of-the-art resources, both in staff and equipment, you can be confident in the data we collect for this project!

- **Responsiveness** – HR Green has a proven track record of responsiveness and accountability. We are an Iowa-based company made up of responsive team members located less than two hours from your community. As you know from our brownfield work, we are always available to answer your questions and help solve problems. Everyone on my team carries smartphones to ensure we are always available when you need us. When we submit a proposal for your project, you can be certain we have the resources and technical knowledge to excel. HR Green will rely on City staff to be part of the team; we listen when you make suggestions. Our goal is to respond to your GIS needs as if they were our own.

- **Knowledge of the City of Oskaloosa and Your Infrastructure** – HR Green is familiar with Oskaloosa and has been working with the City for the past several years on projects ranging from implementing your EPA Brownfield Assessment Grants to working with the Municipal Water Department to map their drinking water assets in GIS. This work has helped HR Green become more acquainted with the City’s infrastructure and grow trusted relationships with City staff. This project’s GIS inventory and GIS application development will realize benefits in quality and efficiency as a result of this familiarity and shared resources. By leveraging existing GIS infrastructure, the City will save time and money!
HR Green will manage sewer assets inside the City’s existing GIS database for drinking water assets – allowing shared viewing of both assets while saving costs for the community!

We believe in the City of Oskaloosa’s vision and have dedicated a team of professionals with considerable GIS and engineering experience to successfully complete this work. The synergies that result from this combination of experience differentiate HR Green from other GIS firms and engineering firms. HR Green’s ability to offer this all “under one roof” helps our clients make well-informed decisions about their water and wastewater systems.

HR Green’s goal is, first and foremost, to help the City of Oskaloosa obtain an accurate inventory of the sanitary sewer collection and storm water sewer systems. We appreciate the opportunity to present our qualifications and look forward to helping you realize your vision.

Thank you for your thoughtful consideration.

Sincerely,

Scott Mattes, P.E., CIH
Project Manager
Firm Background

HR Green, Inc. (HR Green) is a multi-discipline professional services and construction firm offering planning, technical consulting, architectural, engineering, environmental services, and construction to clients in diverse markets.

One of America’s oldest design and construction firms, HR Green enjoys a longstanding reputation for environmental stewardship, public service and technical excellence. The Iowa-based firm is consistently ranked among ENR’s Top 500 Design Firms in the United States. Founded, and headquartered, in Cedar Rapids, Iowa in 1913 by Howard R. Green, the firm now employs over 400 people in California, Colorado, Illinois, Iowa, Minnesota, Missouri, Pennsylvania, South Dakota and Texas. HR Green is an employee-owned corporation and last year’s revenues exceeded $60 Million. The majority of the work to be done for Oskaloosa will be in Iowa at our Cedar Rapids and Des Moines, IA offices. HR Green does not plan to use subconsultants for this project.

HR Green staff has developed project-wide GIS deployments for numerous municipal clients. Our GIS professionals have vast experience leading NASSCO-based asset management collection efforts for clients all across the Midwest. HR Green’s team has developed mobile data collection applications linked to customized automated reporting tools. In addition, we can manage the design and configuration of interactive web mapping “geo-portals” that integrate a variety of project data (CAD, GIS, and tabular) into a seamless web browser interface powered by ArcGIS Server technology. This technology gives you instant access to your data anywhere you have an internet connection!

We’ve been in business without interruption since 1913. We carefully target our technical services to address the most timely needs of society, and thus to succeed as sustainable businesses. Our six business units provide comprehensive services as follows:

- **Transportation** – Highways – streets, pedestrian facilities, traffic engineering and bridge design services.
- **Water** – Water resources, treatment and distribution; wastewater collection, pumping and treatment; residuals handling and disposal, sustainable solutions for water quality on transportation projects.
- **Governmental Services** – Community redevelopment – brownfields and downtown revitalization to include visioning and land use planning to create a sustainable future. GIS assistance to help local government infrastructure & asset management. Program management for local and state government.
- **Construction** – Extensive project experience includes the construction management of bridges, roads and highways; storm and sanitary sewers; water distribution systems; water treatment facilities; wells, storage facilities, pumps and lift stations; and wastewater facilities.
- **Land Development** – Residential, commercial, industrial, and institutional land planning, engineering, surveying and landscape architecture services.

Did You Know?

HR Green is an **Iowa-based**, full service engineering firm that can help with things such as:
- GIS Data,
- Hydraulic Modeling,
- CIP Planning
and much more!
Project Team

The team will be led by Scott Mattes and his staff in our HR Green offices located in Iowa in Des Moines and Cedar Rapids, as well as supported by additional staff in Yorkville, IL, and St. Louis, MO. Each staff member has their own unique areas of focus, but all are well-rounded professionals capable of managing multi-disciplinary projects. HR Green has assembled a diversified team comprised of technical staff that has been engaged in a wide array of GIS mapping projects. In addition to the key personnel assigned to your project, additional staffing and expertise can be utilized from HR Green’s over 400 person staff. HR Green has provided below an Organizational Chart that demonstrates the lines of responsibility and communication to perform the services outlined in the RFQ. The following pages include resumes with the qualifications and specific locations of our key personnel and support staff.

Availability and Experience

Our team possesses overlapping experience across many areas of the GIS Mapping and asset management process. Our team takes advantage of this bench strength in order to meet tight deadlines and make the best use of the entire team’s skills. Team members outside of Iowa are used to support desktop activities as needed in order to meet our client’s expectations. Our proposed Project Manager and staff currently have workload availability to complete the project and meet all compliance schedule dates.

Roles of our key personnel:
Scott Mattes, PE, CIH: Scott is the Environmental/GIS Services Group Leader and is a Senior Project Manager for HR Green. As the Project Manager and GIS Technical Advisor for the project, Scott will coordinate the City’s GIS database and application development, data QA/QC, and final project deliverables.
Peter Lovell: Pete is a NASSCO-certified Project GIS Specialist for HR Green. For this project, Pete will be responsible for developing mobile GIS applications, designing web mapping applications, and conducting database design quality control.
Michael Liska, GISP: Mike is a NASSCO-certified Project GIS Specialist for HR Green. Mike will be responsible for GIS database design, mobile and dashboard application design, data migration, asset inventory field work, and design quality control.
Emily Wilson: Emily is a NASSCO-certified Staff Scientist for HR Green. Emily will be responsible for GIS mobile and dashboard application design, data migration, asset inventory field work, and design quality control.
Support Staff: Staff resumes follow that highlight supporting staff and qualifications.

