STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

JOINT PETITION OF CITY OF EVANSVILLE, INDIANA AND JOHNSON CONTROLS, INC. FOR APPROVAL OF A GUARANTEED PERFORMANCE CONTRACT AND ASSOCIATED FINANCING TERMS.	)	**CAUSE NO. 44295**

JOINT PETITION

The City of Evansville, Indiana, acting through its Water and Sewer Utility Board ("Evansville" or "City"), and Johnson Controls, Inc. ("JCI") (collectively, "Joint Petitioners") request that the Indiana Utility Regulatory Commission ("Commission") grant such approvals and authorizations as are necessary for Evansville to enter into a guaranteed performance contract between it and JCI and to finance the assets and services to be provided by JCI, as hereinafter described. In support thereof they state that:

1. Evansville is a municipal corporation situated in Vanderburgh County, Indiana. Evansville owns, operates, manages and maintains facilities used for the production, treatment and distribution of water utility service to the public in the Evansville area ("Water Utility"). Evansville also owns, operates, manages and maintains facilities for the collection, treatment and disposal of wastewater generated by the public within the City ("Sewer Utility"). The Water Utility is a municipally owned utility, as that term is defined in Indiana Code § 8-1-2-1, and is subject to the jurisdiction of this Commission to the extent provided by law. The Sewer Utility is not subject to this Commission's jurisdiction. The Sewer Utility determines its customers' bills for service based on the amount of water used.

2. JCI is a corporation organized and existing under the laws of Wisconsin. Among other things, JCI is engaged in the business of evaluating utility operations and identifying opportunities for energy and other savings and then implementing actions to realize those savings for its customers. JCI was selected by Evansville over one other qualified respondent to a request for proposal issued by Evansville for the project that is the subject of this petition.

3. Joint Petitioners have entered into an agreement ("Contract"), a copy of which is attached as Exhibit A hereto, pursuant to which JCI will purchase and install approximately 44,000 new water meters and approximately 17,000 new registers, as well as a state of-the-art data service and meter-reading system, with the intent of improving the functioning of the systems of both the Water Utility and the Sewer Utility. The cost of such improvements is expected to be allocated to these two utilities based on the benefits realized by them. The Contract calls for JCI to guarantee performance which will provide specific positive financial benefits for both the Water Utility and the Sewer Utility.

4. Evansville intends to finance its obligations under the Contract by means of revenue bonds, bond anticipation notes, installment purchase contracts, capital leases or certificates of participation (or any combination thereof), with payments anticipated to be made from increased revenues and cost savings from the performance to be guaranteed by JCI. In the case of the Water Utility, (a) the increased revenues are anticipated to result from reductions in unaccounted-for or inaccurately accounted-for water and (b) the cost savings are anticipated to be derived from increased operating efficiencies.

5. The Contract was negotiated pursuant to Indiana Code ch. 36-1-12.5, which Joint Petitioners believe does not require Commission approval. In Cause No. 44123, Joint Petitioners sought Commission approval of the predecessor agreement to the Contract ("Prior Contract"), as

well as authorization for Evansville to issue debt to finance the construction of the project, to the extent necessary under Indiana Code ch. 8-1.5-2.

6. In its Order in Cause No. 44123 dated August 15, 2012, the Commission denied Evansville's request to issue debt to finance the costs associated with the Prior Contract, finding that Indiana Code § 8-1.5-2-19(b) requires the utility to demonstrate that it has sufficient funds for the operation, maintenance, and depreciation of the utility, and to pay the principal and interest on the proposed bond issue, together with a surplus or margin of at least ten percent in excess ("Ten Percent Test").

7. Joint Petitioners filed a Petition for Reconsideration and Rehearing in Cause No. 44123, which was denied by the Commission's Order dated October 31, 2012 ("Rehearing Order"). In the Rehearing Order, the Commission held that change orders entered into by Joint Petitioners with respect to the Prior Contract were not the type of new evidence contemplated by 170 IAC 1-1.1-22(e) triggering a rehearing, but instead so modified the Prior Contract as to make it essentially a new contract. The Commission directed Joint Petitioners to file a new petition with the Commission for approval of the Prior Contract as modified by the change orders.

8. This Joint Petition is filed in response to the Commission's guidance in the Rehearing Order. Joint Petitioners' Case-in-Chief filed in support hereof contains evidence that Evansville will have sufficient funds to pay for the proposed debt service and all other costs associated with the Contract plus a surplus or margin of at least ten percent (10%) in satisfaction of the Ten Percent Test.

9. Following a meeting held more than thirty (30) days prior to the date of this filing among Joint Petitioners, the Indiana Office of Utility Consumer Counselor ("OUCC") and the Commission Staff, the following procedural schedule was deemed agreeable for this case:

January 22, 2013	Joint Petitioners prefile their Joint Petition and testimony and exhibits constituting their Case-in-Chief
February 22, 2013	OUCC and any Intervenors will prefile the testimony and exhibits constituting their respective Cases-in-Chief
March 1, 2013	Joint Petitioners will prefile Rebuttal testimony and exhibits, if any
Early March	Evidentiary Hearing

The parties also agreed that any response or objection to a discovery request shall be made within four (4) business days of the receipt of such request. Any discovery served after noon on a Friday shall be deemed to have been served on the following business day. The parties have agreed to conduct discovery by electronic means.

10. The following are the attorneys for Joint Petitioners and are authorized to accept service of papers on behalf of their clients:

Robert T. Grand, Attorney No. 8258-49
Nicholas K. Kile, Attorney No. 15203-53
Hillary J. Close, Attorney No. 25104-49
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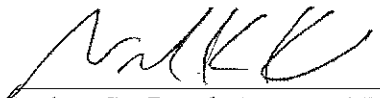
hclose@btlaw.com

WHEREFORE, Joint Petitioners respectfully request that the Commission conduct such hearing as it deems required and thereafter enter an order approving the Contract to the extent deemed necessary and associated financing arrangements and granting such other relief as is deemed necessary or appropriate by the Commission in this matter.

Respectfully submitted,



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nkile@btlaw.com
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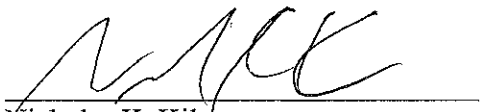
Attorneys for Joint Petitioners City of Evansville, Indiana and Johnson Controls, Inc.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that two copies of the foregoing were served this 22nd day of January 2013, by hand delivery and/or U.S. mail, postage prepaid, upon the following counsel of record:

Office of the Utility Consumer Counselor
PNC Center
115 W. Washington Street, Suite 1500 South
Indianapolis, Indiana 46204



Nicholas K. Kile

AMENDED AND RESTATED PERFORMANCE CONTRACT

This Amended and Restated Performance Contract (this "Agreement") is made this ___ day of _____, 2012 between:

PARTIES

JOHNSON CONTROLS, INC. ("JCI")
1255 NORTH SENATE AVENUE
INDIANAPOLIS, IN 46202

and

EVANSVILLE WATER & SEWER UTILITIES ("Customer", "Owner", "Client")
1 NW MARTIN LUTHER KING, JR. BLVD.
EVANSVILLE, IN 47708

RECITALS

WHEREAS, Customer and JCI executed that certain Performance Contract as of November 15, 2011 (the "Original Agreement");

WHEREAS, this Agreement shall amend and replace such Original Agreement;

WHEREAS, Customer desires to retain JCI to perform the work specified in Schedule 1 (Scope of Work) hereto (the "Work") relating to the installation of the improvement measures (the "Improvement Measures") described therein; and

WHEREAS, Customer is authorized and empowered under applicable Laws (as defined below) to enter into this Agreement, and has taken all necessary action under applicable Laws to enter into this Agreement; and

WHEREAS, Customer has selected JCI to perform the Work after it determined JCI's proposal was the most advantageous to Customer in accordance with all applicable procurement and other Laws.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the parties agree as follows:

AGREEMENT

1. **SCOPE OF THE AGREEMENT.** JCI shall perform the Work set forth in Schedule 1. After each Improvement Measure has achieved Substantial Completion (as defined below), JCI shall provide to Customer a Certificate of Substantial Completion for each such Improvement Measure, and upon approval by Customer, Customer and JCI shall execute such certificate. Thereafter, after each Improvement Measure has achieved Final Completion (as defined below), JCI shall provide to Customer a Cerificate of Final Completion for each such Improvement Measure, and upon approval by Customer, Customer and JCI shall execute each such Certificate. The Assured Performance Guarantee (as defined in Schedule 2 and Schedule 2A) shall become effective upon Final Completion of all Improvement Measures and the measurement and verification services (the "M&V Services") shall also begin at such time, each as set forth in Schedule 2 (Assured Performance Guarantee – Non-Metered Projects) and Schedule 2A (Assured Performance Guarantee – Utility Meters). Customer shall make payments to JCI for the Work and the M&V Services in accordance with Schedule 4 (Price and Payment Terms).

2. **AGREEMENT DOCUMENTS:** In addition to the terms and conditions of this Agreement, the following Schedules and Attachments are incorporated into and shall be deemed an integral part of this Agreement:

Schedule 1 – Scope of Work
Schedule 2 – Assured Performance Guarantee
Schedule 2A – Assured Performance Guarantee – Utility Meters
Schedule 3 – Customer Responsibilities
Schedule 4 – Price and Payment Terms
Schedule 5 – Change Orders
Attachment 1 – Notice to Proceed
Attachment 2 – Change Orders
Attachment 3 – Certificate of Substantial Completion
Attachment 4 – Certificate of Final Completion
Attachment 5 – Lighting Line-By-Line Details

In the event of any conflict between or among any of the terms and conditions set forth in this Agreement and those set forth in the Schedules, Attachments or any other contract document that cannot be resolved so as to give full effect to both or all provisions, the terms and conditions set forth in this Agreement shall control over the terms and conditions set forth in any of other documents.

3. **NOTICE TO PROCEED; SUBSTANTIAL COMPLETION; M&V SERVICES.** This Agreement shall become effective on the date of the last signature on the signature page below. JCI shall commence performance of the Work within ten (10) business days of receipt of Customer's Notice to Proceed, a form of which is attached hereto as Attachment 1. The Notice to Proceed issued by Customer and acknowledged by JCI on November 15, 2011 is void and of no effect. JCI shall achieve Substantial Completion of the Work by the Substantial Completion date, which shall be the earlier of:

(a) the date on which Customer executes a Certificate of Substantial Completion substantially in the form attached hereto as Attachment 3;

or

(b) 26 months after JCI's receipt of Customer's Notice to Proceed, subject to adjustments set forth in Section 4 and Section 5 below.

JCI shall provide to Customer written verification of the date of Substantial Completion for each Improvement Measure within not more than five (5) business days after Substantial Completion of each Improvement Measure, which verification must be countersigned by Customer to finalize such Substantial Completion, provided, however, that JCI's failure to provide such written verification within five (5) business days will not constitute a breach of this Agreement.

For purposes of this Agreement, "Substantial Completion" means that JCI has provided and installed sufficient materials and services to permit Customer to operate the Improvement Measures. The Customer acknowledges and agrees that different Improvement Measures may achieve Substantial Completion and Final Completion at different times, and that the corresponding warranty associated with such Improvement Measures will similarly begin at different times. The M&V Services shall commence on the first day of the month following the month in which Customer executes a Certificate of Final Completion for the entire Project and shall continue throughout the Guarantee Term, subject to earlier termination of the Assured Performance Guarantee as provided herein. Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails in any material respect to fulfill any of Customer's responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, JCI shall provide notice of such breach or failure to Customer, and Customer shall have a period of thirty (30) days to

cure such breach or failure; provided, however, in the event that such breach or failure cannot be cured within such thirty (30) days period, Customer shall promptly take steps in furtherance of such cure within such thirty (30) day period and shall thereafter diligently pursue such cure until completion. In the event that Customer fails to cure such breach or failure within the thirty (30) day cure period or the extended cure period referenced above, JCI may, upon notice to Customer, terminate the Assured Performance Guarantee; provided, however, to the extent that JCI owes any sums to Customer pursuant to the Assured Performance Guarantee with respect to time periods occurring prior to the date of such termination, JCI shall promptly pay such amounts to Customer and the termination of the Assured Performance Guarantee shall have no effect on and shall not terminate JCI's obligations to pay such amounts to Customer. Provided further, in the event that JCI is in default of any of its obligations hereunder at the time JCI is attempting to terminate the Assured Performance Guarantee under this Section 3, JCI must cure such default prior to any termination of the Assured Performance Guarantee hereunder. Note: for purposes of JCI's warranty, it is anticipated that different scopes of work will achieve Substantial Completion and Final Completion at different times.

4. **DELAYS AND IMPACTS.** If JCI is delayed in the commencement, performance, or completion of the Work and/or M&V Services by causes beyond its control and without its fault, including but not limited to inability to access property; concealed or unknown conditions encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work; a Force Majeure (as defined below) condition; failure by Customer to perform its obligations under this Agreement; or failure by Customer to cooperate with JCI in the timely completion of the Work, JCI shall provide written notice to Customer of the existence, extent of, and reason for such delays and impacts. Under such circumstances, an equitable adjustment in the time for performance, price and payment terms, and the Assured Performance Guarantee shall be made.

5. **ACCESS.** Customer shall provide JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties in Customer's control that are subject to the Work and M&V Services. Customer further agrees to assist JCI, its subcontractors, and its agents to gain access to facilities and properties that are not controlled by Customer but are necessary for JCI to complete the Work and provide the M&V Services. An equitable adjustment in the time for performance, price and payment terms, and Assured Performance Guarantee shall be made as a result of any failure to grant such access.

6. **PERMITS, TAXES, AND FEES.** Unless otherwise specified in Schedule 3 (Customer Responsibilities), JCI shall be responsible for obtaining all building permits required for it to perform the Work. Unless otherwise specified in Schedule 1 (Scope of Work), Customer shall be responsible for obtaining all other permits, licenses, approvals, permissions and certifications, including but not limited to, all zoning and land use changes or exceptions required for the provision of the Work or the ownership and use of the Improvement Measures. JCI shall not be obligated to provide any changes to or improvement of the facilities or any portion thereof required under any applicable building, fire, safety, sprinkler or other applicable code, standard, law, regulation, ordinance or other requirement unless the same expressly regulates the installation of the Improvement Measures. Without limiting the foregoing, JCI's obligations with respect to the Work is not intended to encompass any changes or improvements that relate to any compliance matters (whether known or unknown) that are not directly related to the installation of the Improvement Measures or which have been imposed or enforced because of the occasion or opportunity of review by any governmental authority. Customer shall be responsible for and shall pay when due all assessments, charges and sales, use, property, excise, or other taxes now or hereafter imposed by any governmental body or agency upon the provision of the Work or the M&V Services, implementation or presence of the Improvement Measures, the use of the Improvement Measures or payments due to JCI under this Agreement, other than taxes upon the net income of JCI. Customer shall also be responsible for real or personal property taxes relating to equipment or material included in the Improvement Measures.

Any fees, taxes, or other lawful charges paid by JCI on account of Customer shall become immediately due from Customer to JCI.

7. **WARRANTY.** JCI will perform the Work in a professional, workman-like manner. JCI will promptly re-perform any non-conforming Work for no charge, as long as Customer provides written notice to JCI within one (1) year following Final Completion of each Improvement Measure (or, for the Water Meter Replacement scope of work, within one (1) year following Final Completion of each route) or such other period identified in Schedule 1. If JCI installs or furnishes goods or equipment under this Agreement, and such goods or equipment are covered by an end-user warranty from their manufacturer, JCI will transfer the benefits of such warranty to Customer. The foregoing remedy with respect to the Work, together with any remedy provided by goods or equipment manufacturers, shall be Customer's sole and exclusive remedies for warranty claims. If JCI installs or furnishes goods or equipment under this Agreement, and such goods or equipment are covered by an end-user warranty from their manufacturer, JCI will transfer the benefits of such warranty to Customer. Customer agrees that the one (1) year period following Final Completion of each Improvement Measure (or, for the Water Meter Replacement scope of work, within one (1) year following Final Completion of each route), or such other period identified in Schedule 1, shall be a reasonable time for purposes of submitting valid warranty claims with respect to the Work. These exclusive remedies shall not have failed of their essential purpose so long as JCI transfers the benefits of any goods or equipment end-user warranty to Customer and remains willing to re-perform any non-conforming Work for no charge within the one (1) year period described above or such other period identified in Schedule 1. NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE PROVIDED BY JCI. This warranty does not extend to any Work that has been abused, altered, or misused, or repaired by Customer or third parties without the supervision or prior written approval of JCI. Except with respect to goods or equipment manufactured by JCI and furnished to Customer hereunder, for which JCI shall provide its express written manufacturer's warranty, JCI shall not be considered a merchant or vendor of goods or equipment.

8. **CLEANUP/REPAIR.** JCI shall keep the premises and the surrounding area free from accumulation of waste materials or rubbish caused by the Work and, upon completion of the Work, JCI shall remove all waste materials, rubbish, tools, construction equipment, machinery, and surplus materials. In the event that JCI or any of its employees or agents causes any damage to any premises or injury to any person where Work is being performed, JCI shall promptly repair such damages and shall indemnify Customer from and against any and all damages, costs, expenses, liabilities, claims, penalties, and actions arising out of or related to any such damages to such premises or injury to such person.

9. **SAFETY; COMPLIANCE WITH LAWS.** JCI shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work and M&V Services. Each of JCI and Customer shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities (collectively, "Laws") in connection with its performance hereunder.

10. **ASBESTOS-CONTAINING MATERIALS AND OTHER HAZARDOUS MATERIALS.**

Asbestos-Containing Materials: Neither party desires to or is licensed to undertake direct obligations relating to the identification, abatement, cleanup, control, removal or disposal of asbestos-containing materials ("ACM"). Consistent with applicable Laws, Customer shall use reasonable efforts to supply JCI with any information in its possession relating to the presence of ACM in areas where JCI undertakes any Work or M&V Services that may result in the disturbance of ACM. It is JCI's policy to seek certification for facilities constructed prior to 1982 that no ACM is present, and Customer shall use reasonable efforts to provide such certification for buildings it owns, or shall use reasonable efforts to aid JCI in obtaining such certification from facility owners in the case of buildings that Customer does not own, if JCI will undertake Work or

M&V Services in the facility that could disturb ACM. If either Customer or JCI becomes aware of or suspects the presence of ACM that may be disturbed by JCI's Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other. As between Customer and JCI, Customer shall be responsible at its sole expense for addressing the potential for or the presence of ACM in conformance with all applicable Laws and addressing the impact of its disturbance before JCI continues with its Work or M&V Services, unless JCI had actual knowledge that ACM was present and acted with intentional disregard of that knowledge, in which case (i) JCI shall be responsible at is sole expense for remediating areas impacted by the disturbance of the ACM, and (ii) Customer shall resume its responsibilities for the ACM after JCI's remediation has been completed.