Did You Know?

HR Green has collected & inspected nearly 17,000 sanitary and storm sewer assets over the last 4 years.
Statement of Qualifications for Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping
City of Oskaloosa Public Works

Proposed Organizational Chart

Scott Mattes, PE, CIH
Project Manager
Technical Advisor/QA-QC

QA/QC
Scott Mattes, PE, CIH
Technical Review Lead
Adam Fisher
IT GIS support

Field Data Collector
Task Lead: Michael Liska, GISP
Project GIS Specialist I
NASSCO Certified
Emily Wilson
Staff Scientist II
NASSCO Certified
Pete Lovell
Project GIS Specialist II
NASSCO Certified

SDE & Database Administrator
Task Lead: Pete Lovell
Project GIS Specialist II
NASSCO Certified
Michael Liska, GISP
Project GIS Specialist I
NASSCO Certified

City Coordination
Task Lead: Emily Wilson
Staff Scientist II
NASSCO Certified
Stephen Prideaux
Community liaison

Civil Engineering
David Schultz, PE,
LEED AP
Civil Engineering
NASSCO Certified
Lauren O'Neil, PE
Sewer Assessment and modeling
Scott Mattes, PE, CIH | Project Manager and GIS Technical Lead  
Office Location: Des Moines, IA  
Scott has extensive experience managing the architecture, development, and implementation of geographic information systems (GIS). Scott has developed project-wide GIS deployments for numerous municipal and transportation clients. He has experience developing mobile data collection applications linked to customized automated reporting tools. Scott manages the design and configuration of several interactive web mapping “geo-portals” that integrate a variety of project data (CAD, GIS, and tabular) into a seamless web browser interface powered by ArcGIS Server technology. As a licensed Professional Engineer and Certified Industrial Hygienist, his engineering background includes technical oversight and management of projects dealing with groundwater contamination, drinking water, hazardous waste and materials, and environmental risk assessments. He has managed industrial hygiene surveys for industrial work centers and designed solutions to mitigate physical, chemical, biological and radiological hazards.

Scott was previously an instructor of engineering with the US Air Force Academy where he instructed cadets on GIS and environmental engineering.

Relevant Project Experience:
- Davenport, Iowa – Project Manager for GIS Services, 14th District Basin East I&I Sanitary Sewer Study
- Oskaloosa Municipal Water, Iowa – Project Manager for GIS Services for Water Utility
- Indianola, Iowa – Project Manager for GIS Services, Sanitary Sewer Data Collection and Hydraulic Study
- Liberty, Texas – Project Manager for GIS Services, Sanitary Sewer Assessment
- Minneapolis, Minnesota – Project Manager for GIS Database Administration, Sanitary Sewer Condition Assessment
- Shenandoah, Iowa – Project Manager for GIS Services for Municipal Utilities
- Oskaloosa, IA Project Manager for GIS Services and Brownfield Redevelopment Prioritization Modeling

Peter Lovell | Project GIS Specialist II  
Office Location: Des Moines, IA  
Pete’s innovative geographic information systems (GIS) solutions have helped many clients understand and solve complex problems. He has developed geospatial applications and performed GIS analysis to streamline processes and inform decision-making for brownfield redevelopment, environmental site assessment, transportation, and municipal projects. Pete has created numerous web mapping applications that integrate GIS data with an intuitive internet browser interface to facilitate use by non-GIS users. He has conducted Level 1 NASSCO manhole inspections, developing data entry forms and scripts that promote efficient data collection and data integrity. Pete is a GIS Technical Advisor at HR Green, establishing company-wide GIS standards, leading company GIS initiatives, and helping staff with technical questions regarding the use of GIS.

Prior to joining HR Green, Pete was a GIS technician at the Iowa State University GIS Support Facility, where he worked on GIS projects for external clients while also providing GIS support for student and faculty research.

Relevant Project Experience:
- Davenport, Iowa – GIS Services, 14th District Basin East I&I Sanitary Sewer Study
- Oskaloosa Municipal Water, Iowa – GIS Services for Water Utility
- Indianola, Iowa – GIS Services, Sanitary Sewer Data Collection and Hydraulic Study
- Liberty, Texas – GIS Services, Sanitary Sewer Assessment
- Minneapolis, Minnesota – GIS Database Administration, Sanitary Sewer Condition Assessment
- Shenandoah, Iowa – GIS Services for Municipal Utilities
- Oskaloosa, IA GIS Services and Brownfield Redevelopment Prioritization Modeling
Michael Liska, GISP | Project GIS Specialist I  
Office Location: Cedar Rapids, IA

Mike's knowledge of water and wastewater systems and expertise in geographic information systems (GIS) has made him an authority in utilities database design at HR Green. He has developed and managed geospatial databases for water and wastewater utilities. He has used GIS to create construction drawings for water distribution lines. While utilizing GIS data, Mike has designed several detailed maps and map books for clients. Mike has performed several Level 1 NASSCO inspections on manholes and has performed QA/QC on CCTV Inspections using NASSCO Grading. Mike is a GIS Technical Advisor at HR Green, establishing company-wide GIS standards, leading company GIS initiatives, and helping staff with technical questions regarding the use of GIS.

Prior to joining HR Green, Mike was a GIS Specialist for a rural water district that covered 11 counties in Iowa, where he designed and managed a water and wastewater GIS database and a geometric network that served approximately 9200 Customers. He also provided geospatial technical support and training for employees using GPS and GIS.

Relevant Project Experience:
- Davenport, Iowa – GPS data collection, 14th District Basin East I&I Sanitary Sewer Study
- Anamosa, Iowa – GIS Services with Water, Sanitary Sewer, and Storm Sewer Data Collection
- Oskaloosa Municipal Water, Iowa – GIS Services for Water Utility
- Indianola, Iowa – Sanitary Sewer Data Collection and Hydraulic Study
- Palo, Iowa – GPS data collection and GIS Services, Water System Mapping
- Walker, Iowa – GPS data collection and GIS Services, Water and Sanitary Sewer Mapping
- Agency, Iowa – GPS data collection and GIS Services, Wastewater Treatment System Improvements
- Keota, Iowa – GPS data collection and GIS Services, Sanitary Sewer System Modeling
- Liberty, Texas – GPS data collection and GIS Services, Sanitary Sewer Assessment
- Minneapolis, Minnesota – Sanitary Sewer Condition Assessment

Emily Wilson | Staff Scientist II  
Office Location: Cedar Rapids, IA

Emily Wilson has five years of experience working in a variety of different capacities within the environmental field. Emily's experience includes working with groundwater, wastewater, stormwater, industrial pre-treatment sampling, wastewater flow monitoring, Phase I and Phase II Environmental Assessments, and geographic information systems (GIS) asset management projects.