Other Hazardous Materials: JCI shall be responsible for removing or disposing of any Hazardous Materials (as defined below) that it uses in providing Work or M&V Services ("JCI Hazardous Materials") and for the remediation of any areas impacted by the release of JCI Hazardous Materials. For other Hazardous Materials that may be otherwise present at Customer's facilities ("Non-JCI Hazardous Materials"), Customer shall supply JCI with any information in its possession relating to the presence of such materials if their presence may affect JCI's performance of the Work or M&V Services. If either Customer or JCI becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with JCI's Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other. As between Customer and JCI, Customer shall be responsible at its sole expense for removing and disposing of Non-JCI Hazardous Materials from its facilities and the remediation of any areas impacted by the release of Non-JCI Hazardous Materials, unless JCI had actual knowledge that Non-JCI Hazardous Materials were present and acted with intentional disregard of that knowledge, in which case (i) JCI shall be responsible at its sole expense for the remediation of any areas impacted by its release of such Non-JCI Hazardous Materials, and (ii) Customer shall remain responsible at its sole expense for the removal of Non-JCI Hazardous Materials that have not been released and for releases not resulting from JCI's performance of the Work or M&V Services. For purposes of this Agreement, "Hazardous Materials" means any material or substance that, whether by its nature or use, is now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant or contaminant under applicable Law relating to or addressing public or employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, mutagenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product, or polychlorinated biphenyls. "Hazardous Materials" specifically includes mold and lead-based paint and specifically excludes ACM. JCI shall have no obligations relating to the identification, abatement, cleanup, control, removal, or disposal of mold, regardless of the cause of the mold.

11. CHANGE ORDERS. The parties, without invalidating this Agreement, may request changes in the Work to be performed under this Agreement, consisting of additions, deletions, or other revisions to the Work ("Change Orders"). The price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted in accordance with the Change Order. Such adjustments shall be determined by mutual agreement of the parties. JCI may delay performance until adjustments arising out of the Change Order are clarified and agreed upon. Any Change Order must be signed by an authorized representative of each party. If conditions are encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work, price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted. Claims for equitable adjustment may be asserted in writing within a reasonable time from the date a party becomes aware of a change to the Work by written notification. Failure to promptly assert a request for equitable adjustment, however, shall not constitute a waiver of any rights to seek any equitable adjustment with respect to such change.

12. **CUSTOMER FINANCING; TREATMENT; TAXES.** The parties acknowledge and agree that JCI is not making any representation or warranty to Customer with respect to matters not expressly addressed in this Agreement, including, but not limited to:

(a) Customer's ability to obtain or make payments on any financing associated with paying for the Improvement Measures, related services, or otherwise;
(b) Customer's proper legal, tax, accounting, or credit rating agency treatment relating to this Agreement; and
(c) the necessity of Customer to raise taxes or seek additional funding for any purpose.

Customer is solely responsible for its obligations and determinations with respect to the foregoing matters. In addition, the parties acknowledge and agree that Customer shall be responsible to comply, at its cost and expense, with all Laws that may be applicable to it relating to performance contracting, including, without limitation, any requirements relating to the procurement of goods and/or services and any legal, accounting, or engineering opinions or reviews required or obtained in connection with this Agreement.

13. **INSURANCE.** JCI shall maintain insurance in amounts no less than those set forth below in full force and effect at all times until the Work has been completed, and shall provide a certificate evidencing such coverage promptly following Customer's request therefor.

COVERAGES	LIMITS OF LIABILITY
Workmen's Compensation Insurance or self insurance, including Employer's Liability	Statutory
Commercial General Liability Insurance	$5,000,000 Per Occurrence $5,000,000 Aggregate
Comprehensive Automobile Liability Insurance	$5,000,000 Combined Single Limit

The above limits may be obtained through primary and excess policies, and may be subject to self-insured retentions.

Customer shall be responsible for obtaining builder's risk insurance coverage for the Improvement Measures and shall at all times be responsible for any loss or casualty to the Improvement Measures. Customer shall also maintain insurance coverage, of the types and in the amounts customary for the conduct of its business, throughout the term of this Agreement.

JCI shall provide bonds covering faithful performance of the Contract and payment of obligations arising hereunder.

14. **INDEMNIFICATION.** To the fullest extent permitted by applicable Law and subject to the limitation on the liability of Customer as a political subdivision of the State of Indiana, under the laws of the State of Indiana, including the Indiana Tort Claims Act, each party shall indemnify the other with respect to any third party claim alleging bodily injury, including death, or property damage to the extent such injury or damage is caused by the negligence or willful misconduct of the indemnifying party. A condition precedent to any obligation of a party to indemnify the other pursuant to this Section 14 shall be for the indemnified party to promptly advise the indemnifying party of the claim pursuant to the notice provision of this Agreement.

15. **LIMITATION OF LIABILITY.** WITHOUT LIMITING JCI'S EXPRESS OBLIGATIONS UNDER THE ASSURED PERFORMANCE GUARANTEE, NEITHER JCI NOR CUSTOMER WILL BE RESPONSIBLE TO THE OTHER FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, REMOTE, PUNITIVE, EXEMPLARY, LOSS OF PROFITS OR REVENUE, LOSS OF USE, OR SIMILAR DAMAGES, REGARDLESS OF HOW CHARACTERIZED AND REGARDLESS OF A PARTY HAVING BEEN ADVISED OF THE POSSIBILITY OF SUCH POTENTIAL LOSSES OR RELIEF, ARISING IN ANY MANNER FROM THIS AGREEMENT, THE WORK, THE

IMPROVEMENT MEASURES, THE PREMISES, THE M&V SERVICES, OR OTHERWISE. JCI'S LIABILITY UNDER THIS AGREEMENT (OTHER THAN ITS LIABILITY FOR THE ASSURED PERFORMANCE GUARANTEES), REGARDLESS OF THE FORM OF ACTION, SHALL IN NO EVENT EXCEED THE AMOUNT OF THE PAYMENTS ACTUALLY RECEIVED BY JCI UNDER SCHEDULE 4. THE CUSTOMER'S OBLIGATION TO INDEMNIFY JCI OR ANY OTHER ENTITY UNDER THIS AGREEMENT SHALL BE SUBJECT TO THE LIMITATION ON THE LIABILITY OF CUSTOMER AS A POLITICAL SUBDIVISION OF THE STATE OF INDIANA, UNDER THE LAWS OF THE STATE OF INDIANA, INCLUDING THE INDIANA TORT CLAIMS ACT. If this Agreement covers fire safety or security equipment, Customer understands that JCI is not an insurer regarding those services, and that JCI shall not be responsible for any damage or loss that may result from fire safety or security equipment that fails to prevent a casualty loss. The foregoing waivers and limitations are fundamental elements of the basis for this Agreement between JCI and Customer, and each party acknowledges that JCI would not be able to provide the work and services contemplated by this Agreement on an economic basis in the absence of such waivers and limitations, and would not have entered into this Agreement without such waivers and limitations.

16. **FORCE MAJEURE.** Neither party will be responsible to the other for damages, loss, injury, or delay caused by conditions that are beyond the reasonable control, and without the intentional misconduct or negligence of that party. Such conditions (each, a "Force Majeure") include, but are not limited to: acts of God; acts of government agencies; strikes; labor disputes; fires; explosions or other casualties; thefts; vandalism; riots or war; acts of terrorism; electrical power outages; interruptions or degradations in telecommunications, computer, or electronic communications systems; changes in Laws; or unavailability of parts, materials or supplies.

17. **JCI'S PROPERTY.** All materials furnished or used by JCI personnel and/or JCI subcontractors or agents at the installation site, including documentation, schematics, test equipment, software and associated media remain the exclusive property of JCI or such other third party. Customer agrees not to use such materials for any purpose at any time without the express authorization of JCI; provided, however, Customer may use such documents and schematics as may be furnished to Customer by JCI to make any repairs necessary with respect to the equipment installed pursuant to this Agreement. Customer agrees to allow JCI personnel and/or JCI subcontractors or agents to retrieve and to remove all such materials remaining after installation or maintenance operations have been completed. Customer acknowledges that any software furnished in connection with the Work and/or M&V Services is proprietary and subject to the provisions of any software license agreement associated with such software.

18. **DEFAULT.**

(a) The occurrence of any of the following on the part of JCI shall constitute default or event of default by JCI hereunder: (i) failure to make any undisputed payments when due; (ii) failure to comply in any material respect with any covenant or provision contained in this Agreement; and (iii) any other default as otherwise specified herein. In the event of a payment default by JCI, Customer shall provide written notice of such default and JCI thereafter shall have thirty (30) days to cure such payment default. In the event such payment default is not cured within such thirty (30) day period, such past due amount shall be subject to interest at the rate of ten percent (10%) per annum, which interest shall accrue until and be paid when such past due amount is paid in full. For any non-payment default by JCI, Customer shall provide written notice to JCI of such default, and JCI shall thereafter have thirty (30) days to cure such non-payment default; provided, however, if curing such default cannot reasonably be accomplished within such thirty (30) day period, JCI must start curing such default within such thirty (30) day period and thereafter diligently pursue such cure until completed. In the event that JCI fails to cure any default within the applicable cure period set forth above, Customer may, in its discretion, terminate this Agreement upon written notice to JCI and/or seek any other remedies available at law or in equity; provided, however, any and all Assured Performance Guarantee obligations owed to Customer by JCI prior to any such termination shall remain obligations of JCI and shall be paid to

Customer within thirty (30) days after such termination. The obligations of JCI set forth in the prior sentence of this Section 18 shall survive termination of this Agreement.

(b) The occurrence of any of the following on the part of Customer shall constitute default or event of default by Customer hereunder: (i) failure to make any payments when due; (ii) failure to comply in any material respect with any covenant or provision contained in this Agreement; and (iii) any other default as otherwise specified herein. In the event of a payment default by Customer, JCI shall provide written notice of such default and Customer thereafter shall have five (5) days to cure such payment default. For any non-payment default by Customer, JCI shall provide written notice to Customer of such default, and Customer shall thereafter have thirty (30) days to cure such non-payment default; provided, however, if curing such default cannot reasonably be accomplished within such thirty (30) day period, Customer must start curing such default within such thirty (30) days period and thereafter diligently pursue such cure until completed. In the event that Customer fails to cure any default within the applicable cure period set forth above, JCI may, in its discretion, terminate the Agreement and the Assured Performance Guarantee or seek any other remedies available at law or in equity; provided, however, any and all Assured Performance Guarantee obligations owed to Customer by JCI prior to any such termination shall remain obligations of JCI and shall be paid to Customer within thirty (30) days after such termination. The obligations of JCI set forth in the prior sentence of this Section 18 shall survive termination of this Agreement. Provided further, notwithstanding the foregoing, in the event that Customer has breached any terms of this Agreement, has failed to comply with any terms of this Agreement, has failed to comply with the Assured Performance Guarantee or is otherwise in default hereunder, Customer shall not have the right to terminate the Assured Performance Guarantee as set forth above.

19. **CHANGE ORDERS.** Change Orders No. 1, No. 2, No. 3, No. 4, and No. 5 to the Original Agreement attached hereto as Schedule 5, and Change Order No. 6 to this Agreement, attached hereto as Schedule 5, are hereby incorporated herein by this reference, and notwithstanding anything contained herein to the contrary, this Agreement, including the Schedules hereto, is hereby deemed amended as set forth in such Change Orders.

20. **TERMINATION.** Either party may terminate this Agreement (a) upon mutual agreement to so terminate, (b) if the Indiana Utility Regulatory Commission ("IURC") does not approve the financing for this Agreement or the transactions contemplated hereby, or (c) if Customer fails to obtain reasonable financing within one hundred twenty (120) days (or such other period of time as the parties may agree) after IURC approval of the Original Agreement; provided, however, that if Customer fails to obtain reasonable financing as set forth herein, the parties shall work together using their best efforts to secure alternative financing for the project and shall not terminate this Agreement until all commercially reasonable financing alternatives have been considered and rejected in good faith. If this Agreement is so terminated, neither party shall have any further liability to the other party.

21. **DISPUTES.** JCI and Customer will attempt to settle any controversy, dispute, difference, or claim between them concerning the performance, enforcement, or interpretation of this Agreement (collectively, "Dispute") through direct discussion in good faith, but if unsuccessful, will submit any Dispute to non-binding mediation in Evansville, Indiana, where the project is performed, unless the parties mutually agree upon a different location. If the parties are unable to agree on a mediator or a date for mediation, either party may request JAMS, Inc. to appoint a mediator and designate the time and procedure for mediation. Such mediator shall be knowledgeable, to each party's reasonable satisfaction, with respect to matters concerning construction law. Neither JCI nor Customer will file a lawsuit against the other until not less than sixty (60) days after the mediation referred to herein has occurred, unless one or both parties is genuinely and reasonably concerned that any applicable statute of limitations is on the verge of expiring.

22. **GOVERNING LAW.** This Agreement and the construction and enforceability thereof shall be interpreted in accordance with the laws of the state where the Work is conducted.

23. **CONSENTS; APPROVALS; COOPERATION**. Whenever a party's consent, approval, satisfaction or determination shall be required or permitted under this Agreement, and this Agreement does not expressly state that such party may act in its sole discretion, such consent, approval, satisfaction or determination shall not be unreasonably withheld, qualified, conditioned or delayed, whether or not such a "reasonableness" standard is expressly stated in this Agreement. Whenever a party's cooperation is required by the other party in order to carry out the other party's obligations hereunder, such party agrees that it shall act in good faith and reasonably in so cooperating with the other party and/or the other party's designated representatives or assignees or subcontractors. Each party shall use reasonable efforts to furnish decisions, information, and approvals required by this Agreement in a timely manner so as not to delay the performance of the Work or M&V Services.

24. **FURTHER ASSURANCES.** The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Agreement.

25. **INDEPENDENT CONTRACTOR.** The relationship of the parties hereunder shall be that of independent contractors. Nothing in this Agreement shall be deemed to create a partnership, joint venture, fiduciary, or similar relationship between the parties.

26. **POWER AND AUTHORITY.** Each party represents and warrants to the other that (i) it has all requisite power and authority to execute and deliver this Agreement and perform its obligations hereunder, (ii) all corporate, board, body politic, or other approvals necessary for its execution, delivery, and performance of this Agreement have been or will be obtained, and (iii) this Agreement constitutes its legal, valid, and binding obligation.

27. **SEVERABILITY.** In the event that any clause, provision, or portion of this Agreement or any part thereof shall be declared invalid, void, or unenforceable by any court having jurisdiction, such invalidity shall not affect the validity or enforceability of the remaining portions of this Agreement unless the result would be manifestly inequitable or materially impair the benefits intended to inure to either party under this Agreement.

28. **COMPLETE AGREEMENT.** It is understood and agreed that this Agreement contains the entire agreement between the parties relating to all issues involving the subject matter of this Agreement. No binding understandings, statements, promises or inducements contrary to this Agreement exist. This Agreement supersedes and cancels all previous agreements, negotiations, communications, commitments and understandings with respect to the subject matter hereof, whether made orally or in writing. Each of the parties to this Agreement expressly warrants and represents to the other that no promise or agreement which is not herein expressed has been made to the other, and that neither party is relying upon any statement or representation of the other that is not expressly set forth in this Agreement. Each party hereto is relying exclusively on the terms of this Agreement, its own judgment, and the advice of its own legal counsel and/or other advisors in entering into this Agreement. Customer acknowledges and agrees that any purchase order issued by Customer associated with this Agreement is intended only to establish payment authority for Customer's internal accounting purposes. No purchase order shall be considered a counteroffer, amendment, modification, or other revision to the terms of this Agreement.

29. **HEADINGS.** The captions and titles in this Agreement are for convenience only and shall not affect the interpretation or meaning of this Agreement.

30. **COUNTERPARTS.** This Agreement may be executed in any number of counterparts, all of which when taken together shall constitute one single agreement between the parties.

31. **NOTICES.** All notices or communications related to this Agreement shall be in writing and shall be deemed served if and when sent by facsimile or mailed by certified or registered mail: to Johnson Controls, Inc. at the address listed on the first page of this Agreement, ATTN: Regional

Solutions Manager, with a copy to Johnson Controls, Inc., ATTN: General Counsel – Building Efficiency Americas, 507 East Michigan Street, Milwaukee, Wisconsin, 53202: and to Customer at the address listed on the first page of this Agreement.

32. **CONFLICTS.** In the event of any irreconcilable conflicts between the provisions of Sections 1-33 of this Agreement and the terms of any Schedule to this Agreement, the terms of Sections 1–33 of this Agreement shall control.

33. **E-VERIFY COMPLIANCE.** Pursuant to I.C. 22-5-1.7, JCI shall enroll in and verify the work eligibility status of all newly hired employees of JCI through the E-Verify Program ("Program"). JCI is not required to verify the work eligibility status of all newly hired employees through the Program if the Program no longer exists. Also, pursuant to I.C. 22-5-1.7, JCI must execute an affidavit affirming that JCI does not knowingly employ an unauthorized alien and confirming JCI's enrollment in the Program, unless the Program no longer exists, which Affidavit shall be filed with the City prior to the execution of this Agreement.

IN WITNESS WHEREOF, this Agreement has been executed as of the effective date set forth above.

EVANSVILLE WATER & SEWER UTILITIES

Signature: Jeffrey M. Hatfield

Printed Name: JEFFREY M. HATFIELD

Title: PRESIDENT

Date: DECEMBER 11, 2012

JOHNSON CONTROLS, INC.

Signature: DMPeters

Printed Name: David M. Peters

Title: Regional VP and General Manager

Date: DECEMBER 17, 2012

SCOPE OF WORK

SUMMARY OF WORK: The following summarizes the Work to be provided by JCI under this Agreement, as further defined below. In addition to the cost of the Work, Customer also is responsible to pay for the Payment & Performance Bond as required by the Evansville Water & Sewer Utilities, its financial institution or bond counsel as described in Schedule 4 of this agreement.

Scope Of Work Summary:
1. **Water Meter Improvements and Advanced Metering Infrastructure**
2. **Automated Leak Detection**
3. **Municipal Network Infrastructure**
4. **Improvement to Treatment Plants**
5. **Owner Controlled Contingency**

Scope of Work - 1: Meter Replacement and Advanced Metering Infrastructure

This Business Improvement Measure will include new residential water meters, replacement of select large water meters, and the installation of a Sensus FlexNet Advanced Metering Infrastructure (AMI) system; provided, however, notwithstanding anything contained herein to the contrary, the parties understand and agree that Customer may elect not to replace water meters that were installed at any time during the past five (5) years, in which event the Customer will identify any such meters not to be replaced, and the Scope of Work and related price and payment terms will be adjusted accordingly by way of a Change Order.

Goals:

- Increase meter accuracy
- Provide customer more accurate meter information
- Install the correct type of water meter for the application
- Reduce apparent water losses
- Standardize water meter stock
- Reduce time and labor associated with meter reading
- Reduce opportunity for human error in meter reading system
- Minimize the need to estimate consumption when meters cannot be manually read

Assumptions:
Not applicable.

Demolition:
Johnson Controls will collect, store, track and manage the selling of the meter scrap inventory. Proceeds from sale of meter scrap will be added to Customer controlled contingency fund. In addition, Johnson Controls will properly dispose of any other removed equipment which is not kept by the Customer.

Exclusions:
It is understood by the Customer that JCI and its subcontractors will not provide, nor be found responsible for the identification, testing or removal of asbestos or lead. If asbestos or lead is encountered during

construction, JCI shall have no responsibility in connection therewith, and Customer will use reasonable efforts with respect to identification, testing, removal and/or encapsulation, subject to the limitation on the liability of Customer as a political subdivision of the State of Indiana, under the laws of the State of Indiana, including the Indiana Tort Claims Act; provided, however, notwithstanding the foregoing, if JCI had actual knowledge that ACM was present and acted with intentional disregard of that knowledge, in which case (i) JCI shall be responsible at is sole expense for remediating areas impacted by the disturbance of the ACM, and (ii) Customer shall resume its responsibilities for the ACM after JCI's remediation has been completed. Any work relating to lead that goes beyond the unscrewing and screwing of couplings in order to remove and install meters will not be the responsibility of Johnson Controls. Johnson Controls will not be responsible for any work that requires cutting or torching any lead pipe.