Prior to HR Green, Emily was a field technician for the Milwaukee Metropolitan Sewerage District where she monitored and inspected the sanitary system for the entire Milwaukee County. Emily performs Level 1 NASSCO inspections on sanitary and stormwater systems for GIS projects using high accuracy mobile GPS equipment.

Relevant Project Experience:
- Anamosa, Iowa – GIS Services with Water, Sanitary Sewer, and Storm Sewer Data Collection
- Liberty, Texas – Sanitary Sewer Assessment
- Oskaloosa, IA – EPA Brownfield Hazardous Substance Assessment Grant, EPA Brownfield Petroleum Assessment Grant - Project Planner
Stephen Prideaux, AICP  |  Project Planner, Phase I Assessments and Redevelopment Planning

Office Location: Cedar Rapids, IA

Steve has extensive knowledge of the EPA Brownfields Program. His work includes helping communities identify and inventory potential brownfields sites, conducting Phase I Environmental Site Assessments, and creating outreach tools to educate local residents on the brownfields process. Additionally, Steve specializes in leveraging funds for client projects. He has written numerous successful grant applications including the following: EPA Brownfields Program, IDED Iowa Brownfields Redevelopment Program, IDNR Derelict Buildings Grant Program, EPA Re-Powering America’s Land Program Feasibility Study Program, Iowa OEI Energy Conservation Block Grant, USDA Rural Energy for America Program, and the EPA Environmental Justice Small Grants Program.

Steve has also demonstrated outstanding capabilities as an urban planner and environmental consultant since beginning his career with HR Green in 2007. For an extended period he served as a resident part-time city planner for a key client of the company located within ECIA’s jurisdiction. In that role he earned high marks for assisting the development process in a growing city of nearly 30,000 people. Steve served as the primary author of two sub-area plans, drafted zoning ordinances, reviewed site plans and preliminary/final plats, and created staff reports for presentation at City Planning Commission, Zoning Board of Adjustment, and City Council meetings.

Relevant Project Experience:
- Dubuque, IA - EPA Brownfield Hazardous Substances Assessment, EPA Brownfield Petroleum Assessment - Project Planner
- Ottumwa, IA - EPA Brownfield Hazardous Substances Assessment, EPA Brownfield Petroleum Assessment - Project Planner
- Waterloo, IA - EPA Brownfield Hazardous Substances Assessment, EPA Brownfield Petroleum Assessment - Staff Planner
- Council Bluffs, IA – EPA Brownfield Hazardous Substances Assessment, EPA Brownfield Petroleum Assessment - Staff Planner
- Oskaloosa, IA EPA Brownfield Hazardous Substance Assessment Grant, EPA Brownfield Petroleum Assessment Grant - Project Planner

David Schultz, PE, LEED AP  |  Project Manager and Site Civil Engineer

Office Location: Yorkville, IL

David specializes in the Civil Engineering aspects of residential, commercial, and industrial land development along with specialty in redeveloped of brownfield sites in communities of Iowa, including municipal water and sanitary sewer design, storm sewer design, stormwater management, site layout, grading and earthwork balance, cost analysis and feasibility studies, roadway design and road geometrics. He also has general experience as a municipal engineering contact, including the design and project management of roadway and sewer and water improvement projects. David is also an experienced Project/Design Engineer for municipal, educational, and commercial projects, including conceptual design through Final Engineering approval leading through to construction closeout. Also as a LEED Accredited Professional, he is well versed in implementing principles of sustainable design procedures and green design.

Relevant Project Experience:
- Coralville, IA – Iowa River Landing, redevelopment of former industrial area using sustainable design practices for stormwater – Assistant Project Manager and Design Engineer
- Council Bluffs, IA – Katelman Site Redevelopment Project – South Main Brownfields Area Project, EPA Assessment Grants, Cleanup Grant, Former Katelman Foundry, & Cleanup Grant proposing design of self-contained earthen berms to house the contaminated soils and remediation onsite - Civil/Sitework Project Manager
- City of Dubuque, IA – Jule New Transit Facility - redevelopment of former Peoples Natural Gas Superfund site for a re-use project to house the Jule bus fleet and office operation. The US EPA listed the site on the National Priorities List.
Environmental constraints/covenants of the site were taken into design requirements to make a safe and sustainable project.

Lauren O'Neil, PE I Project Engineer I  
Office Location: Cedar Rapids, IA  
Lauren is a civil engineer with significant experience in water and wastewater engineering. Prior to joining HR Green, Lauren studied civil and environmental engineering at the University of Iowa. She attained her masters in environmental engineering at the University of Iowa in 2015. Lauren has had a variety of experience, including construction observation of several storm water projects. She observed the construction of several pumping stations, berm construction and restoration, and various other improvements to protect from future flooding. Lauren has also been involved in the design, bidding and construction of flood walls.

Relevant Project Experience:
- **Walker - Wastewater System Improvements Construction Administration - City of Walker, IA - Construction Observer**  
  Lauren was responsible for construction observation of a lagoon upgrade in Walker, Iowa. This included the installation of a SAGR system. Lauren was responsible for coordination with the contractor, was an onsite representative for the City of Walker, and reviewed pay applications and change orders.
- **1st Avenue Corridor Flood Recovery and Protection 2008-2013 - City of Coralville, IA - Construction Observer**  
  Lauren was responsible for construction observation for multiple storm water pumping stations in Coralville, Iowa. Lauren worked with the contractor to answer construction related questions as well as reviewed change orders and pay applications.
- **2nd St SE Sanitary Sewer & Street Reconstruction - City of Cedar Rapids, IA - Staff Engineer**  
  Involved of conceptual, preliminary and final design for the reconstruction of the flood damaged sanitary sewer line along 2nd Street SE from 9th Avenue SE approximately 2800' to the dead end on 2nd Street SE. In 2008, this area was inundated with flood waters in excess of 9 feet in depth above the roadway.

Adam Fisher I Junior Application Administrator  
Office Location: St. Louis, MO  
Adam is a Field Technician II with experience working on Brownfield redevelopment and NEPA projects; along with extensive experience conducting Phase I and II Environmental Site Assessments. Adam is 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) certified, has completed Wetland Delineation training, and has GIS experience.

Relevant Project Experience:
- **South Main Brownfields Project - City of Council Bluffs, IA - Staff Scientist**  
  Adam conducted Phase I and Phase II ESA's on various properties. HR Green developed and implemented a brownfield area GIS database and geo-web portal for the project. This web mapping application highlights the City's efforts to revitalize the downtown district, and improves access to project data for interested developers.
- **US 30 Mt. Vernon Bypass - Iowa DOT - GIS Specialist**  
  Adam produced GIS maps relating to the identified environmental constraints. He also conducted the contaminated sites review for the project. HR Green prepared an Environmental Assessment and two Interchange Operation Reports for an eight mile long bypass of Mount Vernon and Lisbon, Iowa. The project included a bypass and two new interchanges on new alignment. The key environmental components of this project included an extensive tree survey, mist netting for Indiana bats, extensive wetland delineation, and conversion of farmland.
Experience of the Firm

Sanitary Sewer System GIS Asset Inventory and Hydraulic Modeling  |  Indianola, Iowa

Sanitary sewer issues such as collection and conveyance, capacity, management, operations, wet weather system impacts, maintenance and expansion created a need for a holistic analysis providing clear and quantifiable solutions for the City of Indianola. It was decided in August 2013 that a hydraulic model of the City’s sanitary system was necessary to integrate rainfall impacts with existing sanitary sewer flows to provide Indianola with the information needed to make informed infrastructure decisions. In order to create this model, however, a comprehensive data collection effort for the entire City’s sanitary system was necessary.

This inventory, consisting predominantly of manhole inspections, involved not only collecting high-accuracy locations and depths on system assets but also collecting additional attributes, such as asset sizes, materials, and condition ratings. All of this data was collected in the field using mobile GIS/GPS technology equipped with custom collection forms built to maximize efficiency and minimize user error. This field data was synced daily with a project GIS database designed both to accommodate the field data and the subsequent analysis outputs from the SewerGEMS modeling software.

HR Green set an ambitious schedule for the GIS development and asset inventory field work to avoid delays due to winter weather, allow sufficient time for conducting the hydraulic analysis, and to be as responsive as possible to the needs of the client. Existing GIS databases and mobile applications were leveraged to hasten development efforts, allowing field work to commence less than a week after the contract was approved. Despite delays due to weather, City support staff availability that only allowed for a single crew at any given time, and challenges locating assets that were in many cases buried, sealed shut, or tucked in overgrown or otherwise difficult settings, the City’s 1600+ manholes were inventoried in less than three months. This allowed hydraulic modeling to commence in December 2013. While an updated GIS for the City’s sanitary system was not the primary focus for this project, the asset inventory GIS should be a significant value-added deliverable that Indianola can use to aid in operations and in prioritizing system improvements going forward.

Utilities GIS Services  |  City of Anamosa, Iowa

Over the course of multiple HR Green projects, the City of Anamosa has incrementally grown its Utilities GIS. HR Green was originally hired to evaluate the City’s existing water distribution system and prioritize improvements in the form of a comprehensive capital improvement plan. This need served as the impetus for HR Green’s development of a City GIS database and a comprehensive field inventory of the City’s water distribution system. GIS database design and collection efforts allowed for efficient integration with WaterGEMS V8i hydraulic modeling software.

In a subsequent project, HR Green added stormwater and sanitary sewer utilities into the City’s GIS database, migrated existing electronic data into the GIS, and performed a phased GIS inventory of the city’s storm and sanitary manholes, ultimately to include a NASSCO Level 1 Inspection. Data and inspections were performed on 524 sanitary sewer manholes, 44 stormwater manholes, 456 storm inlets and 95 stormwater outlets. Topologically-correct digitizing of sewer and storm water mains was performed inside GIS following the field inventory. For the
sanitary system, flows and inverts were associated with all pipes. An asset condition was given to each sanitary structure to aide in CIP decision-making.

City GIS data is accessed through the internet under a secured password and username. Mobile applications were created for updating and collecting data in the field via tablets or smart phones. In addition, color 11x17 mapbooks were developed for use by field personnel.

**Davenport Sanitary Sewer I&I Project | City of Davenport, Iowa**

The City of Davenport was concerned with increasing wet weather flows to the wastewater treatment plant as well as sewer inundation during periods of heavy rainfall. The City contracted with HR Green to perform an inflow and infiltration (I&I) study and recommend projects for the removal of storm water from the system. To gain a better understanding of the sewer network, flow meters were strategically placed throughout the system and data from the flow meters was then utilized to develop a dynamic sewer model of the project area. HR Green used survey-grade GPS data collectors to inventory manhole and pipe assets in the sewer system and document key infrastructure details within a mobile GIS database. NASSCO-certified GIS professionals reviewed the asset inventory in GIS and applied custom quality control tools from ESRI’s GIS Data ReViewer software to identify and correct more complicated network errors to ensure the final GIS deliverable conformed to the latest manhole and pipeline inspection standards from the National Association of Sewer Service Companies (NASSCO). The GIS database was directly integrated with the project hydraulic model to deliver seamless results. Using the dynamic sewer model, HR Green was able to identify regions suffering from I&I and accurately recommend further investigation.

Smoke testing, televising, and manual inspections were then utilized to determine specific points of I&I and provide detailed improvement recommendations to the system in a Capital Improvements Plan (CIP). The CIP included a complete description of the problems encountered during the investigations including locations, links to investigative data, recommended improvements, relative priorities, and an opinion of probable cost for each. HR Green provided an asset inventory report of all surveyed assets within an asset class (e.g. manholes, pipes) that detailed information about the asset including its current condition, site photographs, NASSCO condition, and field sketches.
Project Understanding & Approach

The HR Green project approach will demonstrate not only HR Green’s expertise in GIS but also our broad engineering expertise in order to deliver a comprehensive community GIS solution for the City of Oskaloosa.

Project Understanding
The City of Oskaloosa requests a comprehensive Geographic Information Systems (GIS) database for its sanitary sewer and storm water sewer systems that will be made accessible to staff through web mapping applications consumed on both desktop and mobile platforms. The City requests a high-accuracy asset inventory of sanitary sewer and storm water sewer assets that will populate the City GIS. In addition to high-accuracy locations, the asset inventory will include the entry of City-specified attribute data and asset photos. On-site training for the City’s GIS applications is to be provided to City staff after development is complete.