Warranties:

1. One (1) year warranty on materials and labor beginning at the date of Final Completion by route.
2. A 20 year warranty will be provided for any SmartPoint meter transmitting unit configuration. Note: Any replacement SmartPoint meter transmitting unit provided in years 11 through 20 will be covered with the remainder of the original unit's warranty term; i.e., any unit that fails in years 1 through 10 will be replaced with a new unit that has a full 20 year (10/10) warranty. If a unit fails in year 12, the replacement unit would be provided (at no charge) with an 8 year warranty.
3. Specific details for each extended warranty, including the SmartPoint meter transmitting units, will be provided in the O&M manuals.
4. For all equipment purchased from manufacturers other than JCI, (i) to the extent the warranties with respect thereto are transferrable, JCI shall assign such warranties to Customer by written agreement, and (ii) to the extent such warranties are not transferable, Customer shall be the purchaser of such equipment in order to be the direct Beneficiary of such warranties.

All Meters – Miscellaneous Scope of Work:

1. All meter vaults shall be approved by Customer prior to installation; provided, however, such approval shall not be deemed to affect any warranties or obligations of JCI or any manufacturer hereunder.
2. All valves shall be approved by Customer prior to installation; provided, however, such approval shall not be deemed to affect any warranties or obligations of JCI or any manufacturer hereunder.
3. Document meter information including customer account number, service address, existing serial number and size, and the final reading from the existing register.
4. For all new meters, the following information will be documented, including; serial number, meter size, initial register reading, and radio transmitter serial number.
5. Document the latitude and longitude of each meter to within a four (4) meter radius using a GPS device.
6. Provide and install couplings, connectors, gaskets, and accessories as required.
7. Commissioning of all meters.
8. System performance measure for route sign-off: Billing reads - 98% of the billing reads shall be obtained for all installed meters, within a route and within a 3-day read window and containing all of the billing determinants needed to generate a bill.
9. Removed meters will remain the property of Customer.
10. All manufacturer product warranties will be transferred directly to Customer upon installation

Meters Not Addressed Through Original Survey:

Account Number: 614-21450
Customer Name: HK Partners
Service Address: Washington Square
Meter Size: 4" (Manufacturer and Serial Number Unknown)

Comments: This account is in the billing system extract, but it was not included in the list of large water meters to be surveyed that was provided to Johnson Controls by the City of Evansville. Moreover, M.E. Simpson, the large meter testing and repair firm retained by the City of Evansville, has no record of this meter in their database. Johnson Controls will survey the meter and incorporate it into the Scope of Work.

Account number 614-21430 serves HK Partners. It was surveyed as a 4" Neptune TruFlo compound meter, serial number 40100041. The meter was tested and found to be 100.13% accurate and is included in the Scope of Work.

Account Number: 615-20395
Customer Name: SW Indiana Mental Health
Service Address: 30 Stockwell Road (S)
Meter Size: 2" Neptune T-10, S/N 31614483
Comments: This meter was surveyed and found to be a 2" positive displacement meter and not a large water meter. This service is therefore included in the intermediate water meter Scope of Work.

Account Number: 617-23440
Customer Name: K & G Mobile Home
Service Address: 301 Sequoia Lane
Meter Size: 1" Sensus SR, S/N 46147835
Comments: This meter was surveyed and found to be a 1" positive displacement meter and not a large water meter. This service is therefore included in the small water meter Scope of Work.

Account Number: 617-23754
Customer Name: GolFire Lineoor Baseball
Service Address: Golfmoor Road
Meter Size: 2" Compound
Comments: This account was neither included in the billing system extract nor was it included in the list of large water meters to be surveyed that was provided to Johnson Controls by the City of Evansville. Moreover, M.E. Simpson, the large meter testing and repair firm retained by the City of Evansville, has no record of this meter in their database. Johnson Controls has determined, however, that this is a 2" compound meter that is included in the intermediate water meter Scope of Work.

Account Number: 617-24260
Customer Name: Bootz Mfg Co
Service Address: 915 St. Joe Avenue (W)
Meter Size: 2" Neptune T-10, S/N 21099064
Comments: This meter was surveyed and found to be a 2" positive displacement meter and not a large water meter. This service is therefore included in the intermediate water meter Scope of Work. Note: the billing system incorrectly lists this service as having a 3" meter.

Account Number: 618-22040
Customer Name: Evansville Surgery Center
Service Address: 520A Mary Street
Meter Size: 4" Neptune TruFlo, S/N Unknown
Comments: This meter was surveyed, and the meter initially tested at 78.7% accuracy. The meter was repaired and re-tested where it met AWWA minimum new meter accuracy standards. It is included in Item #6F of the Scope of Work.

Account Number: 681-20750
Customer Name: Whirlpool
Service Address: 5401 Highway 41 North [B]
Meter Size: 6" Rockwell SRM, S/N 30975766

Comments: This meter was tested by M.E. Simpson in September 2007. The account was neither included in the billing system extract nor included in list of large meters to be surveyed that was provided to Johnson Controls by the City of Evansville. Moreover, M. E. Simpson did not attempt to test this meter in 2011.

Given that the facility is currently closed, it may be prudent to exclude this service from the Scope of Work. Johnson Controls will incorporate this service into the Scope of Work, however, if the City so desires.

Account Number: 681-20770
Customer Name: Whirlpool
Service Address: 5401 Highway 41 North [B]
Meter Size: 6" Sensus SRH, S/N 1148980
Comments: This meter was tested by M.E. Simpson in September 2007. The account was neither included in the billing system extract nor included in list of large meters to be surveyed that was provided to Johnson Controls by the City of Evansville. Moreover, M. E. Simpson did not attempt to test this meter in 2011.

Given that the facility is currently closed, it may be prudent to exclude this service from the Scope of Work. Johnson Controls will incorporate this service into the Scope of Work, however, if the City so desires.

Account Number: 698-02709
Customer Name: Spurling Development
Service Address: 4500 Theater Drive
Meter Size: 6" Neptune Protectus III, S/N 60130015
Comments: This meter was surveyed and tested to be 100.17% accurate. It is included in Item #6B in the Scope of Work.

Account Number: 698-02731
Customer Name: MBA Construction
Service Address: 7100 East Virginia Street
Meter Size: 4" Neptune TruFlo, S/N 40100058
Comments: This meter was surveyed and tested to be 100.43% accurate. It is included in Item #6F in the Scope of Work.

1. Small water meter replacement and Advanced Metering Infrastructure (AMI) system installation for all existing, active services.

JCI shall replace fifty-six thousand, eight hundred and eighty-three (56,883) existing, active 0.625" x 0.75" water meters with new Sensus SRII 0.625" x 0.75" positive displacement meters furnished by the JCI. JCI shall also remove the existing touch coupler housings from the meter box lid and install fifty-six thousand, eight hundred and eighty-three (56,883) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

JCI shall replace two thousand, four hundred and four (2,404) existing, active 1" water meters with new Sensus SRII 1" positive displacement meters furnished by the JCI. JCI shall also remove the existing touch coupler housings from the meter box lid and install two thousand, four hundred and four (2,404) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

It is understood that the Customer's database may improperly identify as many as (3,500) 0.75" meters that are listed as 0.625" x 0.75" water meters. Johnson Controls will provide and install as many as (3,500) 0.75" water meters as part of the (56,883) meter replacements referenced above.

Existing small meter boxes that require significant rework will be replaced with new composite small meter boxes and lids at an additional per unit cost of $600. In addition, Johnson Controls will be responsible for repair or replacement of any sidewalks or roadways damaged in the process.

2. Intermediate water meter replacement and Advanced Metering Infrastructure (AMI) system installation for all existing, active services.

JCI shall replace sixty-nine (69) existing, active 1.5" water meters with new 1.5" Sensus Omni R^2 furnished by the JCI. JCI shall also remove the existing touch coupler housings from the meter box lid and install sixty-nine (69) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

JCI shall replace one thousand, one hundred and thirty-seven (1,137) existing, active 2" positive displacement water meters with new Sensus Omni R^2 2" meters furnished by the JCI. JCI shall also remove the existing touch coupler housing from the meter box lid and install one thousand, one hundred and thirty-seven (1,137) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

JCI shall replace forty (40) existing, active 2" positive displacement water meters with new Sensus 2" Omni C^2 measuring chambers that are mounted in Sensus Omni T^2 bodies in order to obtain a 17" lay-length. JCI shall provide the new water meters and the list of services to receive these meters. JCI shall also remove the existing touch coupler housings from the meter box lid and install forty (40) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

JCI shall replace fifty-two (52) existing, active 2" horizontal turbine water meters with new Sensus 2" Omni T^2 meters without the integral strainer (10" lay-length) furnished by the JCI. JCI shall also remove the existing touch coupler housing from the meter box lid and install fifty-two (52) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint.

JCI shall replace two hundred and eighty (280) existing, active 2" compound water meters with new Sensus 2" Omni C^2 meters with the integral strainer (15.25" lay-length) furnished by the JCI. JCI shall also remove one of the existing touch coupler housings from the meter box lid and install two hundred and eighty (280) Sensus 520M SmartPoints furnished by the JCI. JCI shall then insert the TR/PL coupler from the new water meter into the receptacle on the new 520M SmartPoint. It is permissible to abandon in place the remaining touch read coupler in the vault lid by cutting the register cable below the coupler housing.

Locations to Receive a New 2" Sensus Omni C^2 Meter

Account No.	Customer Name	Service Address
61120310	HULMAN&CO COURT BLDG	123-25 NW FOURTH ST
61120970	HOLWEGER MGMT	501 MAIN ST
61122550	SWIRCA	16 W VIRGINIA ST
61220950	BRENTWOOD CONVALESENT	30 E CHANDLER AVE
61221370	G I G LLC	9 ADAMS AVE
61221610	R&K HOLDINGS	1322 PARRETT ST
61222470	ULTRA 2 LLC	2625 RHEINHARDT AVE
61222510	ULTRA 2 LLC	2900 S RUSTON AVE
61222530	ULTRA 2 LLC	2625A RHEINHARDT AVE
61321550	THE MARTIN GROUP	1450#7 LUTHER SQ
61321650	GRAND OAK COMMUNITY	1700 NORWOOD SQ
61321790	GRAND OAK COMMUNITY	5021 CASS AVE
61321930	GRAND OAK COMMUNITY	4901 HAZELBRIAR PL
61321990	CAZE	13 CAZE
61322110	C/O VELOCITY	2001 CHEYENNE DR
61322130	C/O VELOCITY	1950 SOSHONI LN
61322710	SIRLOIN STOCKADE	4610 BELLEMEADE AVE
61420034	RAFFERTY'S RESTAURANT & BAR	1400 N GR RIVER RD
61420170	BOB EVANS	1125 N GR RIVER RD
61420330	ACROPOLIS RESTAURANT	501 N GR RIVER RD
61420365	DBK-VISION-MCDONALDS	799 N GR RIVER RD
61420400	ADVANTAGE IQ	943 N GR RIVER RD
61420720	ADVENT IN LLC	314 N GR RIVER RD
61420910	CICI PIZZA	150 PLAZA EAST BLVD
61420970	D PATRICK EAST	200 N GR RIVER RD
61421330		5170 MONROE AVE
61422480	SHIV VANDAN LLC	4819 TECUMSEH LN
61422890	ASHELY COURT APARTMENTS	5800 5824 E FIELDING
61422990	BUSSING CONST CO	BRENTWOOD CIR
61423016	ROMAIN BUICK	7600 E DIVISION ST
61423090	REGENCY CONSILIDATED	400 KIMBER LN
61520950	UNIVERSITY OF EVANSVILLE	216 S WEINBACH AVE
61521290	MEMORIAL HIGH SCHOOL	500 S BENNIGHOF AVE
61722880	UNIV OF SOUTHERN IN	918 UNIVERSITY BLVD
61821810	CENTRAL METH CHURCH	310 MARY ST
61821930	WALTER HARDISON	1010 MARY ST
61822190	ACCOUNTING OFFICE	711 N FIRST AVE
61822210	LEN GRIES	40 W COLUMBIA ST
61943230	VAND CO 4-H CENTER	201 E BNVL NH RD
68120530	MASTER MANUFACTURING CO.	4703 OHARA DR

3. Large water meter replacement and Advanced Metering Infrastructure (AMI) system installation for existing, active services.

A. Account Number: 611-20960

Customer Name: Pearl Launders
Service Address: 428 Market Street
Existing Meter: 4" Rockwell SRM, S/N 31669724
Scope of Work: Remove existing meter from service. Replace both inlet and outlet valves with new gate valves provided by the JCI. Install new 4" Sensus Omni T^2 meter in a Sensus Omni C^2 body provided by the JCI. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint, provided by the JCI. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

B. Account Number: 611-21850

Customer Name: Fifth Third Bank
Service Address: 20 Third Street
Existing Meter: 4" Neptune HP, S/N 31940007
Scope of Work: Remove existing meter, inlet, outlet, and bypass butterfly valves from service. Rework the setting to accommodate a 4" Sensus Omni C^2 meter. Replace inlet, outlet, and bypass butterfly valves with new gate valves. Install a 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint,. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

C. Account Number: 612-21070

Customer Name: Select Specialty Hospital
Service Address: 5th Street and Cherry Street
Existing Meter: 6" Sensus PT, S/N 31558051
Scope of Work: Remove existing meter and outlet valve from service. Rework the setting to accommodate a 6" Sensus Omni T^2 meter. Cut-in a new inlet gate valve, 6" bypass line, bypass gate valve, and replace existing outlet gate valve. Install a 6" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint, provided by the JCI. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

D. Account Number: 612-21190

Customer Name: Evansville Museum of Arts and Science
Service Address: 411 Riverside Drive (SE)
Existing Meter: 4" Sensus SRH, S/N 45191
Scope of Work: Remove existing meter from service. Cut-in new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

E. Account Number: 618-21980

Customer Name: Deaconess Hospital
Service Address: 600 Edgar Street
Existing Meter: 4" Rockwell SRH, S/N 2851705
Scope of Work: Remove existing meter, inlet, outlet, and bypass butterfly valves from service. Rework the setting to accommodate a 4" Sensus Omni T^2 meter. Install new inlet gate valve, bypass gate valve, and outlet gate valve. Locate the outlet gate valve so that it does not restrict access to the meter test port. Install a 4" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M

SmartPoint, provided by the JCI. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

F. Account Number: 618-22000

Customer Name: Deaconess Hospital
Service Address: 614 Edgar Street
Existing Meter: 4" Rockwell SRM, S/N 31226434
Scope of Work: Replace outlet valve with new gate valve provided by the JCI. Install a new 4" meter provided by JCI, which shall be a Sensus Omni T^2 measuring chamber in an Omni C^2 body. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

G. Account Number: 618-22080

Customer Name: Evansville ARC
Service Address: 615 Virginia Street (W)
Existing Meter: 4" Rockwell SRH, S/N 1164785
Scope of Work: Remove existing meter from service. Remove existing inlet and outlet gate valves. Install new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

H. Account Number: 619-41350

Customer Name: Holiday Village Retirement
Service Address: 1200 Buena Vista (W)
Existing Meter: 4" Sensus SRH, S/N 1163385
Scope of Work: Remove existing meter from service. Remove existing inlet and outlet butterfly valves. Install new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. Note: if setting has a bypass butterfly valve, it shall be replaced with a new gate valve.

I. Account Number: 681-21850

Customer Name: ERB Equipment
Service Address: 9800 Highway 57 North
Existing Meter: 4" Rockwell SRM
Scope of Work: Remove existing meter from service. Remove existing inlet and outlet butterfly valves. Install new inlet and outlet gate valves. Relocate new outlet gate valve downstream of meter as much as possible to provide access to meter test port. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. Note: if setting has a bypass butterfly valve, it shall be replaced with a new gate valve.

J. Account Number: 611-20230

Customer Name: SBC/Ameritech
Service Address: 134 6th Street (NW)
Existing Meter: 4" Rockwell SRH, S/N 1147235
Scope of Work: Remove existing meter from service. Remove existing inlet and outlet gate valves. Install new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

K. Account Number: 614-23570

Customer Name: Timbers Apartments
Service Address: 3450 North Green River Road
Existing Meter: 6" Neptune Trident, S/N 3192534
Scope of Work: Remove existing meter and plate strainer from service. Remove existing inlet and outlet butterfly valves. Install new inlet and outlet gate valves. Install new 6" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. If the bypass valve is a butterfly valve, it shall be replaced with a new gate valve. Existing plate strainer shall be returned to the city.

L. Account Number: 615-20490

Customer Name: Roberts Municipal Stadium
Service Address: 2600 Division Street and Villa Drive
Existing Meter: 4" Sensus SRH, S/N Unknown
Scope of Work: Remove existing meter from service. Remove existing outlet gate valve. Install new outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

M. Account Number: 619-42410

Customer Name: Parkview Convalescent
Service Address: 2819 St. Joseph Avenue (N)
Existing Meter: 4" Sensus W-1000, S/N 1243494
Scope of Work: Remove existing meter and plate strainer from service. Remove existing inlet and outlet butterfly valves. Install new inlet and outlet gate valves. Install new 4" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. If setting has a bypass butterfly valve, it shall be replaced with a new gate valve provided by JCI. Plate strainer shall be returned to the city.

N. Account Number: 619-42610

Customer Name: Gene Whitehead Mobile
Service Address: 5901 St. Joseph Avenue (N)
Existing Meter: 4" Sensus SRH, S/N 1158505
Scope of Work: Remove existing meter from service. Cut-in outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

O. Account Number: 619-42710

Customer Name: Bethel Manor – Highland Pointe Healthcare
Service Address: 6015 Kratzville Road
Existing Meter: 4" Rockwell SRH, S/N 91147526
Scope of Work: Remove existing meter from service. Cut-in inlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

P. Account Number: 611-20190

Customer Name: US Federal Building

Service Address: 800 Sycamore Street
Existing Meter: 4" Sensus W-1000, S/N 1243874
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

Q. Account Number: 612-21530

Customer Name: Donaldson Apartments
Service Address: 1407 Howard Street
Existing Meter: 3" Sensus SRM, S/N 30752056
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 3" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

R. Account Number: 618-21790

Customer Name: Berry Plastics
Service Address: 101 Oakley Street
Existing Meter: 4" Sensus W-1000, S/N 118454
Scope of Work: Remove existing meter and plate strainer from service. Cut-in both inlet and outlet gate valves. Install new 4" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. Existing plate strainer shall be scrapped.

S. Account Number: 619-43510

Customer Name: Senate Estates
Service Address: 700 Senate Ave.
Existing Meter: 4" Sensus SRM, S/N 31226349
Scope of Work: Remove existing meter, inlet gate valve, and outlet gate valve from service. Install new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

T. Account Number: 680-22070

Customer Name: Dyna-Mechs Truck Service, Inc.
Service Address: 1650 Fares Avenue
Existing Meter: 4" Neptune TruFlo/T-8, S/N 30787583
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler shall be abandoned in place in the vault lid by cutting the register cable below the coupler housing.

U. Account Number: 681-20370

Customer Name: Inland Container
Service Address: 2000 Lynch Road
Existing Meter: 6" Sensus SRH, S/N 1148087
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 6" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

V. Account Number: 681-21335

Customer Name: Ryder Truck Co.
Service Address: 7925 Baumgart Road
Existing Meter: 4" Neptune Trident, S/N 31922371
Scope of Work: Remove existing meter and plate strainer from service. Remove existing inlet and outlet butterfly valves. Install new inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. If setting has a bypass butterfly valve, it shall be replaced with a new gate valve. Plate strainer shall be returned to city.