Project Priorities
The following priorities have been identified for this project:

- Provide efficient project management. Include key city staff in a project kick-off meeting. Prepare periodic status updates. Provide all equipment, software, hardware, labor, transportation, and scheduling to perform this project.
- Compile from city and review existing available data of sewer infrastructure.
- Develop ESRI GIS database to hold the asset management data needed by the City.
- Populate the GIS with sanitary system data and storm water system data using high-accuracy GPS coupled with smart data collection forms.
- Perform a modified or full Level 1 National Association of Sewer Service Companies (NASSCO) Inspection on sanitary sewer manholes.
- Create user-friendly mapping applications that provides City staff with easy access to their GIS data in the office and the field. Set up and administer an ArcGIS Online account for the City and develop a City of Oskaloosa Collector for ArcGIS map and Operations Dashboard. The Collector map will be used for data collection and asset locating in the field. The Operations Dashboard will serve as a command center for viewing and analyzing City assets in real time. Finally, ArcGIS Online mapping portals for will be developed for both the sanitary system and the storm water system. These applications will provide City staff with easy access to their GIS data and the user-friendly tools to manage the data and inform decision-making.
- Train City staff and provide instructional documentation on how to use the custom mapping applications.

Assumptions

General Assumptions

- Safe surroundings (i.e., traffic, environment, etc.) and acceptable weather conditions for the field asset inventory will be present.
- HR Green’s standard GIS database design (which includes all required attributes listed in the RFQ), mobile GIS form design, and web map design will be used to develop the City GIS. HR Green will define the tabular GIS database structure and establish the valid feature values, attribute ranges, and classifications for use in attribute “pick-lists.” The City is welcome to provide feedback regarding desired feature values, default values, attribute ranges, and “pick-list” classifications. Specific design changes desired by the City must be communicated to HR Green prior to a signed agreement.
- HR Green will import existing City electronic CAD/GIS utility files into the GIS database as long as they have a spatial reference. Under this agreement, HR Green will not perform any georeferencing or digitizing as part of the data migration into the GIS database. City requests for additional data upload that require digitizing or georeferencing will be treated as a supplemental service and be billed according to the current HR Green Schedule of Hourly Fees.
- Without exact counts on the number of assets within the City’s sanitary and storm water systems, the following assumptions on asset totals was made for the sake of putting together the fee for this proposal:
  - Sanitary Manholes – 1,200 or fewer assets
  - Sanitary Lift Stations – 3 or fewer assets
  - Sanitary Gravity Main – 15 miles of main or less
  - Sanitary Force Main – 1 mile of main or less

By leveraging existing GIS infrastructure, the City will save time and money! HR Green will manage sewer assets inside the City’s existing GIS database for drinking water assets – allowing shared viewing of both assets while saving costs for the community!
Statement of Qualifications for Professional Services for GIS Wastewater Collection and Stormwater Infrastructure Mapping  
City of Oskaloosa Public Works

- Storm Manholes – 600 or fewer assets
- Storm Inlets – 400 or fewer assets
- Storm Outlets – 100 or fewer assets
- Storm Gravity Main – 6 miles of main or less

- A reasonable effort will be made to locate each sanitary and storm asset. Known assets that cannot be located with reasonable effort will be noted and the inventory will proceed to the next asset to be respective of budget and project schedule. If budget remains, HR Green staff will return to these remaining assets after the remainder of the City has been inventoried. Otherwise, this effort will be treated as a supplemental service and be billed according to the current HR Green Schedule of Hourly Fees.

City Responsibilities

- A City representative will read, sign, and comply with the HR Green non-disclosure agreement (NDA) protecting the HR Green-unique GIS design features we’ve developed from our experience performing thousands of asset inspections. This agreement says the data is always yours and you may share the data within anyone using shapefiles.
- City staff will provide as-builts and paper maps associated with the City’s sanitary and storm water systems.
- The City will arrange for access to assets located on private property.
- During the data collection phase, the City will aid in locating lost, inaccessible, or difficult to reach features on an as-needed basis.
- City staff will provide access inside of all manholes.
- City staff will deliver to HR Green any available City data that is needed for inclusion in the City GIS. This data will include but is not limited to CAD utility data, paper maps, and parcel information.
- The City will provide a knowledgeable staff member to answer questions and provide information.
- The City will arrange for HR Green access to private property and make all provisions for HR Green staff to enter upon public and private property as required for consultant to perform services under this agreement.

Scope of Services

Phase 1 – GIS Database

Overview: In developing the sanitary sewer and storm water GIS for the City of Oskaloosa, **HR Green will build upon the existing Oskaloosa Water Department GIS database for more efficient production and to allow greater data sharing in GIS applications.** HR Green GIS database development will be based on industry standard design that will accommodate all elements required in RFQ and the other data necessary to manage the City of Oskaloosa’s sanitary sewer conveyance and storm water conveyance systems.

Anticipated Tasks:

- HR Green will develop the GIS database based on industry standards. The structure of the GIS database will be informed by ESRI data models as well as the expertise of HR Green NASSCO GIS specialists and engineers.
- Considerable efficiencies will be realized as previous project database design will be leveraged in the development of the City’s sanitary sewer and storm water GIS datasets. Even greater efficiencies will result from building upon the existing GIS database used by the Oskaloosa Water Department.
- HR Green will develop a GIS database structure that will accommodate the necessary spatial features and tabular data fields required in the RFQ for the City’s sanitary sewer and storm water systems.
- HR Green will fulfill the following duties for a year’s duration (365 days) beginning upon delivery of the City’s web mapping applications:
  - Provide access to the City’s GIS database on HR Green’s server **at no additional cost to the City.**
  - Maintain the City GIS database and make all needed updates and repairs necessary for its use.
  - Provide the City with access to the web mapping applications developed by HR Green as part of this professional services agreement.

After this initial year passes, the renewal of these services will require an annual supplemental agreement.
HR Green will set up the City GIS database as an enterprise SQL Server SDE geodatabase. HR Green will develop this GIS database using strictly non-proprietary software available “off-the-shelf” from ESRI, the world's leading GIS software provider. The GIS database will be designed using a recent version of ESRI’s ArcGIS software. Using this GIS format allows the City to access its GIS data inside ArcGIS and take full advantage of ESRI software functionality should the City request a hard copy of its GIS data. Upon request, HR Green will provide the City with its GIS data in ESRI shapefile format at no additional cost to the City.