W. Account Number: 681-22130

Customer Name: Evansville Pleasant Ridge, LLC
Service Address: 4901 Pleasant Ridge
Existing Meter: 4" Sensus SRM, S/N 31100115
Scope of Work: Remove existing meter and the inlet, outlet, and bypass butterfly valves. Install new inlet, outlet, and butterfly gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

X. Account Number: 613-20410

Customer Name: Christ the King School
Service Address: 3109 Bayard Park Drive
Existing Meter: 4" Rockwell SRM, S/N 31663828
Scope of Work: Remove existing meter from service. Cut-in an inlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

Y. Account Number: 619-40925

Customer Name: EVSC – Central High School
Service Address: 5400 First Avenue (N)
Existing Meter: 4" Rockwell SRM, S/N 31226353
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

Z. Account Number: 611-21490

Customer Name: Gage
Service Address: 318 Main Street
Existing Meter: 3" Sensus SRH, S/N 1144492
Scope of Work: Remove existing meter and inlet gate valve from service. Replace inlet gate valve with new gate valve. Install new 3" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

AA. Account Number: 614-21210

Customer Name: Holy Rosary Catholic School
Service Address: 1301 Green River Road
Existing Meter: 4" Sensus SRM, S/N 30641080

Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

BB. Account Number: 611-20830

Customer Name: Old Vanderburgh County Courthouse Civic Center Room #305
Service Address: 4th Street (NW)
Existing Meter: 4" Sensus SRH, S/N 31660723
Scope of Work: Remove existing meter and outlet butterfly valve from service. Cut-in an inlet gate valve and install new outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

CC. Account Number: 612-20490

Customer Name: St. John Catholic Church
Service Address: 627 Bellemeade Avenue
Existing Meter: 3" Sensus SRH, S/N 1143421
Scope of Work: Remove existing meter from service. Cut-in both an inlet and an outlet gate valve. Install new 3" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

DD. Account Number: 612-22270

Customer Name: The Holy Spirit Church
Service Address: 1800 Lodge Avenue
Existing Meter: 4" Sensus W-1000, S/N 12434971
Scope of Work: Remove existing meter and plate strainer from service. Cut-in an outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. Existing plate strainer shall be returned to the city.

EE. Account Number: 615-21090

Customer Name: University of Evansville – Brentano Hall
Service Address: Walnut Street
Existing Meter: 4" Rockwell SRM, S/N 31034249
Scope of Work: Remove existing meter from service. Rework the setting to accommodate a 4" Sensus Omni C^2 meter. Cut-in a new inlet gate valve, 4" bypass line, bypass gate valve, and outlet gate valve. Install a 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. If space does not permit the installation of a 4" bypass, Johnson Controls shall install a 2" bypass.

FF. Account Number: 615-21170

Customer Name: University of Evansville – Hughes Hall
Service Address: 431 Weinbach Avenue (S)
Existing Meter: 4" Rockwell SRH, S/N 1163238
Scope of Work: Clean inlet valve box. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

GG. Account Number: 614-21310
Customer Name: Alliance Res. Mgmt./CMS Stone Hedge Apts.
Service Address: 5201 Monroe Ave.
Existing Meter: 4" Sensus SRH, S/N 1158314
Scope of Work: Remove existing meter and outlet gate valve from service. Install new outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

HH. Account Number: 614-22110
Customer Name: Chateau Village Apartments
Service Address: 650 Green River Road (S)
Existing Meter: 6" Sensus SRH, S/N 1200081
Scope of Work: Remove existing meter from service. Cut-in an outlet gate valve. Install new 6" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

II. Account Number: 613-22150
Customer Name: Indian Woods Apartments
Service Address: 1901 Cheyenne Drive
Existing Meter: 6" x 1.5" Neptune Protectus III, S/N 80799460310 and 5269005
Scope of Work: Remove existing fire service meter assembly, inlet butterfly valve, and outlet butterfly valve from service. Install new inlet and outlet gate valves. Install new 6" Sensus Omni F^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni F^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing. If bypass valve is of the butterfly-type, it shall be replaced with a new gate valve.

JJ. Account Number: 613-22170
Customer Name: Indian Woods Apartments
Service Address: 1900 Pueblo Pass
Existing Meter: 6" x 1.5" Neptune Protectus III, S/N 15092815 and 0599006
Scope of Work: Remove existing fire service meter assembly, inlet butterfly valve, and outlet butterfly valve from service. Install new inlet and outlet gate valves. Install new 6" Sensus Omni F^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni F^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing. If bypass valve is of the butterfly-type, it shall be replaced with a new gate valve.

KK. Account Number: 617-23420
Customer Name: NSH Affordable Housing
Service Address: 4715 Lake Side Drive
Existing Meter: 4" Sensus SRH, S/N 1163237
Scope of Work: Remove existing meter, inlet gate valve, and outlet gate valve from service. Install new inlet gate valve and outlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

LL. Account Number: 613-20750

Customer Name: NSH Affordable Housing of Ind., Inc.
Service Address: 1360 Lombard
Existing Meter: 4" Sensus SRH, S/N 1147529
Scope of Work: Remove existing meter, inlet gate valve, outlet gate valve, and bypass gate valve from service. Install new inlet gate valve, outlet gate valve, and bypass gate valve. Install new 4" Sensus Omni C^2 meter. Remove existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

MM. Account Number: 613-22070

Customer Name: Village Green Apartments
Service Address: 4600 Riverside Drive (E)
Existing Meter: 4" Sensus SRH, S/N 29092448
Scope of Work: Remove existing meter and the inlet, outlet, and bypass butterfly valves. Install new inlet, outlet, and bypass gate valves. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

NN. Account Number: 617-23280

Customer Name: Westside Industrial Park – Building #13
Service Address: 4200 Upper Mt. Vernon Road
Existing Meter: 6" Sensus SRH, S/N Unknown
Scope of Work: Remove existing vault lid and vault. Remove existing meter set in its entirety. Install new vault and new vault lid. Install new inlet gate valve, new 6" Sensus Omni C^2 meter, and new outlet gate valve. Install a new Sensus 520M SmartPoint into the new vault lid. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

OO. Account Number: 611-20450

Customer Name: YWCA Building
Service Address: 118 Vine Street (118 – 130)
Existing Meter: 3" Rockwell PT, S/N 30752057
Scope of Work: Remove existing 3" Rockwell PT compound meter from service and install new 3" Sensus Omni C^2 meter. Remove the existing touch read coupler from the wall and install a new Sensus 510M-W wired SmartPoint. Insert the TR/PL coupler from the existing Omni C^2 meter into the receptacle on the new Sensus 510M-W wired SmartPoint.

PP. Account Number: 611-22530

Customer Name: St. Paul Lutheran Church
Service Address: 108 Michigan Street (E)
Existing Meter: 3" Rockwell SRH, S/N 1143422
Scope of Work: Remove existing 3" Rockwell SRH compound meter from service and install new 3". Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

QQ. Account Number: 612-21110

Customer Name: The Kunkel Group
Service Address: 510 Oak Street
Existing Meter: 6" Rockwell SRM, S/N 31557948
Scope of Work: Remove existing 6" Rockwell SRM compound meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new 6" Sensus Omni

C^2 meter, inlet gate valve, bypass gate valve, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

RR. Account Number: 612-21271

Customer Name: Eastside Treatment
Service Address: 1500 Waterworks Road
Existing Meter: 6" x 2" Neptune Protectus, S/N 15092011
Scope of Work: Remove existing 2" Neptune T-10 from service. Install new 2" Neptune T-10 meter. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 510M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 510M-W SmartPoints according to the instructions provided by Sensus.

SS. Account Number: 613-22090

Customer Name: Village Green Apartments
Service Address: 4700 Riverside (E)
Existing Meter: 4" Neptune Trident, S/N 31922368
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, outlet butterfly valve, and plate strainer from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Plate strainer shall be returned to city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

TT. Account Number: 614-22000

Customer Name: Belle Manor Owners Association
Service Address: 600 Collen Avenue (S)
Existing Meter: 4" Rockwell SRM, S/N 31669831
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

UU. Account Number: 614-22050

Customer Name: Harrison High School
Service Address: 6 Harrison Boulevard
Existing Meter: 4" Neptune TruFlo/T-8, S/N 31921887
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

VV. Account Number: 614-22810

Customer Name: Home Life Studios and Suites
Service Address: 100 Green River Road (S)
Existing Meter: 4" Neptune Trident, S/N Unknown
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, outlet butterfly valve, and plate strainer from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new

Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

WW. Account Number: 615-20340
Customer Name: Concrete Supply LLC
Service Address: Stockwell Road (N)
Existing Meter: 4" Neptune TruFlo/T-8, S/N 30787372
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Remove the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

XX. Account Number: 617-23380
Customer Name: NSH Affordable Housing
Service Address: 4801 Lakeside Drive
Existing Meter: 4" Rockwell PT, S/N 81700414
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

YY. Account Number: 617-23990
Customer Name: Mater Dei Prov
Service Address: 9200 New Harmony Road
Existing Meter: 6" x 1.5" Neptune Protectus, S/N 61723990
Scope of Work: Remove existing 1.5" Neptune T-10 from service. Install new 1.5" Neptune T-10 meter. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 510M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 510M-W SmartPoints according to the instructions provided by Sensus.

ZZ. Account Number: 617-24329
Customer Name: Parks Department
Service Address: Mesker Park Drive
Existing Meter: 4" Neptune TruFlo/T-8, S/N 31918171
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

AAA. Account Number: 617-23450
Customer Name: Mesker Park
Service Address: 2421 Bement Avenue
Existing Meter: 6" x 2" Sensus FireLine, S/N 1295439
Scope of Work: Remove existing 2" Sensus SR meter from service. Install new 2" Sensus SR meter. Remove the existing touch read coupler mounts from the vault lid and install one (1) new dual-port Sensus 520M SmartPoint. Connect the TR/PL couplers from the

existing 6" meter and the new 2" meter into the new dual-port Sensus 520M SmartPoint. The remaining touch read coupler housing in the vault lid shall be abandoned in place.

BBB. Account Number: 618-22060
Customer Name: Deaconess Development Corporation
Service Address: 520 Mary Street
Existing Meter: 4" Neptune TruFlo/T-8, S/N 70002640
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

CCC. Account Number: 618-22250
Customer Name: RHF Housing, Inc.
Service Address: 201 Delaware Street (W)
Existing Meter: 4" Rockwell SRM, S/N 30752218
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

DDD. Account Number: 619-41660
Customer Name: Monarch Management
Service Address: 2451 Waterbridge Way
Existing Meter: 4" Neptune Trident, S/N 30788346
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

EEE. Account Number: 681-20030
Customer Name: Clarion Inn
Service Address: 4101 Highway 41 North
Existing Meter: 4" Neptune Trident, S/N 31928127
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter. Plate strainer shall be returned to the city. Cut-in new 4" bypass and bypass gate valve. If existing vault cannot accept a 4" bypass line, Johnson Controls shall cut-in a 2" bypass line and bypass gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

FFF. Account Number: 681-20070
Customer Name: Drury Inn
Service Address: 3901 Highway 41 North
Existing Meter: 4" Neptune Trident, S/N 31922367
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Plate strainer shall be returned to city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M

SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

GGG. Account Number: 681-20230
Customer Name: Randall M. Schulz Trust
Service Address: 2800 Lynch Road
Existing Meter: 4" Rockwell SRM, S/N 30258468
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, bypass gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

HHH. Account Number: 681-20940
Customer Name: Encore Hotel Owners
Service Address: 5701 Highway 41 North
Existing Meter: 4" Sensus W-1000, S/N 1244466
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

III. Account Number: 681-21230
Customer Name: Anchor Industries
Service Address: 7701 Highway 41 North
Existing Meter: 3" Rockwell SRM, S/N 30845745
Scope of Work: Remove existing meter and outlet butterfly valve from service. Install new outlet gate valve and 3" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

JJJ. Account Number: 698-02613
Customer Name: Economic Development Commission
Service Address: 1801 Waterworks Road
Existing Meter: 6" x 1.5" Neptune Protectus II, S/N 60100003
Scope of Work: Remove existing meter from service. Install new 6" Sensus Omni F^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni F^2 meter into the receptacle on the new Sensus 520M SmartPoint.

KKK. Account Number: 611-20250
Customer Name: AT&T
Service Address: 133 NW 5th Street
Existing Meter: 4" Neptune HP, S/N 40100032
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

LLL. Account Number: 611-22330
Customer Name: Housing Authority #2
Service Address: 717 Cherry Street

Existing Meter: 4" Neptune Trident, S/N 2070910056
Scope of Work: Remove existing meter and plate strainer from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 510M SmartPoint. Plate strainer shall be returned to the city.

MMM. Account Number: 612-20240
Customer Name: METS
Service Address: 601 John Street
Existing Meter: 4" Neptune Trident, S/N 31922375
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

NNN. Account Number: 615-21370
Customer Name: Little Sisters of the Poor
Service Address: 1236 Lincoln Avenue
Existing Meter: 4" Rockwell W-1000, S/N 1244465
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

OOO. Account Number: 619-41580
Customer Name: Grandview Towers
Service Address: 1000 Fulton Parkway
Existing Meter: 4" Neptune HP, S/N 40100020
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

PPP. Account Number: 681-21420
Customer Name: Evansville Airport
Service Address: 7801 Highway 57
Existing Meter: 4" Neptune Trident, S/N 31906061
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

QQQ. Account Number: 612-21830
Customer Name: Housing Authority #3
Service Address: 659 Sweetser Ave.
Existing Meter: 4" Neptune HP, S/N 3098320
Scope of Work: Remove existing plate strainer and meter from service. Replace existing inlet and outlet valves with new gate valves. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler

from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

RRR. Account Number: 613-23010
Customer Name: Addison Place, LLC
Service Address: 1100 Burdette Avenue
Existing Meter: 4" Neptune Trident, S/N 30737186
Scope of Work: Remove existing plate strainer and meter from service. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Cut-in new outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

SSS. Account Number: 613-23030
Customer Name: Addison Place, LLC
Service Address: 1300 Burdette Avenue
Existing Meter: 4" Neptune Trident, S/N 2152000025
Scope of Work: Remove existing plate strainer and meter from service. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Cut-in new outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

TTT. Account Number: 615-21330
Customer Name: Saint Benedicts
Service Address: 540 Harlan Avenue
Existing Meter: 4" Sensus W-1000, S/N 1243492
Scope of Work: Remove existing plate strainer and meter from service. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

UUU. Account Number: 617-22920
Customer Name: Solarbron Pointe
Service Address: 1501 McDowell Road
Existing Meter: 6" Sensus W-2000, S/N 1414637
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 6" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

VVV. Account Number: 680-21850
Customer Name: Yeroiemos, LLC
Service Address: 2508 Highway 41 North
Existing Meter: 4" Sensus W-1000, S/N 1243496
Scope of Work: Remove existing plate strainer and meter from service. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

WWW. Account Number: 681-21210

Customer Name: Cummings Crosspointe
Service Address: 7901 Highway 41 North
Existing Meter: 4" Neptune HP, S/N 31979816
Scope of Work: Remove existing plate strainer and meter from service. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

XXX. Account Number: 611-21800
Customer Name: Given and Spindler
Service Address: 100 NW 1st Street
Existing Meter: 4" Neptune Trident, S/N 31907860
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

YYY. Account Number: 618-21610
Customer Name: Housing Authority #1
Service Address: 1030 West Franklin Street
Existing Meter: 4" Neptune HP, S/N 34940005
Scope of Work: Remove existing meter and test port from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 510M SmartPoint.

ZZZ. Account Number: 619-42590
Customer Name: Westbrook Mobile Home
Service Address: 5901A North St. Joe Avenue
Existing Meter: 6" Neptune HP, S/N 30787419
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 6" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

AAAA. Account Number: 614-20230
Customer Name: C H Evansville
Service Address: 829 North Green River Road
Existing Meter: 6" Neptune Trident, S/N 30788339
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 6" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

BBBB. Account Number: 614-20530
Customer Name: Eastland Mall
Service Address: 800 North Green River Road
Existing Meter: 3" Neptune HP, S/N Unknown

Scope of Work: Remove existing meter and inlet gate valve from service. Remove insulation from supply line that is located in the vertical plane, upstream of existing inlet gate valve. Cut-in new inlet gate valve at this location, making certain that the new inlet gate valve does not interfere with the operation of the backflow prevention devices. Install a new mounting flange and a new 3" Sensus Omni C^2 meter. Install new pipe insulation to affected areas. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 510M SmartPoint.

CCCC. Account Number: 617-23040
Customer Name: Daniel Dick
Service Address: 8001 Old Orchard Trail
Existing Meter: 4" Neptune HP, S/N 40100031
Scope of Work: Remove existing plate strainer, meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Existing plate strainer shall be returned to the city. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

DDDD. Account Number: 681-21630
Customer Name: Bentwood Homeowners
Service Address: 1441 Bentwood Dr.
Existing Meter: 4" Neptune Trident, S/N 40100031
Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve, outlet gate valve, 4" Sensus Omni C^2 meter, and bypass gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

EEEE. Account Number: 616-21810
Customer Name: Housing Authority
Service Address: 509 North St. Joe Avenue
Existing Meter: 4" Neptune HP, S/N 31940013
Scope of Work: Remove existing meter and test port. Install new 4" Sensus Omni C^2 meter and test port. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 510M SmartPoint.

FFFF. Account Number: 617-23426
Customer Name: Fairfield Inn West
Service Address: 54700 Weston Road
Existing Meter: 4" Neptune HP, S/N 41920003
Scope of Work: Remove existing meter and plate strainer. Install new 4" Sensus Omni C^2 meter. Existing plate strainer shall be returned to the city . Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

GGGG. Account Number: 618-21230
Customer Name: Aramark Uniform Services
Service Address: 1151 Dresden Street
Existing Meter: 4" Sensus SRM, S/N 23517306
Scope of Work: Remove existing meter from service. Cut-in new inlet gate valve. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid

and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

HHHH. Account Number: 619-40070
Customer Name: Bootz Distribution
Service Address: 1600 North First Avenue
Existing Meter: 4" Sensus SRH, S/N 30134248
Scope of Work: Remove existing meter from service and install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

IIII. Account Number: 618-20630
Customer Name: Bootz Mfg. Co.
Service Address: 1400 Park Street
Existing Meter: 4" Rockwell SRH, S/N 1163847
Scope of Work: Remove existing meter and outlet valve from service. Install new 4" Sensus Omni C^2 meter and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

JJJJ. Account Number: 618-20210
Customer Name: Cytex Plastics
Service Address: 1100 Grove Street
Existing Meter: 4" Rockwell SRH, S/N 1163869
Scope of Work: Remove existing meter and outlet valve from service. Cut-in new inlet gate valve adjacent to meter. Install new 4" Sensus Omni C^2 meter and outlet gate valve. Relocate meter away from vault wall. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

KKKK. Account Number: 615-20330
Customer Name: DSE Realty
Service Address: 1201 Stockwell
Existing Meter: 6" Sensus SRH, S/N 1148086
Scope of Work: Remove existing inlet butterfly valve and meter from service. Cut-in new outlet gate valve adjacent to meter. Install new 6" Sensus Omni C^2 meter and inlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

LLLL. Account Number: 618-21130
Customer Name: Evansville Housing Authority
Service Address: 1331 Shanklin Avenue
Existing Meter: 4" Sensus SRH, S/N 1146701
Scope of Work: Remove existing meter, inlet gate valve, and outlet valve from service. Install new inlet gate valve, outlet gate valve, and 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

MMMM. Account Number: 614-23590
Customer Name: Good Shepherd Church
Service Address: 2301 North Stockwell Road

Existing Meter: 4" Sensus SRH, S/N 1158500
Scope of Work: Remove existing meter and three (3) outlet butterfly valves from service. Cut-in new inlet gate valve adjacent to meter. Install a new 4" Sensus Omni C^2 meter and three (3) new outlet gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

NNNN. Account Number: 680-21290
Customer Name: JH Rudolph Co. – Feigel Construction
Service Address: 903 East Columbia Street
Existing Meter: 3" Rockwell SRM, S/N 8084647
Scope of Work: Remove existing inlet gate valve, meter and outlet gate valve from service. Install a new inlet gate valve, 3" Sensus Omni C^2 meter, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

OOOO. Account Number: 618-20270
Customer Name: Karges Furniture
Service Address: 1503 West Maryland Street
Existing Meter: 4" Sensus SRH, S/N 1183236
Scope of Work: Remove existing inlet gate valve, meter, bypass valve and outlet gate valve from service. Install a new inlet gate valve, 4" Sensus Omni C^2 meter, bypass gate valve, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

PPPP. Account Number: 618-20650
Customer Name: Bootz Mfg. Co.
Service Address: 1400 Park Street
Existing Meter: 4" Rockwell SRH, S/N 14117130
Scope of Work: Remove existing inlet gate valve, meter, and outlet gate valve from service. Install a new inlet gate valve, 4" Sensus Omni C^2 meter, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

QQQQ. Account Number: 611-21710
Customer Name: R & G Properties, Inc.
Service Address: 101 Walnut Street
Existing Meter: 3" Sensus SRH, S/N 30732056
Scope of Work: Remove existing meter from service. Replace both inlet and outlet butterfly valves with new gate valves. Install new 3" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

RRRR. Account Number: 615-20450
Customer Name: U.S. Army 88th RSC
Service Address: 2900 Division Street (E)
Existing Meter: 3" Sensus SRH, S/N 615-20450
Scope of Work: Remove existing meter from service. Install new 3" Sensus Omni C^2 meter. Cut-in new outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

SSSS. Account Number: 680-21270
Customer Name: JH Rudolph
Service Address: 901 East Columbia Street
Existing Meter: 4" Rockwell SRH, S/N 1202478
Scope of Work: Remove existing inlet, outlet, and bypass butterfly valves and meter from service. Install new 4" Sensus Omni C^2 meter. Install new inlet, outlet, and bypass gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

TTTT. Account Number: 615-20510
Customer Name: Roberts Stadium
Service Address: 2600 Division
Existing Meter: 4" Rockwell SRH, S/N Unknown
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Cut-in new outlet gate valve. New outlet gate valve shall not obstruct access to meter test port. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

UUUU. Account Number: 614-23350
Customer Name: SBC/Ameritech
Service Address: 5525 Booneville Highway
Existing Meter: 4" Neptune TruFlo T-8, S/N 31921889
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

VVVV. Account Number: 614-23110
Customer Name: Irving Materials, Inc.
Service Address: 6000 Oak Grove Road
Existing Meter: 4" Neptune Trident, S/N 31904260
Scope of Work: Remove existing inlet, outlet, and bypass butterfly valves, plate strainer, and meter from service. Install new 4" Sensus Omni T^2 meter. Install new inlet, outlet, and bypass gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. Existing plate strainer shall be returned to the city.

WWWW. Account Number: 681-21830
Customer Name: Evansville Water Hauling
Service Address: Highway 47 & Daylight Drive
Existing Meter: 4" Neptune Trident, S/N 30788322
Scope of Work: Remove existing inlet, outlet, and bypass gate valves, plate strainer, and meter from service. Install new 4" Sensus Omni T^2 meter. Install new inlet, outlet, and bypass gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. Existing plate strainer shall be returned to the city.

XXXX. Account Number: 612-21970
Customer Name: Royal Crown Bottling Corporation

Service Address: 1100 Independence Avenue
Existing Meter: 4" Sensus W-1000, S/N 1197956
Scope of Work: Remove existing inlet butterfly valve, plate strainer, and meter from service. Install new 4" Sensus Omni T^2 meter. Install new inlet gate valve. Cut-in new 4" bypass line, bypass gate valve, and outlet gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city. Note: some sections of the vault walls may need to be removed to accommodate the new bypass line and outlet gate valve. Once the work has been completed, the vault walls shall be repaired as necessary.

YYYY. Account Number: 681-20410
Customer Name: Ferro Corporation
Service Address: 4400 Hitch-Peters Road
Existing Meter: 6" Sensus SRH, S/N 1230006
Scope of Work: Remove existing inlet, outlet, and bypass butterfly valves and meter from service. Install new 6" Sensus Omni C^2 meter. Install new inlet, outlet, and bypass gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

ZZZZ. Account Number: 619-40730
Customer Name: Evansville Country Club
Service Address: 3306 Stringtown Road
Existing Meter: 6" Neptune Trident, S/N 31909613
Scope of Work: Remove existing inlet butterfly valve, plate strainer, and meter from service. Install new 6" Sensus Omni T^2 meter. Install new inlet gate valve. Cut-in new outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city.

AAAAA. Account Number: 681-20790
Customer Name: Whirlpool Corp.
Service Address: 5401 Highway 41 North [B]
Existing Meter: 6" Sensus W-2000, S/N 1256586
Scope of Work: Remove existing plate strainer and meter from service. Install new 6" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city.

BBBBB. Account Number: 616-20890
Customer Name: Craddock Furniture Company
Service Address: West Illinois Street
Existing Meter: 4" Rockwell SRH, S/N 1164274
Scope of Work: Remove existing inlet valve, meter, and outlet valve from service. Install new 4" Sensus Omni C^2 meter, inlet gate valve, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

CCCCC. Account Number: 617-24180
Customer Name: Silgan Closures
Service Address: Mt. Auburn Road

Existing Meter: 4" Rockwell SRM, S/N 31669828
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Cut-in new inlet and outlet gate valves. New outlet gate valve shall be positioned so as to not restrict access to meter test port. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

DDDDD. Account Number: 618-21250
Customer Name: Uniseal
Service Address: 1014 Uhlhorn Street
Existing Meter: 4" Rockwell SRM, S/N Unknown
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

EEEEE. Account Number: 680-21450
Customer Name: Red Spot Paint & Varnish
Service Address: 966 East Columbia Street
Existing Meter: 4" Rockwell SRM, S/N Unknown
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

FFFFF. Account Number: 681-20430
Customer Name: El Maizal
Service Address: 4501 Hitch Peters Road
Existing Meter: 4" Rockwell SRM, S/N 37052219
Scope of Work: Remove existing meter from service. Install new 4" Sensus Omni C^2 meter. Install new inlet and outlet gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

GGGGG. Account Number: 681-21125
Customer Name: Omninet Hotel
Service Address: 7101 Highway 41 North
Existing Meter: 6" Neptune HP, S/N 6990004
Scope of Work: Remove existing plate strainer, horizontal turbine meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new 6" Sensus Omni C^2 meter. Install new inlet, bypass, and outlet gate valves. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city.

HHHHH. Account Number: 615-21130
Customer Name: University of Evansville
Service Address: 1801 East Walnut Street
Existing Meter: 4" Rockwell SRM, S/N 31226352
Scope of Work: Remove existing meter and install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

IIIII. Account Number: 680-20970
Customer Name: Garvin Street Warehouse

Service Address: 1501 North Garvin Street
Existing Meter: 6" Sensus SRH, S/N 1148088
Scope of Work: Clean out inlet valve box. Remove existing meter and install new 6" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

JJJJJ. Account Number: 680-21350
Customer Name: Red Spot Paint & Varnish
Service Address: 966 East Columbia Street
Existing Meter: 4" Rockwell SRM, S/N Unknown
Scope of Work: Remove existing meter and install new 4" Sensus Omni C^2 meter. Replace existing outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

KKKKK. Account Number: 613-22410
Customer Name: St. Mary's Medical Center
Service Address: 3700 Washington Avenue
Existing Meter: 6" Sensus SRH, S/N 1140037
Scope of Work: Remove existing meter and install new 6" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

LLLLL. Account Number: 613-22870
Customer Name: St. Mary's Medical Center
Service Address: 3900 Washington Avenue
Existing Meter: 4" Rockwell SRM, S/N Unknown
Scope of Work: Remove existing meter and install new 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

MMMMM. Account Number: 612-21570
Customer Name: Rathbone Home
Service Address: 1320 B Southeast Second Street
Existing Meter: 3" Neptune TruFlo/T-10, S/N Unknown
Scope of Work: Remove existing meter and outlet butterfly valve. Install new 3" Sensus Omni C^2 meter and outlet gate valve. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

NNNNN. Account Number: 612-22310
Customer Name: Barklay & Purkans
Service Address: 2800 Lodge Avenue
Existing Meter: 4" Neptune TruFlo/T-10, S/N Unknown
Scope of Work: Remove existing meter and outlet gate valve. Install new 4" Sensus Omni C^2 meter and outlet gate valve. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

OOOOO. Account Number: 617-22785
Customer Name: Burdette Park
Service Address: 5301 Nurrenbern Road #24
Existing Meter: 6" Neptune TruFlo/T-10, S/N 69900011
Scope of Work: Remove existing meter. Cut-in new inlet gate valve. Install new 6" Sensus Omni C^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

PPPPP. Account Number: 619-40690
Customer Name: EVSC – North High School
Service Address: 2319 Stringtown Road
Existing Meter: 4" Neptune TruFlo/T-10, S/N Unknown
Scope of Work: Remove existing meter. Replace existing inlet and outlet gate valves. Install new 4" Sensus Omni C^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

QQQQQ. Account Number: 681-22060
Customer Name: Beth United Church of Christ
Service Address: 6400 Oak Hill Road
Existing Meter: 4" Neptune TruFlo/T-10, S/N 2301028
Scope of Work: Remove existing meter. Cut-in new oulet gate valve. Install new 4" Sensus Omni C^2 meter. Remove one of the existing touch read couplers from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint. The remaining touch read coupler in the vault lid shall be abandoned in place by cutting the register cable below the coupler housing.

4. Large water meter setting improvements and Advanced Metering Infrastructure (AMI) system installation for existing, active services.

A. Account Number: 618-21990
Customer Name: Deaconess Hospital
Service Address: Edgar Street & Delaware
Existing Meter: 4" Neptune TruFlo/T-10, S/N 2072108057
Scope of Work: Replace existing outlet gate valve with new gate valve. Remove the existing touch read coupler mounts from the wall and install two (2) new Sensus 510M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 510M-W SmartPoints according to the instructions provided by Sensus.

B. Account Number: 611-20170
Customer Name: Marjk McCarty
Service Address: 406 Sycamore Street
Existing Meter: 3" Neptune TruFlo/T-10, S/N 30100000
Scope of Work: Install main outlet gate valve onto the potable service line. Note: there are outlet valves on the fire service lines. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then

connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

C. Account Number: 680-22170
Customer Name: Evansville Rug Cleaning
Service Address: 2124 Willow Road (N)
Existing Meter: Neptune TruFlo/T-10, S/N 40100040
Scope of Work: Cut-in an outlet gate valve. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

D. Account Number: 611-21430
Customer Name: National City Bank
Service Address: 227 Main Street
Existing Meter: 4" Sensus Omni T^2, S/N 71486156
Scope of Work: Cut-in an outlet gate valve and relocate backflow protection device to the outlet side of meter. Remove the existing touch read coupler from the wall and install a new Sensus 510M-W wired SmartPoint. Insert the TR/PL coupler from the existing Omni T^2 meter into the receptacle on the new Sensus 510M-W wired SmartPoint.

E. Account Number: 618-20950
Customer Name: Gene Whitehead Mobile
Service Address: Allens Lane & 6th Avenue
Existing Meter: 4" Neptune TruFlo/T-10, S/N 1163778
Scope of Work: Cut-in an inlet gate valve. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

F. Account Number: 613-20490
Customer Name: Dexter Villa Apartments
Service Address: 2805 Washington Avenue
Existing Meter: 4" Neptune TruFlo/T-10, S/N 4010026
Scope of Work: Replace existing outlet gate valve with new outlet gate valve. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

G. Account Number: 617-23300
Customer Name: Seven Oaks Prop. II
Service Address: 325 Red Bank (N)
Existing Meter: 4" Neptune TruFlo/T-10, S/N 40100063
Scope of Work: Remove existing vault and lid. Cut-in 4" bypass with gate valve. Provide and install new vault and lid. Install two (2) new Sensus 520M-W wired SmartPoints into the new vault lid. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

H. Account Number: 680-21410
Customer Name: Colondalkin
Service Address: 1900 East Louisiana Street

Existing Meter: 4" Neptune TruFlo, S/N 40100014
Scope of Work: Cut-in new 4" bypass line. Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

I. Account Number: 615-20570
Customer Name: Good Samaritan Home
Service Address: 601 East Boeke Road
Existing Meter: 4" Neptune TruFlo/T-10, S/N 40100057
Scope of Work: Cut-in new outlet gate valve adjacent to meter. Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

J. Account Number: 613-22390
Customer Name: St. Mary's Financial Services
Service Address: 3700 Washington Avenue
Existing Meter: 6" x 1.5" Neptune Protectus III, S/N 1921978
Scope of Work: Replace existing Neptune ProRead encoder register on main meter (6" horizontal turbine) with new Neptune ProRead encoder register. Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the touch couplers from the ends of the Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

K. Account Number: 612-22950
Customer Name: EVSC
Service Address: 4 South Bosse Avenue
Existing Meter: 4" Neptune TruFlo/T-10, S/N 231922344
Scope of Work: Replace existing outlet butterfly valve with new gate valve. Remove the existing touch read coupler mounts from the vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

L. Account Number: 681-20310
Customer Name: Omni Plastics
Service Address: 2300 Lynch Road
Existing Meter: 4" Neptune HP, S/N 4990008
Scope of Work: Coordinate all activities with both City and end user. Cut-in new 4" bypass line, inlet gate valve, bypass gate valve, test port with valve, and outlet gate valve. Make certain that new outlet gate valve does not restrict access to new test port. It is permissible to remove sections of the existing vault wall to accommodate new bypass line, provided that the wall is properly shored-up once the work has been completed. Remove the existing touch read coupler mount from the vault lid and install one (1) new Sensus 520M-W wired SmartPoint, provided by the JCI. Cut the existing touch coupler from the end of the existing Neptune ProRead encoder register and then connect the register cable to the new, wired 520M-W SmartPoint according to the instructions provided by Sensus.

5. **Large water meter improvements and Advanced Metering Infrastructure (AMI) system installation for existing, active services at Mead Johnson Nutritionals - Bristol-Meyers.**

The meters serving Mead Johnson Nutritionals – Bristol-Meyers are in continuous operation throughout the year and cannot be removed from service except for one week in July when the facility is closed. JCI shall schedule the work to be performed with Mead Johnson Nutritionals – Bristol-Meyers.

A. Account Number: 616-21425
   Customer Name: Mead Johnson Nutritionals / Bristol-Meyers B61-1
   Service Address: 2300 Pennsylvania Street
   Existing Meter: 4" Rockwell SRH, S/N 1202605
   Scope of Work: Remove existing meter, inlet butterfly valve, bypass butterfly valve, and outlet butterfly valve from service. Install new inlet gate valve , bypass gate valve, outlet gate valve and 4" Sensus Omni C^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

B. Account Number: 617-22060
   Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #1
   Service Address: 2400 Lloyd Expressway (W)
   Existing Meter: 6" Neptune Trident, S/N 31904296
   Scope of Work: Remove existing meter and plate strainer from service. Install new 6" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city.

C. Account Number: 617-22080
   Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #2
   Service Address: 2400 Pennsylvania Street
   Existing Meter: 6" Sensus W-2000, S/N 1110539
   Scope of Work: Remove existing meter and plate strainer from service. Install new 6" Sensus Omni T^2 meter. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint. The existing plate strainer shall be returned to the city.

D. Account Number: 617-22100
   Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #3
   Service Address: St. Joe Avenue (S)
   Existing Meter: 4" Sensus SRH, S/N 1158508
   Scope of Work: Remove existing meter, inlet gate valve, and outlet gate valve from service. Install new 4" Sensus Omni C^2 meter, inlet gate valve, and outlet gate valve. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 510M SmartPoint.

E. Account Number: 617-22110
   Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #8
   Service Address: 135 St. Joe Avenue (S)
   Existing Meter: 8" Neptune HP, S/N 31952790
   Scope of Work: Remove existing meter, inlet gate valve, outlet gate valve, bypass gate valve, and plate strainer from service. Install new 8" Sensus Omni T^2 meter, inlet gate valve, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

F. Account Number: 617-22120

Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #5
Service Address: St. Joe Avenue (S)
Existing Meter: 6" Rockwell SRM, S/N 30258137
Scope of Work: Remove existing meter and inlet gate valve from service. Install new 6" Sensus Omni T^2 meter and inlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni T^2 meter into the receptacle on the new Sensus 520M SmartPoint.

G. Account Number: 617-22140
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #4
Service Address: St. Joe Avenue (S)
Existing Meter: 6" Rockwell SRH, S/N 1200080
Scope of Work: Remove existing meter and inlet gate valve from service. Install new 6" Sensus Omni C^2 meter and inlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

H. Account Number: 617-22160
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #6
Service Address: St. Joe Avenue (S)
Existing Meter: 6" Neptune TruFlo, S/N 1168020347
Scope of Work: Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

I. Account Number: 617-22180
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #7
Service Address: St. Joe Avenue (S)
Existing Meter: 6" Rockwell SRH, S/N 1149038
Scope of Work: Remove existing meter, inlet gate valve, and outlet gate valve from service. Install new 6" Sensus Omni C^2 meter, inlet gate valve, and outlet gate valve. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the new Omni C^2 meter into the receptacle on the new Sensus 520M SmartPoint.

J. Account Number: 698-00250
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #9
Service Address: 2400 Ohio Street
Existing Meter: 6" x 1.5" Neptune Protectus III, S/N 70050312
Scope of Work: Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

K. Account Number: 698-01460
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #16
Service Address: 2400 Ohio Street
Existing Meter: 6" Neptune TruFlo/T-10, S/N 69900022
Scope of Work: Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register

cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

L. Account Number: 698-01470
Customer Name: Mead Johnson Nutritionals / Bristol-Meyers #11
Service Address: 2400 Lloyd Expressway
Existing Meter: 6" Neptune TruFlo/T-10, S/N 69900021
Scope of Work: Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

6. Advanced Metering Infrastructure (AMI) system installation for existing, active large water meter services in vaults.

The meters detailed in this section have all been tested and either meet or exceed AWWA minimum new meter accuracy standards and shall remain in service. All of these meters have absolute encoder registers that shall be connected to the appropriate meter transmission unit.

A. Existing Neptune horizontal turbine meters (Trident and HP)

All of these services are located in vaults. Remove the existing touch read coupler mount from the existing vault lid and install one (1) new Sensus 520M-W wired SmartPoint. Cut the existing touch coupler from the end of the existing Neptune ProRead encoder register and then connect the register cable to the new, wired 520M-W SmartPoint according to the instructions provided by Sensus.