HR Green will set the City GIS database to a horizontal coordinate system of State Plane Iowa South 1402 US Foot with a datum of NAD83 (NSRS 2007). This format is the most accurate projection currently available for GIS data and is fully compatible with the Iowa RTN GPS network.

HR Green will design the City GIS database to include the following asset classes for the sanitary sewer conveyance system: gravity mains, force mains, main breaks, manholes, and a general asset class for other network structures.

HR Green will design the City GIS database to include the following asset classes for the storm water conveyance system: gravity mains, inlets, manholes, and outlets. Additionally, the City GIS database will also include an asset class for main breaks and a general asset class for other network structures.

HR Green will design the City GIS database’s sanitary system to be compatible to NASSCO standards. It will be able to accommodate data from Pipeline Assessment and Certification Program (PACP) and Manhole Assessment and Certification Program (MACP) inspections. As a result of this, the database structure will allow for the documentation of asset conditions based on the PACP grading system (5 – Most significant defect grade; 4 – Significant; 3 – Moderate defect grade; 2 – Minor to Moderate; 1 – Minor defect grade).

HR Green will design each asset class in the City GIS database to include important progress and status fields that allow City staff to keep track of the completeness and quality of City GIS data. These fields include: Collection Method, GPS Service Used, and GPS Collection Quality.

HR Green will design the City GIS database to be compatible with hydraulic modeling software (e.g., SewerGEMS, XPSWMM) recommended and used by HR Green engineers. The City GIS database can then be leveraged to help streamline future modeling work.

HR Green will design the City GIS database to include numerous data quality fields in each point asset class. When collecting GPS locations using HR Green-designed ArcPad deployments, these data fields will populate automatically, providing a useful record of the age of these assets and accuracy of their locations in GIS. The following data fields are scripted to auto-populate: GPS Date, GPS Time, Number of GPS Satellites Used, GPS Quality Score, GPS Horizontal Dilution of Precision (HDOP), GPS Vertical Dilution of Precision (VDOP), and GPS Positional Dilution of Precisions (PDOP).

HR Green will obtain available electronic base map data from the City and publicly-available sources and load it into the GIS database “as-is.” This base map data will be limited to the following: Parcel polygon, topographic contour, and road centerline shapefiles.

HR Green will convert data from the City’s existing, georeferenced CAD as-built drawings into the GIS database. Asset locations and attributes shown in the as-built drawings for sanitary manholes, sanitary mains, storm manholes, storm inlets, storm outlets, and storm mains will be brought into GIS.

**Phase 2 – Asset Inventory**

**Overview:** HR Green will conduct a thorough asset inventory of the City’s sanitary sewer system and storm water system. Existing City as-built records and field notes may be used to assist in locating assets as part of this field inventory.

**Anticipated Tasks:**

- HR Green will prepare mobile data collection applications that provide access to the City GIS database. Additions and changes to the GIS database can be made from the field. HR Green will leverage its standard mobile form design to facilitate accurate and efficient data collection. HR Green field staff will make use of forms equipped with custom pick-lists in order to record asset information. Use of these pick-lists promotes efficiency and protects data integrity.

- HR Green field staff will collect high-accuracy asset positions, photos, depth, pipe inverts, pipe diameters, and pipe materials among a variety of other attributes. The following asset types and attributes represent the core elements of the asset inventory that will be conducted by HR Green:
Statement of Qualifications for Professional Services for
GIS Wastewater Collection and Stormwater Infrastructure Mapping
City of Oskaloosa Public Works

- Storm sewer gravity main
  - ID, Length (ft.), Diameter (in.) / Dimension, Material, Flow Direction
- Storm sewer inlets
  - ID, X Coordinate, Y Coordinate, Elevation (ft.), GPS Date, Inspection Date, Condition Rating, Inside Structure Photo (attached to GIS feature), Site Photo (attached to GIS feature)
- Storm sewer outlets
  - ID, X Coordinate, Y Coordinate, Elevation (ft.), GPS Date, Inspection Date, Condition Rating, Inside Structure Photo (attached to GIS feature), Site Photo (attached to GIS feature)
- Storm sewer manholes
  - ID, X Coordinate, Y Coordinate, Rim Elevation (ft.), Elevation at Bottom of Structure (ft.), GPS Date, Inspection Date, Condition Rating, Inside Structure Photo (attached to GIS feature), Site Photo (attached to GIS feature)

- Sanitary sewer gravity main
  - ID, Length (ft.), Diameter (in.), Material, Upstream Manhole ID, Upstream Manhole Elevation (ft.), Downstream Manhole ID, Downstream Manhole Elevation (ft.), Flow Direction
- Sanitary sewer force main
  - ID, Length (ft.), Diameter (in.), Material, Upstream Manhole ID, Upstream Manhole Elevation (ft.), Downstream Manhole ID, Downstream Manhole Elevation (ft.), Flow Direction
- Sanitary sewer manholes
  - ID, X Coordinate, Y Coordinate, Rim Elevation (ft.), Elevation at Bottom of Structure (ft.), GPS Date, Inspection Date, Condition Rating, Inside Structure Photo (attached to GIS feature), Site Photo (attached to GIS feature)
- Sanitary sewer lift stations
  - ID/Name, X Coordinate, Y Coordinate, Elevation (ft.), Elevation at Bottom of Structure (ft.), GPS Date, Inspection Date, Inside Structure Photo (attached to GIS feature), Site Photo (attached to GIS feature)

- HR Green will use a high-accuracy Trimble R8/R10 receiver tied into the Iowa Real-Time Network (RTN) to field map the City's assets. Using a R8/R10 receiver with a RTN provides a high accuracy solution both horizontally (2 cm. accuracy with fixed position) and vertically (6 cm. accuracy with fixed position).
- HR Green field staff will check into local control monuments on a daily basis throughout the data collection effort and perform calibrations/adjustments as needed to refine vertical position accuracy.
- HR Green staff will review the field data to determine network connectivity and use desktop GIS to create/update line features (e.g. mains in the case of the sanitary system; mains and culverts in the case of the storm system). These line features will demonstrate correct topology (i.e., pipe and network connectivity) with the field-located point assets in their respective systems. Existing City as-built records and field notes may be used as references to assist in the digitization process.
- HR Green will provide the City with the populated GIS database once the asset inventory has been completed. A copy of this GIS database will be placed on two different thumb drives and delivered to the City.
- HR Green will develop and deliver to the City the following maps: one (1) full-system 36”x48” laminated wall map, four (4) bound books of maps on 11”x17” pages and two (2) bound books with 1:66 scale maps of the sanitary and storm water sewer networks.
- HR Green will deliver a database-linked report summarizing the sanitary and storm assets inventoried for this project. The report will detail the attributes collected in the field and will include the asset conditions recorded by HR Green’s NASSCO-trained field staff.