Account No.	Customer Name	Service Address	Meter S/N	Meter Size
612-20235	VA Med Center	500 Walnut Street (E)	1308807	4"
613-22330	Evansville Protestant Home	3701 Washington Avenue	31940006	4"
614-23321	Combs Landscaping	3801 Burkhardt Road (N), [B]	31922366	4"
615-20550	Hartke Pool	201 Boeke Road (N)	Unknown	4"
619-43391	Aztec Milling LP-SSC	15700 Highway 41 North, [B]	31979181	4"
681-21180	O'Neal Steel	1323 Burch Drive	31922373	4"
698-02480	City of Evansville Soccer Complex	6800 Green River Road (N) [X]	49900009	4"
698-02726	Jeff Dike Farms	3443 Kansas Road	40100055	4"
61621330	IRVING METALS	1816 PENNSYLVANIA ST	Unknown	4"
68121660	OAK MEADOW GOLF COURSE	11505 BROWNING RD	31979817	4"

B. Existing Neptune fire service meters (Protectus III)

All of these services are located in vaults. Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61322100	WESTBROOK MOBILE HOME	2300 DORAL CT	66980001	6"
61420210	C H EVANSVILLE	300 CARRIAGE DR	44920008	4"
61420250	EDEN ASSOCIATES	5301 CARRIAGE DR	44920012 / 10070027	4"
61421570	AM WATER SHARED SERV	NEWBURGH & HWY 662	66900004	6"
61423025	DEACONESS CROSSPOINTE	7200 E INDIANA ST	31931670	6"
61423480	LAKESIDE MANOR	3201 N GREEN RIVER RD	15050005	6"
61520420	EVILLE STATE HOSPITAL	3400B LINCOLN AVE	N/A	6"
61520560	MCDONALD GOLF	551A N BOEKE RD	N/A	4"
61520580	WESSELMAN PARK	551B N BOEKE RD	N/A	4"
61521210	UNIVERSITY OF EVANSVILLE	1700 LINCOLN AVE	15050007	6" x 1.5"
61722420	LPN RAILROAD CSX TRANSPORTATION	HOWELL YARDS	69930000	6" x 1.5"
61722783	BURDETTE PARK	5301B NURRENBER RD	N/A	6"
61722870	USI PHYSICAL PLANT DEPT	901 ECKELS	N/A	4"
61722945	MISSION VIEJO VILLAS	230 S BOEHEN CAMP RD	N/A	6"
61723500	CABAT PROPERTIES	4500 WOCKLER AVE	N/A	4"
61723658	BRICKYARD DEV	3701 UP MT VERNON RD	N/A	6"
61821925	DEACONESS HOSP	600 MARY ST	N/A	6"
61941510	WOODBRIDGE PLACE	3550 WOODBRIDGE DR	N/A	4"
61942560	MILL CREEK ESTATES	1901 W MILL RD	???	6"
61943130	GERMAN TWNP	2636 W BOONVILLE NH RD	702209218 / 15099002	6" x 2"
61943320	GIBSON WATER	HWY 41 N - GIBSON CO	7273071182 / 15070002	6"
68021960	FENDRICH GOLF COURSE	1900 E DIAMOND AVE	31926934	4"
68122335	MCDONALD GOLF	2905 E MORGAN ST	N/A	4"
69801050	INTERPROP FUND VII	650 S BOEHNE CAMP RD	N/A	6"
69801110	SPURLING CO PROP	3401 N GREEN RIVER RD	15900009 / 69900009	6"
69801250	LINCOLN ESTATES	401 JEANETTE BENTON	N/A	6"
69801310	CROSS LAKE APTS	7730 E VIRGINIA ST	N/A	6"
69802468	HICKORY LAKE APT	4800 MD MT VERNON	N/A	6"
69802485	BROOKLYN PLACE APTS	6900 E VIRGINIA ST	60100000	6"
69802486	AMERIQUAL FOODS	18200C HWY 41 N	7296076741	8"
69802500	LEISURE LIVING APTS	2750 ALLENS LN	60100001	6" x 1.5"
69802571	BRICKYARD SEVEN LLC	3615 UP MT VERNON RD	N/A	6"
69802590	EAGLE VILLAGE APARTMENTS	800 SCHUTTE RD	N/A	6"
69802609	RJC INC	3000 N BURKHARDT RD	61501004	6"
69802615	TOWN OF ELBERFIELD	11999 BLUEBELL RD	60100009 / 61501006	6"
69802653	MESKER PARK	1545 MESKER PARK DR	N/A	6"
69802700	MANCHESTER TOWN HOMES	19212 SHOUTHAMPTON DR	60100013	6"
69802709	SPURLING DEV	4500 THEATER DR	60130015	6"
69802713	DAUBY PROPERTY	7342 MEGANBROOK LN	60100018 / 61501015	6"

C. Existing Rockwell/Sensus single-body compound meters (SRM and SRH)

All of the services listed below are located in vaults. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the existing encoder register into the receptacle on the new Sensus 520M SmartPoint.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61121290	YMCA	222 NW SIXTH ST	1164276	4"
61121810	FC TUCKER COMMERCIAL	1 RIVER FRONT PL	30078821	4"
61122535	SIGECO	101 N MAIN ST	1164724	4"
61221010	SW IND MENTAL HEALTH	415 MULBERRY ST	1146702	4"
61222830	EVSC - WASHINGTON MIDDLE SCHOOL	1801 WASHINGTON AVE	1164725	4"
61320515	THE JAMESTOWN	2901 WASHINGTON AVE	1147082	4"
61322050	HEATHMORE APTS	2413 S GREEN RIVER RD	1147236	4"
61322370	ST MARYS MED CENTER	3700 WASHINGTON AVE	82871133	4"
61322470	VAND CITY REHAB	3701 BELLEMEADE AVE	1202294	4"
61322750	DONS CLEANERS	660 S HEBRON AVE	1164723	4"
61420150	SIGNATURE INN HOTEL	1101 N GREEN RIVER RD	1202387	4"
61420780	AMERICAN GENERAL	5550 E VIRGINIA ST	1125051	4"
61420790	NORMANDY ARMS APTS	600 NORMANDY DR	1147980	6"
61421370	CONTINENTAL TOWERS	1100 ERIE AVE	1125056	4"
61421390	SEARS	1100 S GREEN RIVER RD	1202384	4"
61421970	REGENCY PROP	711-915 ERIE AVE	1164311	4"
61521190	U OF E	551 S WEINBACH AVE	1164312	4"
61521230	U OF E	ROTHERWOOD AVE	1146735	4"
61521250	U OF E	400 S ROTHERWOOD AVE	1147523	4"
61521990	ST. JOSEPH SCHOOL	607 IOWA STREET (E)	1164274	4"
61620610	CREDITHRIFT	601 NW SECOND ST	1164277	4"
61722350	EVSC	717 S BARKER AVE	1146733	4"
61722700	DANIEL WERTZ SCHOOL	1701 S RED BANK RD	1164787	4"
61723740	MATER DEI	1300 HARMONY WAY	1148997	4"
61820530	POWERS WELDING	FIFTH AVE	N/A	4"
61820790	ZEIDLER FLORAL	2019 N FULTON AVE	N/A	4"
61821090	HOUSING AUTHORITY	1710 N FULTON AVE	1146704	4"
61821630	TRINITY LUTHERAN CHURCH	INDIANA & THIRD AVE	30876125	4"
61940790	EVANSVILLE COUNTRY CLUB	3810 STRINGTOWN RD	1147520	4"
61943330	BUSLER ENT	1-64 SWY 41 NORTH	26900566	4"
68120090	AZIMUTH CUSTOM EXT	1618 LYNCH RD	1202383	4"
68120150	TJ MAXX	2101 LYNCH RD	1611126	4"
69801950	WAREHOUSE SERVICES	911B E VIRGINIA ST	N/A	6"

The service below is located inside a mechanical room. Remove the existing touch read coupler from the wall and install a new Sensus 510M SmartPoint, provided by the JCI. Insert the TR/PL coupler from the existing encoder register into the receptacle on the new Sensus 510M SmartPoint.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61122360	HOUSING AUTHORITY	315 SE MLK JR BLVD	1146705	4"
61121530	KUNKEL GROUP	329 MAIN ST.	1163858	4"

D. Existing Rockwell/Sensus horizontal turbine meters (W-Series)

The service listed below is located in a vault. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the existing encoder register into the receptacle on the new Sensus 520M SmartPoint.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61321400	HEALTHSOUTH CORP	4100 COVERT AVE	1243493	4"

E. Existing Rockwell/Sensus fire service meters (FireLine)

All of the services listed below are located in vaults. Remove the two (2) existing touch read couplers from the vault lid and install a new dual-port Sensus 520M SmartPoint. Insert the TR/PL couplers from the existing encoder registers into the receptacles on the new Sensus 520M SmartPoint.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61421605	CHARTER OAKS ASSOC	8196 LINCOLN AVE	1295533 / 41549975	6"
61421630	ASHLEY PTE APTS	7721 COVENTRY CT	1226025	6"
61423010	WILLIAMSBURGH PARTNERS	6101 E DIVISION ST	1256833 / 1266011	6"
61423470	SUGAR MILL CREEK TWN	2501 N GREEN RIVER RD	1185485 / 1178882	10"
61423560	TIMBERS APTS	3450 N GREEN RIVER RD	1198296 / 35710912	6" x 1.5"
61722811	USI	MCDOWELL RD	N/A	6"
61722910	USI	CLARK & BLUFF	N/A	6"
61723745	HELFRICH GOLF COURSE	GOLFMOOR RD	N/A	6"
68121795	ELBERFIELD WATER	RUSTON LN - COUNTY LN	1244134 / 40025849	4" x 1.5"

F. Existing Neptune single-body compound meters (TruFlo)

All of these services are located in vaults. Remove the existing touch read coupler mounts from the existing vault lid and install two (2) new Sensus 520M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 520M-W SmartPoints according to the instructions provided by Sensus.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61120740	INTEGRA BANK	21 SE THIRD ST	N/A	4"
61121215	OGDEN ENTERTAINMENT	600 MAIN ST	1709800	4"
61121830	OLD POST OFFICE	100 NW SECOND ST	N/A	4"
61220245	EVANSVILLE COURIER	201-9 E SYCAMORE	30787466	6"
61220351	VISITING NURSE ASSOC	610 E WALNUT ST	31981837	4"
61221000	SW IND MENTAL HEALTH	410 MULBERRY ST	N/A	4"
61221050	DEACONESS CLINIC	420 CHERRY ST	N/A	4"
61221810	HOUSING AUTHORITY	SWEETSET & GARVIN	N/A	4"
61222330	WOODLAND PARK APTS	2511 SUNBURST BLVD	N/A	4"
61222350	WOODLAND PARK APTS	2340 SUNBURST BLVD	N/A	4"
61222597	VANN PARK APTS	3321C POLLACK AVE	31981838	4"
61320490	DEXTER VILLA	2805 WASHINGTON AVE	40100026	4"
61321630	EASTLODGE APTS	4830 CASS AVE	66	4"
61322180	EVSC	1601 SHOSHONI LN	31980667	6"
61322230	EMBASSY EAST APTS	3315 WASHINGTON AVE	40100049	4"

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61322510	ST MARYS MED CENTER	3700 BELLEMEADE AVE	49900014	4"
61322570	BRYCE APTS	791 S HEBRON AVE	40100048	4"
61322840	BETHEL TEMPLE	4400 LINCOLN AVE	44109700	4"
61400010	DUNN HOSPITALITY GROUP	301 CIRCLE FRONT DR	44109704	4"
61420660	DILLARDS	800 N GREEN RIVER RD	N/A	4"
61420875	STAR HOSPITALITY	5538 E INDIANA ST	N/A	4"
61421430	HK PARTNERS	1250 S GREEN RIVER RD	40100041	4"
61421560	ATRIA COMMUNITIES	5311 ROSEBUD LN	44109703	4"
61421590	NEWBURGH HEALTH CARE	10466 POLLACK AVE	31921891	4"
61421720	WILLOW PARK	5050 LINCOLN AVE	N/A	4"
61421730	LARCHMONT HOMEOWNERS	6600 NEWBURGH RD	49900012	4"
61423000	ASHFORD TRS LESSEE	8303 E WALNUT ST	41098005	4"
61423015	ASHFORD TRS LESSEE	8000 EAGLE CREST BL	31939078	4"
61423023	INLAND MID-ATLANTIC	6200C E LLOYD EXP	40100039	4"
61423035	RAMKRISHA CORP	8015 E DIVISION ST	40900001	4"
61423200	COMFORT INN	5006 E MORGAN AVE	31939323	4"
61423705	LASER CAR WASH	4650 MORGAN AVE	10960004	4"
61520446	IND NAT GD ARMORY	3000 E DIVISION ST	N/A	4"
61521120	U OF E	1700 WALNUT ST	31981839	4"
61620135	CASINO AZTAR	421 NW RIVERSIDE DR	N/A	6"
61620180	CASINO AZTAR	700 NW RIVERSIDE DR	N/A	4"
61621270	IRVING METALS	1811 OHIO ST	N/A	4"
61621610	ST BONIFACE SCHOOL	405 N TENTH AVE	N/A	4"
61622010	HILLCREST HOME	2700 W INDIANA ST	N/A	4"
61723015	SCHNUCKS MARKET	4520 W LLOYD EXP	40100070	4"
61723080	CORPUS CHRISTI	5528 HOGUE RD	40000009	4"
61723505	WESTSIDE TREATMENT	900 S TEKOPPEL AVE	N/A	4"
61723890	RESSURECTION CHURCH	5301 NEW HARMONY WAY	N/A	4"
61820590	COMSTEEL	1413 W FLORIDA ST	N/A	4"
61820700	KERRY INC	1515B PARK ST	699001	6"
61820870	DIAMOND VALLEY INV	1200-1321 NORTHBROOK	N/A	4"
61820910	DIAMOND VALLEY INV	1151 FULTON PKWY	31921578	4"
61821290	MARTIN HOLDINGS	1328 N FULTON AVE	N/A	4"
61821890	COLUMBIA PHYS CENTER	350 W COLUMBIA ST	N/A	4"
61822040	EVANSVILLE SURGERY CENTER	520A MARY ST	N/A	4"
61940260	INTEGRATED ENERGY TECH	225 W MORGAN AVE	N/A	4"
61940670	ST THERESA CHURCH	900 WEDEKING AVE	N/A	4"
61941690	GROSSMAN RENTALS	700 FAIRWAY DR	40100000	4"
61942495	INDIANA TUBE	2100 LEXINGTON	40100060	4"
61943360	HOLIDAY INN EXPRESS	19600 ELPERS RD	40100024 / 31981840	4"
61943385	SUPER 8 MOTEL NORTH	19601 ELPERS RD	1096080091 / 40960002	4"
61943392	REPLAS INC MATRIXX	15000 HWY 41 N	7142087987 / 41098601	4"
61943410	PPG INDUSTRIES	424 E INGLEFIELD RD	527100123 / 4274033	6"
68021030	JIC ENTERPRISES	1401 N EVANS AVE	N/A	4"
68120165	SIGMA PACKAGING	3001 LYNCH RD	10100073	4"
68120490	OHIO VALLEY PLASTICS	4825 N SPRING ST	40100061	4"
68120570	FERRO CORP	4991 OHARA DR	40100046 / 40143446	4"
68120740	MOTEL 6	4201 HWY 41 N	40100069	4"

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
68120800	STAGG INVESTMENTS	2007 ST GEORGE RD	30787543	4"
68121119	USPS	7100 PETERSBURG RD	7142087937 / 70024122	4"
68121160	WABASH PLASTICS	1300 BURCH DR	N/A	4"
68121629	EVSC	1042S PETERSBURG RD	S27100127 / 60960001	6"
68122340	PRINCETON CT APTS	3500 E MORGAN AVE	40100013	4"
68122640	OAK HILL CEMETARY	1400 E VIRGINIA ST	N/A	4"
69800080	RED ROOF INN	8331 E WALNUT ST	44109701	4"
69800170	EVANSVILLE APTS	5009 E RIVERSIDE DR	41098010	4"
69800180	EVANSVILLE APTS	5008 ANGEL DR	4109008	4"
69800190	EVANSVILLE APTS	2700 CORRUNA DR	41098009	4"
69800200	EVANSVILLE APTS	5011 FALCON	41098006	4"
69800210	EVANSVILLE APTS	2601 RALEIGH DR	41098007	4"
69800220	EVANSVILLE APTS	2701 RALEIGH DR	41098004	4"
69800260	USI	8001 BROADWAY	11098011	4"
69800320	ANGEL RIVER HEALTH	5233 ROSEBUD LN	1499802	4"
69800370	MEUTH CONCRETE	2201X BERGDOLT RD	49900005	4"
69800420	ST MARYS MED CENTER	3801 BELLEMEADE AVE	49900006	4"
69800440	KERASOTES THEATER	5600 PEARL DR	N/A	4"
69800550	BROWNSTONES OF DANBURY	2501 DANBURY LN	69900002	6"
69800640	MARLIN GOEBEL	4400 N FULTON AVE	N/A	4"
69800680	LEISURE LIVING APTS	3000 N ST JOE AVE	69900000	6"
69800740	EVILLE AUD & CONV CTR	WALNUT ST	N/A	4"
69800750	HOWELL POOL	1101 S BARKER AVE	N/A	6"
69800760	ANTHONY OAKS POOL	SUNBURST BLVD	699001	6"
69801120	FERRO CORP	4917 OHARA DR	40000003	4"
69801230	FERRO CORP	5001 OHARA DR	40000002	4"
69801340	GUARDIAN INDUSTRIES	601 N CONGRESS AVE	N/A	4"
69801350	U OF E	200X S ROTHERWOOD	49900010	4"
69801490	CINTAS	7233 ENTERPRISE PK	40000013	4"
69801500	BAYMONT INN	5737 PEARL DR	4000004	4"
69801530	BERRY PLASTICS	101 OAKLEY ST	40000001	4"
69801540	CHRISTIAN FELLOWSHIP	4100 MILLERSBURGH	40000000 / 1095011905	4"
69801640	BEST WESTERN	324 RUSHER CREEK	N/A	4"
69801670	WALMART	6700 E VIRGINIA ST	40000010	4"
69801840	EVILLE STATE HOSPITAL	3400 LINCOLN AVE	N/A	6"
69802070	HOLY REDEEMER	9188 W MILL RD	40100001	4"
69802360	SCHNUCKS MARKET	3501 N GREEN RIVER RD	40100002 / 82871178	4"
69802470	OLD NATIONAL BANK	1 MAIN ST	N/A	4"
69802484	REGENCY CLUB APTS	8416 LINCOLN AVE	41410005	4"
69802488	IVY TECH	3501 N FIRST AVE	69900018	6"
69802497	BURDETTE PARK	5301 NURRENBERN RD	N/A	4"
69802513	SURGICARE	225B CROSSLAKE DR	40100009	4"
69802514	TRISTATE ORTHO SURG	225 CROSSLAKE DR	40100008	4"
69802526	WALMART	335B S RED BANK RD	N/A	4"
69802528	BUILDING AUTH	3500 N HARLAN AVE	40100038	4"
69802559	CULVERS RESTAURANT	1734A HIRSCHLAND RD	40100012	4"
69802560	BUILDING AUTH	35008 N HARLAN AVE	40400011	4"
69802566	U OF E	301 S WEINBACH AVE	40100015	4"

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
69802605	S IN CAREER & TECH	1901 LYNCH RD	40100016 / 40100010	4"
69802619	ST MARYS MED CENTER	3700 WASHINGTON AVE	40100018	4"
69802643	CASINO AZTAR	615 NW RIVERSIDE DR	N/A	4"
69802649	BRAKE SUPPLY	5501 FOUNDATION DR	40100025 / 43401023	4"
69802693	HILTON GARDEN INN	220 EAGLE CREST DR	40100030	4"
69802706	VALUE PLACE HOTEL	8221 STAHL RD	40100027	4"
69802716	AMERICAN GENERAL	600 NW SECOND ST	N/A	4"
69802731	MBA CONST	7100 E VIRGINIA ST	40100058	4"
69802736	WEST RIVER HEALTH CAMPUS	8530B MD MT VERNON RD	N/A	4"
69805204	EVSC	14940 OLD STATE RD	40100006 / 43401006	4"
61322380	ST MARYS MED CENTER	801 St. Mary's Drive	40100018	4"

The services below are located inside mechanical rooms. Remove the existing touch read coupler mounts from the existing wall and install two (2) new Sensus 510M-W wired SmartPoints. Cut the existing touch couplers from the ends of the existing Neptune ProRead encoder registers and then connect the register cables to the new, wired 510M-W SmartPoints according to the instructions provided by Sensus.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61120090	CIVIC CENTER	1 NW MLK JR BLVD	40960000	4"
61120650	CURTIS INVESTMENTS	24 NW FOURTH ST	N/A	3"
69802689	THE MERIDIAN PLAZA	300 MAIN ST	40100029	4"

G. Existing Sensus Omni-series Floating Ball Technology Meters

The service listed below is located in a vault. Remove the existing touch read coupler from the vault lid and install a new Sensus 520M SmartPoint. Insert the TR/PL coupler from the existing encoder register into the receptacle on the new Sensus 520M SmartPoint.

Account Number	Customer Name	Service Address	Meter S/N	Meter Size
61942550	DSM PLASTICS	5413 N ST JOE AVE	71178521	6"

H. Facilities Closed or Under Construction at Time of Survey

Account Number: 611-21990
Customer Name: AM Health – City Center Property
Service Address: 101 – 1st Street (NW)
Meter Size: 4" Neptune TruFlo, S/N 40100017
Comments: This facility is closed and therefore the service is excluded from the Scope of Work.

Account Number: 698-00520
Customer Name: Brandeis Machinery
Service Address: US 41 N
Meter Size: 4" Neptune TruFlo, S/N 49900004
Comments: This facility is closed and therefore the service is excluded from the Scope of Work.

Account Number: 698-02737
Customer Name: Evansville Redevelopment
Service Address: 1 SE Martin Luther King, Jr., Blvd
Meter Size: 6" Neptune TruFlo, S/N 69900020
Comments: This facility was under construction during the large meter survey and therefore was excluded from the Scope of Work. It appears that the register cables from both of the ProRead encoder registers have been cut. At the Customer's discretion, Johnson Controls will replace both of the existing encoder registers with new ProRead encoder registers, install two new Sensus 520M wired SmartPoints, and splice the register cables to the 520M SmartPoints.

Account Number: 698-02740
Customer Name: Summit Smith Medical
Service Address: 6211 Waterford Blvd.
Meter Size: 4" Neptune TruFlo, S/N 401000065
Comments: This facility was under construction during the large meter survey and therefore was excluded from the Scope of Work. At the Customer's discretion, Johnson Controls will replace both of the existing direct read registers with new ProRead encoder registers, install two new Sensus 520M wired SmartPoints, and splice the register cables to the 520M SmartPoints.

Account Number: 681-20850
Customer Name: Action Trailer
Service Address: 1308 St. George Road
Meter Size: 4" Neptune TruFlo, S/N 49900004
Comments: This facility is closed and Duane Gilles from the City of Evansville instructed Johnson Controls not to incorporate this service into the Scope of Work.

7. Advanced Metering Infrastructure (AMI) System Installation

The AMI system will consists of the following:

- AMI System installed shall be the Sensus FlexNet
- Includes eight (8) Sensus Tower Gateway Base Stations (TGBs).
    - Eight (8) Tower Gateway Basestations (TGB'S) collectors mounted to existing City-owned structures to provide sufficient coverage and performance criteria. Tower locations, heights, and propagations studies have been previously analyzed by Sensus to ensure proper coverage. For each TGB site, JCI will make all connections to the TGB cabinet, provide all bracketing and labor for mounting the antenna at the site, and mount the TGB cabinet to the structure or location provided.
    - For indoor TGB sites, Owner is responsible for providing a secure location for TGB installation, JCI will provide 120V electrical power and network access, grounding connection to TGB, all backhaul requirements, IP addresses and access fees. Owner shall coordinate with any additional entities necessary to obtain access to existing structures for AMI use.
    - For outdoor TGB sites, JCI is responsible for providing a secure 6' x 6' pad location for TGB installation, 240V electrical power, network access, grounding connection to TGB, and all backhaul requirements, including IP addresses and access fees. Owner shall coordinate with any additional entities necessary to obtain access to existing structures for AMI use.
    - If repeaters are needed to provide additional coverage in specific locations, JCI is responsible to provide a 120V power source and cable run to the location of each repeater (Metro or FNP). Owner shall be responsible for electrical or lease fees

associated with continued use. Owner shall coordinate with any additional entities necessary to obtain access to existing structures for AMI use.

- One (1) Sensus Regional Network Interface (RNI) system.
- Owner is responsible for providing server-rack bays for installation of the Network Server, power, and all back haul requirements including any necessary static IP addresses and access fees. Network Server installation is usually preferred in a suitable IT room. Owner will provide network access. JCI will comply with Owners current method of access.
- JCI will ensure diligent care in installation and will communicate closely with Customer staff if issues are becoming frequent in particular areas of the city. Follow-up repairs will be made as quickly as possible once the need is identified, while installation crews continue their work. In cases of frequent or serious repairs being required, JCI will notify the owner, and may stop work to investigate the causes and determine a solution. The owner will be responsible for additional repairs beyond the scope of repair listed within the terms of this contract.
- JCI reserves the right to utilize the programming equipment during installation, after which the programming equipment will become property of the Customer.
- The owner shall continue to be responsible for reading meters until all commissioning and acceptance plan steps are completed for the AMI system route.
- All removed meters shall become property of the owner, and will be placed in a mutually agreed upon storage location.

8. Meter Location and Rework

It is understood by JCI that the components of the new AMI system will properly fit inside of OWNER's meter pit environment. If the meter, meter box, service line, or any other existing component is set in a manner that requires rework for installation (other than those accounts specified herein), OWNER is responsible for re-work to meter set and any other components in order to accommodate the new radio/transmitter and meter.

9. Lid Puncturing

OWNER shall provide a minimum of two work-day supply of seed stock for every type of pit lid in the utility based on the expected rate of installation. The minimum supply should be no less than 50 lids per lid type.

10. Weekly Utility Database Refresh

OWNER will provide a weekly refresh file of entire utility database for each scoped service (water, electric, gas...etc). The refresh file should be provided in electronic format and posted to the customer's FTP server for access by Johnson Controls, Inc. on a weekly basis. If the customer does not have a FTP server, a FTP location will be provided to the customer for uploads. The file should be either comma delimited or fixed-width and contain (at minimum) the following fields:

- Service Type (water, gas, electric)
- Account ID (Location ID)
- Address
- Cycle/Zone (if applicable)
- Route/Book
- Reading Sequence
- Radio ID (MXU, MTU, Transmitter Smartpoint, *etc*...)
- Register ID (*aka* AMR#, Register ID, MIU ID)
- Meter Number (*aka* Serial #)

- Make (Sensus, Master Meter, Neptune, *etc*...)
- Model (not required)
- Size (5/8 x 3/4, 1, 2, *etc*...)
- Latitude (degree.decimal)
- Longitude (degree.decimal)

11. Billing System Interruptions:

JCI recognizes the complexities involved in billing system upgrades, transitions, and modifications. In the event of project delays resulting from unexpected functionality, implementation issues, conversion problems or the like of billing system, JCI shall not be held responsible for such delays. The Parties acknowledge that the Owner is in the process of implementing a new billing application and that such application is expected to be in place by April 15, 2012. Given the billing application implementation schedule and the proposed implementation schedule of this project, the parties do not anticipate that installation of the new billing system will adversely affect this project. However, in the event that an adverse effect does result, the OWNER agrees to make mutually agreeable adjustments to any affected facets of project including material warranties, installation schedule, and potential material price increases as a result of billing system modifications during the project.

12. Utility Interruptions and Customer Support:

JCI will be responsible for adequate management, notification, and coordination of installation efforts related to this project. Customer involvement and support will also be required during implementation of this improvement measure. Any Owner staff overtime or water fees that are a result of this project are the responsibility of the customer.

13. Customer Responsibilities:

1. Customer is responsible for water line repairs further than 24" away from the meter, unless caused by the negligence or intentional misconduct of JCI or otherwise noted herein. JCI is not liable for unavoidable damages outside of this 24" zone, either on the water distribution side or on the resident/business side, incurred from the meter replacement process (*i.e.*, shutoff, temporary outage, and restart of water service, *etc*...) unless caused by the negligence or intentional misconduct of JCI.
2. Adequate personnel to assist in the shutting off service to any meters where isolation valves are not functioning properly.
3. Any non-operational isolation valves that require either repair or replacement will be the responsibility of Customer.
4. Locking meter box covers have not been included in this project. Any requirements for locking lids will be the responsibility of Customer.
5. Reasonable assistance in locating meters as required.
6. Provide guidance and support in either the repair or replacement of sidewalks, curb stops, and roadways damaged by JCI during the project. Any damage by JCI will be repaired by JCI at no cost to Customer.
7. Customer will provide guidance in the proper operation of curb stops and shut-off valves. JCI shall operate the isolation valves as instructed by Customer. Customer shall supply personnel to either repair or to replace isolation valves if found to be inoperable.
8. Assurance that water fixtures are running properly after the replacement of corresponding water meter will be coordinated responsibility of JCI, Customer, and said End User.
9.

10. Route Acceptance:
    a. Upon Substantial Completion of each route in Customer's system, JCI shall notify Customer in writing and request a Certificate of Substantial Completion. Customer shall, within 15 days, review submitted route acceptance documentation to determine its status of completion. If Customer does not consider Work to be substantially complete, it shall notify JCI in writing, giving the reasons therefore. If Customer considers the Work to be substantially complete, Customer shall develop a list of items to be completed or corrected ('punch list') and execute a Certificate of Substantial Completion provided by JCI.
    b. "Substantial Completion" with respect to the meter routes only shall mean the point at which a minimum 90% of the meters are installed in a given route and associated data is transferred into the Customer's billing database. Until the point at which an executed substantial completion route document is returned from the Customer, JCI does not support total reliance on the AMI system for billing purposes. Customer is responsible for reading meters not yet retrofitted or installed by JCI.
    c. "Final Completion" for each route is the time at which all punch list items (in a given route) from Substantial Completion are corrected (or 99% of all scoped meters are installed and functioning through the AMI system per manufacturer's specifications, whichever comes first). Upon issuance of the Certificate of Final Completion for each meter route, the installation labor warranty begins, system benefits may be realized, and the use of the AMI system for the specified route can be utilized for billing purposes. Any items remaining on the Substantial Completion punch list at this point will have a mutually determined and documented resolution between the Customer and JCI.
11. It is the Customer's responsibility to bill and collect for all increased meter accuracies. Should the City decide to forgive any increased accuracy impact outlined in this contract, it is at their sole discretion and shall not impact the benefit described herein.
12. Certain meters within the specified scope of work (such as Sensus Omnis) will have a battery life that does not meet the duration of the performance contract. It is the customer's responsibility to take the necessary measures to ensure that these meters remain operational for the duration of the contract. Any negative impact on savings as a result of battery life for meters that do not extend the term of the contract is the burden of the OWNER.
13. System Maintenance Process:
    a. JCI will respond to 100% of initial service calls on any meter not signed off/accepted, where the route was entered (opened). Once the meter has been installed properly per the contract and route acceptance has been completed, the OWNER will be the initial responder to the call. JCI will only be called out to a meter if a problem consists in item "b" below.
    b. If the problem has anything to do with workmanship from an installation (during the warranty period), the problem is the responsibility of JCI. Workmanship examples include anything that has not been completed per the contract (i.e.: meter not installed per AWWA guidelines and lids not punctured properly).
    c. JCI warranty responsibilities – during JCI warranty period as defined in Schedule 1 - include faulty meters or dead meters, regardless of acceptance status. A faulty meter would include any meter with a mechanical malfunction including broken or bad registers. A dead meter is a meter that stops recording water flow after is has already recorded flow. If either one of these problems are realized by JCI during their initial response, they will communicate back to the OWNER and make the needed repairs within thirty days, provided JCI has access to the repair areas. The owner shall be responsible for broken freeze plates, assuming correct installation, due to extreme temperatures and any damages caused by the owner.
    d. In the event that the handheld programmer fails and the installer cannot program meter, he will then attempt to locate a backup handheld to complete installation. If a backup is not available, he will continue to install meters, document the problem and notify JCI of the issue. It will then be JCI's responsibility during the JCI warranty

period as defined in Schedule 1 to ensure that the Meter Manufacturer programs those meters in a timely manner.

e. If for any reason the Fixed Network Collectors stop working and the installation crews cannot properly program the meter, he will continue to install meters and document the problem. During the JCI warranty period as defined in Schedule 1, it will then be JCI's responsibility to ensure that the Meter Manufacturer programs those meters in a timely manner.

Notes:

- The quantities of existing water meters with "Active" accounts are based upon data provided to JCI by Customer. Any additional meters that are found during installation will not be replaced as part of this Agreement. Any excess materials will be left with Customer to be used as bench stock. If JCI is requested to install additional quantities of water meters to complete this project, the total installed unit price per meter will be negotiated at that time.
- All water meters will be installed at the depth dictated by current water service line depth. Any change in water service line depth is the responsibility of the Customer.
- Existing cast iron pit lids with touchpad holes will be reused to accept the 520M "through-the-lid" radio.

14. Meter Access Program:

Customer support will be required during implementation to obtain access to meters and to coordinate utility interruptions. JCI personnel will be responsible for adequate notification and coordination with appropriate Customer personnel and end users to facilitate access and minimal disruption.

JCI shall follow the following Access Program:

- **Written attempt one.** JCI will proceed with meter replacement per a scheduled implementation plan. If the installer cannot gain access to the meter (inaccessible), a door hanger with the Installer contact # to make an arrangement for access, will be left.
- **Written attempt two**. On a second occasion, JCI will attempt to reschedule and access the meter in an attempt to complete the work. If JCI still cannot gain access to the meter, another door hanger will be left.
- If access cannot be obtained via "cold-calls", JCI will attempt to contact the customer via telephone to gain access to the meter. A valid telephone attempt is, a) when the customer can be reached, or, b) when a message is left on an answering machine or voice mail. JCI will make a minimum of three telephone attempts utilizing the telephone number supplied by the Customer via the work order data and any other reasonable means available to JCI. A minimum of one telephone call must be attempted on Saturday or on a weekday after 5:00pm.
- **Written attempt three**. On a third occasion, JCI will call for an appointment, and then visit the premise in an attempt to complete the work. If JCI still cannot gain access to the meter, another door hanger will be left.
- If 10 business days after JCI delivers the third written attempt, the work order has not been completed and an appointment has not been established, the work order will be returned to Customer as a "Can't Complete" order. For project tracking purposes, such orders will be considered complete.
    - Hard to access accounts – Accounts that do not respond to the above attempts process shall be listed by Johnson Controls on a weekly basis and submitted back to OWNER. OWNER will then be responsible for gaining access to these accounts; Johnson Controls may participate in the scheduling (with OWNER) and meter change-out of these accounts.
    - Faulty plumbing or abnormal conditions – If the Johnson Controls installer identifies a condition in a residence or business that would prevent the meter from being replaced,

that account will be submitted by Johnson Controls in a list of accounts to return to OWNER. OWNER will be responsible for repairing the problem.

- Examples of abnormal conditions for water meters (including, but not limited to)
  - Faulty curb stop
  - Broken isolation valve or isolation valve that will not shut-off
  - Broken crocks
  - Broken pit lids
  - Corroded plumbing
  - JCI will provide repair pricing for these situations

Scope of Work - 2: Automated Leak Detection

This measure consists of an automated leak detection system that can also be connected to the AMI system for the purpose of backhauling the leak noise history data for analysis by Customer staff. The leak detection system proposed is not designed to cover the entire distribution system service area, but rather to allow the city staff to survey a portion of the system which is approximately forty (40) miles of service lines at any given time.

Goals:

- Reduce real water losses
- Lower maintenance costs by catching leaks and breaks before they surface
- Help prioritize pipe maintenance
- Provide a mobile leak detection system that can be deployed in a "lift and shift" strategy

Scope of Work – Leak Detection

FCS Permalogger Leak Detection Sensors

- Provide two hundred and fifty (250) Permalog+AMR sensors capable of being read through Sensus FlexNet AMI system

AC Digital Correlating Logger

- Provide one (1) AC Digital Correlating Loggers (DCL's)

Valve Box Covers

- Provide two hundred and fifty (250) composite valve box covers

Training

- Provide 4 days of training on the following:
  - Permalog placement and installation
  - The use of AC Digital Correlating Logger
  - The use of Patroller II unit and software

Scope of Work - 3: Municipal Network Infrastructure

0.0 Project Overview

The project will be supported by a Municipal Network consisting of both wired and wireless networks as described herein. The Network will be comprised of two (2) primary Municipal components:

a) Municipal Wireless Network for AMR, Public Works, Public Safety, Public Access, and other Data Services

b) Municipal Fiber Optic Network and associated Network Hardware for AMR and other Data Services

These two (2) primary Municipal Network components defined herein in four SOW Sections will be packaged and delivered as a single GMP SOW. Upon completion of all installation and acceptance testing requirements, and upon formal acceptance of the Municipal Network and all its components by Customer's designated representative, the Municipal Network and all components specified herein will be transferred to Customer to own, operate and maintain. Warranties, additional services, and recurring costs for the defined term apply as specified herein. Savings that have accrued during the GMP procurement process will be shared equally between the Customer and Johnson Controls.

The Municipal Network will provide data services and beneficial use to EWSU and Customer as detailed herein. Johnson Controls, Inc. assumes all responsibility for the procurement, delivery, testing and warranties as required by the GMP SOW and Performance Specifications for the duration of the specified terms. All ongoing agreements with third parties, including recurring costs for utility pole attachments, power, software licenses, and additional services and/or agreements beyond the defined GMP SOW term of services will be by Customer.

This GMP SOW is for the Wireless and Fiber Networks for Customer. The Project is categorized by scope sections.

- **Scope of Work Section 1: Wireless Network**
  The overall goal of this project is twofold: a) to provide a City-wide wireless network to cover Customer's approximately 40 square miles with wireless mobile data services for Public Safety and Public Works; and b) open-air Public Access Wi-Fi for citizens and visitors.

- **Scope of Work Section 2: Fiber Network**
  The primary purpose of this project is to procure a turnkey solution that provides fiber optic connectivity to multiple sites throughout the City.

- **Scope of Work Section 3: Wireless WAN**
  Customer desires to implement a wireless Wide Area Network (WAN) system to provide data services among several of its Customer-owned sites.

- **Scope of Work Section 4: Fiber Network Hardware and Integration**
  Provide, install, and commission hardware necessary to implement the Fiber network installed as part of Scope of Work Section 2.

It is understood that the current project is defined with GMP procurement guidelines and that scope and Customer requirements may change with documented scope and cost change orders.