Phase 3 – Mapping Applications

Overview: HR Green will develop mapping applications that provide City staff with easy access to their GIS data in both the office and the field. These applications will include powerful GIS functionality that not only allows users to view community assets, but also provides the ability to enter searches, make edits, and conduct analyses on these assets.

Anticipated Tasks:
- HR Green will purchase a $2,500 Level 1 ArcGIS Online (AGOL) annual subscription from ESRI for the City of Oskaloosa. The cost of this transaction, without any accompanying markup or service fee, will ultimately be paid by the City and is included in the fees section of this proposal. In order to retain access to HR Green-developed AGOL map applications, this subscription must be renewed by the City annually.
- HR Green will set up and configure a new AGOL organizational account for the City. HR Green will serve as the account administrator for the City’s AGOL organization. Four (4) named user accounts and 2,500 credits can be used at the discretion of the City as part of this annual subscription. Additional user accounts and credits can be purchased
HR Green will develop, maintain and provide the City with secure, multi-user access to ArcGIS Online (AGOL) maps and applications (e.g. Collector for ArcGIS, Operations Dashboard).

HR Green will develop the following AGOL map applications for the City of Oskaloosa: 1) two (2) Collector applications to perform data collection in the field, 2) two (2) Operations Dashboard sites to use as command centers for viewing and analyzing City GIS data from the office, and 3) two (2) AGOL web maps meant for desktop viewing and editing. For each application type, one application will be dedicated to the sanitary sewer system and the other application will be dedicated to the storm water system. Additional applications can be developed under supplemental agreements.

HR Green will make the City’s sanitary sewer system and storm water system GIS asset classes accessible via the City’s AGOL map applications. These map applications will include multiple basemap options such as aerial imagery, streets, and topography, among others. These applications will provide valuable GIS functionality to the City while remaining user-friendly to staff without a GIS background. This functionality will include but is not limited to data editing capabilities, reporting, printing, and the ability to use map navigation to access asset documents, photos, linked CCTV video files, and other files linked via a Google Drive file library.

HR Green will develop two (2) Operations Dashboard applications and AGOL web maps meant for use on City personal computers and tablets. In both cases, one application will be devoted to sanitary sewer assets and the other to storm water assets. The AGOL web maps will provide an intuitive environment for reviewing and editing existing data as well as adding new features to the City’s GIS. Each Operations Dashboard site is a powerful planning and management tool that will allow City staff to monitor data collection progress and examine infrastructure needs. It can be used to inform everyday decision making as well as long-term capital improvement planning.

An Operations Dashboard application will be made available to City staff during the asset inventory phase to allow for the monitoring of data collection progress. This is a powerful tool for reporting progress and providing quality control on the data collected.

HR Green will develop two (2) Collector applications for use with mobile smart phones and tablets, allowing the City to extend the reach of its GIS to the field. One Collector application will be developed for the sanitary sewer system and the other will be for the storm water system. The City’s custom Collector applications will promote efficiency and consistency in data collection through intuitive forms and pre-loaded pick-list menus. City staff will be able to view and edit GIS data in the field by leveraging inexpensive consumer-grade technology (smart phones, portable tablets) that may already be on hand.

HR Green will conduct training on the City’s AGOL mapping applications once development has been completed and data has been collected. A HR Green GIS specialist will instruct City staff on the various capabilities available in these applications. Copies of a How-To manual will be made for all staff in attendance.

HR Green GIS staff will provide up to 10 hours of on-call phone support for addressing post-training questions pertaining to the use of the mapping applications. Any additional technical support desired by the City would be billed according to the current HR Green Schedule of Hourly Fees.
Organization of Team and Reporting

The project team will be organized according to HR Green's organization chart, discussed earlier. The Project Manager and Community liaison will work directly with the City staff to report progress. The City will be in frequent communication with HR Green field staff during the data collection phase and throughout the project. HR Green will also provide the City with a web-based tool to monitor the progress of the data collection phase. This tool will be useful for City Staff to conduct internal QA/QC checks on data quality. HR Green’s approach will create an efficient project where the City has instant access to the collected data and is always aware of project status.

Supplemental Services (optional)

The City may also agree to employ HR Green to perform additional optional services according to the HR Green Schedule of Hourly Fees.

HR Green recognizes the value of an incremental approach to developing a community GIS – one that evolves as the needs of the community evolve and as users develop greater familiarity with their GIS applications. The City of Oskaloosa may see opportunity to expand its GIS further, perhaps to include other community asset classes such as signage and parks infrastructure. After becoming more familiar with their GIS from day-to-day operations, City staff may also find that improvements to the existing database design and AGOL applications would be desirable. HR Green is ready to adapt and grow the City’s GIS to provide a solution that meets the ever-changing asset management needs of the community.

Please feel free to inquire about HR Green’s supplemental services and solutions. HR Green’s supplemental services include but are not limited to those detailed in the following list.

Selected Supplemental Services:

- HR Green further develops the GIS database to include additional utility systems (e.g. electric, gas) and/or community asset classes (e.g. signage, parks and recreation).
- HR Green makes changes to the GIS database structure (e.g. adding new datasets, adding new attribute fields, adding or altering attribute “pick-lists”) based on City feedback.
- HR Green loads base map data to the GIS database and mapping applications at the request of the City. This base map data may represent new map layers or updates to existing base map data.
- HR Green performs additional asset inventories on community infrastructure that the City would like incorporated into its GIS. This work can range from the collection of high-accuracy GPS locations to highly-detailed asset inspections or a combination of both.
- HR Green conducts QA/QC reviews of City data utilizing ESRI Data ReViewer and provides the City with reports detailing errors and corrective measures.
- HR Green makes corrections to City data based on errors identified in Data ReViewer reports.
- HR Green develops new Collector maps for the City.
- HR Green develops new Operations Dashboard applications for the City.
- HR Green makes changes to the organization and functionality of the existing Operations Dashboard.
- HR Green develops new AGOL desktop web maps for the City.
- HR Green makes changes to the organization and functionality of the existing AGOL desktop web maps.
- HR Green develops web mapping portals for the City. Web mapping portals provide users with access to mapping data via an internet website. Functionality can include but is not limited to viewing, querying, and editing City GIS data. Portals can be tailored for internal or general public use.
- HR Green develops hard-copy and/or electronic mapping products such as poster-sized infrastructure maps and map books.

Supplemental services not included in the agreement can be provided by HR Green under separate agreement, if desired.
Cost

Schedule

The schedule outlined is subject to change due to weather, City staff availability, and other project assumptions already detailed.

<table>
<thead>
<tr>
<th>Project Management</th>
<th>Technical Services</th>
<th>Project Duration</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kick-off meeting</td>
<td>Compile Data</td>
<td>Two Weeks</td>
</tr>
<tr>
<td>Prepare and Maintain Project Schedules</td>
<td>GIS Database Development</td>
<td>1 Month</td>
</tr>
<tr>
<td>Status Updates</td>
<td>Data Collection</td>
<td>6 Months</td>
</tr>
<tr>
<td>Equipment, software, hardware, labor, transportation, locates</td>
<td>o Storm Sewer Gravity Main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Storm Sewer Inlets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Storm Sewer Outlets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Storm Sewer Manholes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Sanitary Sewer Gravity Main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o Sanitary Sewer Force Main</td>
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<tr>
<td></td>
<td>o Sanitary Sewer Lift Stations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Network Connectivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Photos</td>
<td>1 Month</td>
</tr>
<tr>
<td></td>
<td>Web Based GIS Applications</td>
<td>Project Duration</td>
</tr>
<tr>
<td></td>
<td>Maps, asset reports and database delivery</td>
<td>1 Month</td>
</tr>
<tr>
<td></td>
<td>Training</td>
<td>Two Weeks</td>
</tr>
</tbody>
</table>

|                  |                  | One Day          |
| Two Weeks        |                  |                  |
| 1 Month          |                  |                  |
| 6 Months         |                  |                  |
|                  |                  |                  |
|                  |                  |                  |
### Required Professional Services

| Project Management | • Kick-off meeting | $5,500 |
| - | • Prepare and Maintain Project Schedules | |
| - | • Status Updates | |
| - | • Equipment, software, hardware, labor, transportation, locates | $2,500 |
| - | • ESRI ArcGIS On-Line Subscription | |

| Technical Services | • Compile Data | $1,000 |
| - | • GIS Database Development | $1,500 |
| - | • Data Collection | $65,000 |
| - | o Sanitary Sewer | $42,000 |
| - | o Storm Sewer | $8,250 |
| - | • Network Connectivity | $7,250 |
| - | • Web Based GIS Applications | $2,000 |
| - | • Maps, asset reports, and database delivery | $2,000 |
| - | • Training | |

| Total Project Cost | $137,000 |
Preferred Professional Services

| Asset Conditions | • NASSCO-certified inspection for Sewer Assets | Included in Base Price | Add $54,000 to Base Price |
|                 | • Hybrid NASSCO Inspection (includes up to 20 additional NASSCO attributes) | | |
|                 | • Full NASSCO Inspection (includes up to 50 additional NASSCO attributes) | Add $135,000 to Base Price | |
| GPS Quality Statistics | • GPS Date | Included in Base Price | |
| | • GPS Time | | |
| | • GPS Satellites Used | | |
| | • GPS Quality | | |
| | • GPS HDOP | | |
| | • GPS VDOP | | |
| | • GPS PDOP | | |
| | • GPS Service Used | | |
| | • GPS Collection Quality | | |
| CCTV and other File Attachments in GIS Database | • Photos | Included in Base Price | |
| | • Videos | | |
| | • PDF | | |
| | • Word Documents | | |
| | • Many other types of files | | |
| Experienced and Licensed Professional Staff | • Engineers | Included in Base Price | |
| | • GIS Specialists | | |
| | • Scientists | | |

Preferred Service Items indicated above are included in HR Green’s base cost with no additional fee.

A final note regarding the Annual Maintenance Renewal Agreement:
- HR Green understands that the City of Oskaloosa would want this investment in GIS to last for years to come. With this in mind, HR Green will continue to host the City’s GIS database at no cost, only expecting compensation for labor costs associated with ensuring that the City’s GIS applications remain fully functional and stable as we react to inevitable hardware and software updates. These labor costs are addressed by the annual maintenance renewal agreement that would become due one year after delivery of the City’s GIS solution and be renewed on or before that date for each subsequent year in order to continue receiving maintenance.

HR Green welcomes the opportunity to meet with you to answer any questions about our proposal and services. A detailed scope and fee will be determined with the City of Oskaloosa after selection. We appreciate your consideration.
Attachment B: HR Green, Inc. 2016 Billing Rate Schedule
**HR GREEN, INC.**  
Billing Rate Schedule  
Effective January 1, 2016

<table>
<thead>
<tr>
<th>Professional Services</th>
<th>Billing Rate Range</th>
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<tbody>
<tr>
<td>Principal</td>
<td>$195- $280</td>
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<tr>
<td>Senior Professional</td>
<td>$165- $240</td>
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<tr>
<td>Professional</td>
<td>$110- $180</td>
</tr>
<tr>
<td>Junior Professional</td>
<td>$85- $135</td>
</tr>
<tr>
<td>Senior Technician</td>
<td>$90- $125</td>
</tr>
<tr>
<td>Technician</td>
<td>$45- $105</td>
</tr>
<tr>
<td>Senior Field Personnel</td>
<td>$100- $165</td>
</tr>
<tr>
<td>Field Personnel</td>
<td>$60- $145</td>
</tr>
<tr>
<td>Junior Field Personnel</td>
<td>$50- $90</td>
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<tr>
<td>Administrative Coordinator</td>
<td>$85-$140</td>
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<tr>
<td>Administrative</td>
<td>$55- $115</td>
</tr>
<tr>
<td>Corporate Admin</td>
<td>$70- $120</td>
</tr>
</tbody>
</table>

**Reimbursable Expenses**

1. All materials and supplies used in the performance of work on this project will be billed at cost plus 10%.

2. Auto mileage will be charged per the standard mileage reimbursement rate established by the Internal Revenue Service. Survey and construction vehicle mileage will be charged on the basis of $0.85 per mile or $65.00 per day.

3. Charges for sub-consultants will be billed at their invoice cost plus 15%.

4. A rate of $6.00 will be charged per HR Green labor hour for a technology and communication fee.

5. All other direct expenses will be invoiced at cost plus 10%.