0.1 Project Organization

0.2.1 Project Management Team

The Johnson Controls Project Executive (Barry Torphy) has the overall responsibility for the management of the project procurement and coordination of all subcontracted portions of the work in accordance with the Contract Documents. The Project Executive will ensure that all work is performed safely and in accordance with the design and contract documents. If Project Executive leaves the project for any reason, the Customer must agree on the new appointment.

Johnson Controls will establish a Project Office for overall management of the Project. The Project Office will serve as a center for management, communications, planning, design review, field engineering, and technical support, as well as the center of coordination for the installation of the Wireless, Fiber, Wireless WAN, and Hardware scopes to be installed under this contract. All work associated with implementing the project scope of work will be managed from this office.

0.2.2 Engineering Consultant

Johnson Controls, Inc. has retained RCC Consultants, Inc. to provide technical specifications and design oversight for the Wireless and Fiber Network bid packages.

0.2.3 Sub-Contractors

Johnson Controls and all Sub-Contractors will make an effort meet the Customer's 12% MBE and 7% WBE goals. Sub-Contractors will procure all permits as required for their respective work. Sub-Contractors will follow City, County of Vanderburgh, and State of Indiana requirements with regard to Prevailing Wages. The scope of each subcontract will be discussed in detail in section 4.0.

0.3 Project Cost Baseline

0.3.1 GMP Baseline and Procurement Process

Johnson Controls, Inc. will deliver this SOW as described herein, for a Guaranteed Maximum Price. Johnson Controls will solicit qualified bids for products, installation and technical services for the work as described in the 4 SOW Sections. As those bids are received and reviewed, Johnson Controls, Inc. will make recommendations and review scopes of work with the customer. Upon acceptance of these recommendations, the scope and associated costs will be tracked within the project Master GMP Cost Control document. Scope of work and costs within each section may increase or decrease to remain within the guidelines of the established budget as agreed upon by the Customer and Johnson Controls, Inc.

Johnson Controls will execute the work in accordance with the terms and conditions of the contract. The general scope of the work and general clarifications to the specifications are listed in this document. Johnson Controls will resolve inconsistencies between the specifications and Johnson Controls' standard practices with Customer on a case-by-case basis.

Johnson Controls will have overall responsibility for project management, site coordination of Sub-Contractors, schedule management, and coordination with Customer for access to areas in individual buildings. Johnson Controls and its Sub-Contractors will perform engineering for all subcontracted systems.

Additional work requested by Customer that is not included in the scope of work will tracked via the project Master GMP Cost Control document and will require a change order documentation to track the changes in scope.

All estimates are based upon the Work Breakdown Structure (WBS) and include material cost, labor man-hours, and associated labor rates to install or construct elements of the project. Work included in the contract is broken down by WBS with an associated sub-account number for time phased budgeting and the collection of costs. The financial status of the project is reported to Johnson Controls management on a regular basis with monthly reconciliation of cost variances.

Materials descriptions in the estimate will include the specification, grade of the material, and any code requirements as specified. The end product of the material and equipment estimate will be the master equipment list that will be used from procurement through startup and commissioning. For materials or equipment not included in the Johnson Controls product line, the estimate will specify who will procure the material, Johnson Controls or a subcontractor, and the preferred vendor.

A critical element of the estimating process is documentation of scope and design assumptions. This forms the basis of the estimate upon which Customer-requested revisions to the estimate can be evaluated.

During the engineering phase, a detailed material equipment list will be generated that identifies materials, quantities, WBS charge element, and date required. Materials will be ordered with adequate lead-time to be available on site when required for installation activities. A periodic update of the material equipment list will be generated to assure compliance with the project schedule.

All suppliers of material or services are evaluated to assure that they are qualified by Johnson Controls to provide the specified material or service. The Project Executive, or designee, will perform the supplier review and document these reviews. Criteria for evaluation will include reliability, a Quality Control Plan that is consistent with the requirements for the material or service to be provided, facility evaluation, and a history of providing like materials or services.

At a minimum, material purchase orders will specify material, specification and grade, identification requirements, and certification requirements. Sub-Contractors/suppliers will be required to follow salient Quality Assurance (QA) requirements as specified in the purchase/subcontract document. Failure to meet standards may result in procurement changes or modifications as directed by the Project Executive.

0.4 Project Quality

The Johnson Controls Project Executive will have the following responsibilities with respect to quality control (QC):

A. Responsible for the work results for SOW Sections 1-4 as defined above.

B. Ensure all work is performed in compliance with all applicable laws, contract requirements, code requirements, and construction industry standards.

C. Establish a job specific QC program.

D. Ensure that all work is performed in accordance with Johnson Controls standards.

E. Manage and coordinate QC activities, submittals, tests, samples, and results.

F. Ensure that weekly project briefings are held to discuss quality.

G. Ensure that drawings are kept up to date with the proper revision.

H. Inspect equipment to be installed, and reject equipment if found to be non-compliant with specifications or damaged during transportation.

I. Investigate and resolve warranty problems, and indicate the action taken on Warranty Reports.

0.5 Project Safety

Johnson Controls will work in a manner that promotes the safety of Customer, Johnson Controls, subcontractor employees, the public, and the environment. The Project Executive will administer and oversee the safety program for the individual subcontractors. Johnson Controls' will issue a site specific safety plan that aligns with Johnson Controls and Customer safety guidelines. The major elements of the safety program are as follows:

- Documentation, investigation, and reporting of occupational injuries in accordance with Johnson Controls, Customer, and OSHA guidelines.
- Posting of OSHA worker safety guidelines and right to know information.
- Conducting weekly site safety meetings.
- Training personnel on the site safety policy, right to know, use, and maintenance of personal protective equipment.
- Issuance and control of safety related work permits.
- Control of work site access to alleviate work area congestion.
- Maintaining an all-inclusive record of Material Safety Data Sheets and a log of all hazardous materials on site.
- Implementation of lock-out and tag-out procedures.
- Enforcement of fall protection education.
- Identification and monitoring of confined space.
- Hazardous material identification and abatement coordination.

0.6 Construction

Construction will be performed to fully integrate with Customer's activities. Integration will be accomplished using key interface milestones for work that must be completed by Customer and their contractors prior to the initiation of Johnson Controls work. The proposed sequence of work will be by scope. Upon award of contract a detailed WBS and Schedule will be developed and reviewed with the customer.

0.7 Customer Responsibilities:

(b) Pole Attachment Agreements, where applicable, are the sole responsibility of Customer. Johnson Controls will include the first 2 (two) years of recurring Pole Attachment fees within this GMP agreement as a line item project cost in the project Master GMP Cost Control document. All recurring costs, where applicable, associated with Pole Attachment Agreements after the specified term will be the sole responsibility of Customer.

(c) Power connections to newly installed outdoor equipment will be included in the installation costs of the GMP SOW. Johnson Controls will include the first 2 (two) years of recurring power service fees within this GMP agreement as a line item project cost in the project Master GMP Cost Control document.

(d) Johnson Controls will provide the cost of Internet Service Provider (ISP) fees based on a minimum connection of 500Mb/s for the first 2 (two) years after substantial completion as a

line item project cost in the project Master GMP Cost Control document. Any costs above and beyond this amount are the sole responsibility of Customer.

(e) Service Level Agreements (SLA) for all installed equipment will be included in the installation costs of the GMP SOW and included in the allotted GMP total. Johnson Controls will include the first 2 (two) years of recurring SLA costs within this GMP agreement. Level of SLA and service options shall be determined by the Customer with recommendations by Johnson Controls, all SLA costs will be entered as a line item project cost in the project Master GMP Cost Control document.

(f) Customer will use reasonable efforts to work with City-wide tenants to avoid/remediate RF interference to or blocking of the RF signals of the network equipment.

(g) Johnson Controls will provide all necessary security and associated software for managing network traffic for the installed Wireless Network equipment. Johnson Controls will employ industry standard practices at all levels of the Wireless Network and with respect to all services. The Customer will assume ownership and management of Wireless Network security software.

(h) Johnson Controls will coordinate with the Customer to identify and provide appropriate network attachment facilities on Customer owned assets (i.e., street lights, traffic signals, roof tops, communication towers, poles, etc.) for the deployment of the network hardware.

(i) Customer will be responsible for identifying appropriate physical network connection to any existing network(s) and assist with the configurations/commissioning thereof.

(j) Customer shall be responsible to provide IT Project Management to supervise and assist the contractor with the network cutover from the existing Opt-E-Man service to the new Fiber Optical Network.

(k) Customer shall provide IT technical support services to assist with field coordination of the installation of hardware and associated power connections and network connections as required for the installation of all network hardware. This includes identifying mounting locations, power sources, and network connections. If the new WAN locations are in a different location within the building than the existing Opt-E-Man connection, Customer shall provide coordination support to the contractor to identify the most efficient cabling pathways using existing installation assets if possible.

(l) At the Fiber Ring locations, Johnson Controls will be responsible to provide all required Power Supplies and UPS power equipment if it does not currently exists. The Customer shall be responsible to provide any/all required emergency generators, to support the installed network hardware. Power quality assurance, redundant power, and emergency power required to meet the uptime requirements of this agreement shall be the responsibility of Customer. Any impacts to the uptime guarantee covered under the SLA due to power interruption from Customer-owned power supplies shall not result in uptime penalties to Johnson Controls, Inc. or the SLA service provider.

(m) The Customer will provide a single designated Project Representative authorized to direct the Johnson Controls Project Executive in project-related decisions.

Johnson Controls will ensure that all work has received the proper inspection in accordance with the contract documents, local building ordinances, and Customer construction standards. Written acceptance of all work performed will be by Customer

0.8 Communications

0.8.1 General Communication

A list of primary project participants with mailing address, voice mail numbers, fax numbers, etc. will be prepared. Standard reports or documents will be listed with a standard distribution list. Standard meeting schedules will be included with a list of attendees that will participate.

0.8.2 Electronic and Written Correspondence

The formal submittal of deliverables to Customer will be accompanied by a correspondence letter that outlines the information contained in the attachment as well as any requested actions. Johnson Controls will also actively issue both written and electronic correspondence to the subcontractors to ensure the proper execution of subcontractor coordination items.

0.8.3 Project Meetings

A standard weekly team meeting will be held with the core project team and any other key interface organizations. This meeting will include a review of the current schedule. The schedule review will include an update of the status of all tasks and the development of work plans to mitigate any schedule slippage. The updated schedule will be issued weekly to identified personnel. During these communication meetings, it will be critical to review any external interface points to ensure good coordination between subcontractors.

On a monthly basis, a detailed review of schedule performance will be conducted. This review will be done based on the WBS structure and variance analysis. Corrective action will be done for elements that exceed established current period or cumulative thresholds. In addition, a summary of accomplishments and project issues will be prepared.

0.9 Document Control

All documentation for this project will be maintained in an indexed system that allows project documents to be readily retrievable. The organization of project documentation is essential to tracking project commitments and deliverables and serves as a permanent, audible record. Distribution lists will be reviewed with Customer to determine the appropriate person(s) for distribution.

Drawings, specifications, and test procedures will be released separately for Johnson Controls review and for the material procurement and installation stages of the project.

Only "Issued For Construction" documents will be used for construction. One set of drawings will be redlined to reflect "As-built" conditions. The final set of drawings and specifications will be changed and submitted to Customer upon completion of the project.

0.10 Warranty/Maintenance

The Warranty/Maintenance Section applies to all SOW Sections 1-3. SOW Section 4 is defined by specific requirements included in Section 4.0.8.

All equipment, software, and services furnished by Johnson Controls and its Sub-Contractors will be warranted free from defects in material and workmanship, and will conform to this SOW and the Proposal thereto, including those exceptions agreed upon. In the event any such defects in equipment, software, or services become evident within the warranty period, Johnson Controls and its Sub-Contractors will correct the defect at its option by (1) repairing any defective components; (2) furnishing necessary replacement components; (3) otherwise correcting any reproducible and/or recurring software defects; or (4) redoing the faulty services. Labor to perform warranty

services will be provided at no charge during the warranty period. Thereafter, the maintenance and service of the System will be contracted out to Johnson Controls and its Sub-Contractors, a third party, or provided by Customer.

The warranty period will be a period of 12 months from the date of Substantial Completion.

Claims under any of the warranties herein are valid if made within 30 days after termination of the warranty period. In addition, the following specific requirements apply to the warranty:

1. All equipment furnished hereunder shall be new and of current manufacture.
2. Johnson Controls will notify Johnson Controls and its Sub-Contractors within a reasonable time after the discovery of any failure or defect during the warranty period.
3. Should Johnson Controls and its Sub-Contractors fail to remedy any major failure within 8 hours, or any minor failure or defect within 10 consecutive days after receipt of notice thereof, the parties will meet and discuss an extension of time which may be fair and equitable under the circumstances, failing which the City will have the right to replace, repair, or otherwise remedy such failure or defect at Johnson Controls and its Sub-Contractors' expense.
4. Johnson Controls and its Sub-Contractors will obtain any warranties which Sub-Contractors or suppliers to Johnson Controls give in the regular course of commercial practice, and will apply the same to the benefit of Johnson Controls. Copies of any of these warranties will be provided to Johnson Controls and in turn a copy will be forwarded to the Customer
5. The Customer will not be responsible for the storage of any equipment associated with the project.
6. Johnson Controls and its Sub-Contractors will remedy, at its own expense, damage caused by Johnson Controls and its Sub-Contractors to Customer-owned or controlled real or personal property.

Johnson Controls and its Sub-Contractors will provide and install the latest manufacturer's software and/or firmware updates thirty (30) days prior to the end of the warranty period.

0.10.1 Warranty on Additional Equipment

Warranty on any additional system hardware or software purchased after acceptance of the initial system will be for not less than 12 months after the date the hardware or software is accepted and placed in service.

0.10.2 Maintenance during the Warranty Period

During the warranty period, Johnson Controls and its Sub-Contractors will respond to all repair calls or notices of system malfunction at no additional cost to the Customer. System problems should be responded to 24 hours a day, seven days a week (not just during normal business hours). The amount of time required for Johnson Controls and its Sub-Contractors to provide initial response will be within two hours (remote access is acceptable for initial response). The initial response may be in the form of a call-back from a qualified system or software engineer, or remote support. Johnson Controls and its Sub-Contractors will have qualified technicians available to respond to major system malfunctions within four hours and to minor system malfunctions within two business days during the warranty period. A major system malfunction is defined in Section 1.11.3. A minor system malfunction is defined as one in which some system features are not operating properly but Customer is able to conduct its business as usual. Johnson Controls reserves the right to decide whether a system malfunction is classified as major or minor, and JCI shall be reasonable in making such decision.

Acceptance of the work of Johnson Controls and its Sub-Contractors, upon completion of the project, will not preclude Customer from requiring strict compliance with the contract, in that Johnson Controls and its Sub-Contractors will complete or correct upon discovery any faulty, incomplete, or incorrect work not discovered at the time of acceptance. The one-year limit specified above will not void or limit this requirement for little-used features or functions.

0.10.3 Service Under Warranty

If it becomes necessary for Customer to contract with another vendor for warranty repairs, due to inability or failure of Johnson Controls and its Sub-Contractors to perform such repairs, Johnson Controls and its Sub-Contractors will reimburse Customer for all invoices for labor, materials required, and the shipping/handling costs thereof to perform such repairs, within 30 days from presentation of such invoices. This will only occur after Johnson Controls and its Sub-Contractors have been given reasonable time and fair opportunity to respond and correct the problem(s). The cost for such repairs will not exceed the actual parts and labor replacement price of the repair.

0.10.4 Follow-On Maintenance Following Warranty Period

Johnson Controls under this SOW GMP will provide:

- Service Level Agreement (SLA) with 24 hour, 365 day monitoring coverage with a guaranteed response time of 4 hours. The SLA Sub-Contractor assigned will be able to show that they currently have these types of contracts in place and have the staff and equipment to provide the service in addition to a proven track record in performance.
- Term of SLA will be:
    - Two (2) years after project acceptance.
    - SLA Terms will be broken out between Hardware and Technical Labor Services.
    - SLA-provider will provide a complete maintenance plan, including emergency and non-emergency maintenance and periodic maintenance schedules. Such maintenance schedules will specify coverage for each system component.
    - SLA-provider will state the location of the parts depot or storage warehouse which stocks parts for the system.
    - Firmware updates will be applied within thirty (30) days of release if agreed upon by the Customer.
    - SLA-provider will provide an escalation chart which indicates time limits, levels of escalation, and individuals' names, titles and locations to be used in case of extraordinary problems.
    - All maintenance for the Municipal Wireless Network and all components will be provided directly by the successful Sub-Contractor, or any subcontracting arrangements must be clearly defined.
    - Penalties for non-performance will apply, including termination of SLAs, and the Customer may correct or replace the defective or faulty Work or Work which fails to meet the requirements of the Contract by another Contractor. The cost of correcting or replacing same will be subject to obligation from the original Sub-Contractor/Installer

1 Scope of Work Section 1: Wireless Network

1.0 General Information

Johnson Controls will implement this SOW under the GMP Procurement Process. The overall goal of this section of the SOW is twofold: a) to support the communication and SCADA needs of the EWSU and. b) to provide a City-wide wireless network to cover 95% of the City of Evansville's approximately 40 square mile area with wireless mobile data services for Public Works and Public Safety; and open-air Public Access Wi-Fi.

This will be a turnkey design-build procurement. Johnson Controls with its Sub-Contractors and suppliers will be responsible for the design, implementation, commissioning, and warranty. The single physical network will be configured with encrypted SSID for Public Works and Public Safety; and separate non-encrypted SSID for Public Access. The Public Access frequency will be accessible to industry standard IEEE 802.11b/g/n equipped devices.

1.1 Project Scope

The primary purpose of this project is to provide a turnkey solution that provides wireless data system connectivity outdoors for approximately 95% coverage of 40 square miles of the EWSU Service Area (within city of Evansville city limits). Customer plans to use this wireless data network to provide the following functionality:

A. Customer Utilities - Automated Meter Reading (AMR) system backhaul

B. City department mobile data – Internet access, work order processing, messaging, AVL, email, etc.

C. Public safety mobile data – Silent dispatch, status updates, messaging, Internet access, field-based reporting, NCIC queries, Automatic Vehicle Location (AVL), photo/video file transmission, email, RMS/JMS access, etc.

D. Public access Internet

The EWSU and City have identified a number of System Access Point (AP) mounting facilities within the City that may be utilized to implement the Wireless System. These include city-owned buildings, poles, traffic signals, radio and water towers and other structures. The City will also provide pole attachment agreements and installation guidelines for use of 3rd party mounting assets such as power poles, street lights, and communication towers. Johnson Controls and its Sub-Contractors will coordinate any necessary power connections. Johnson Controls will make every effort to ensure maximum use of Customer-owned facilities/assets in order to reduce costs. First costs associated with installation on 3rd party mounting assets will be incurred as part of the GMP. Recurring costs for 3rd party assets will be the responsibility of EWSU and the City except as defined herein.

1.2 Workmanship

All equipment and installation services will be manufactured and/or performed in accordance with all applicable OSHA and FCC standards and regulations in effect at the time of manufacture for all installed equipment. Remanufactured or used parts, components, assemblies, or equipment will not be used. All equipment, cabling, etc. will be installed and electrically grounded in accordance within the guidelines of NFPA 70, IEEE Std. 1100, the National Electric Code, and local building codes, and the Motorola Fixed Network Equipment Installation Standards Manual (R56).

1.3 Software, Manuals, Handbooks, and Documentation

All operating manuals, handbooks, repair manuals and parts breakdowns will be furnished with each device installed.
All accessory, components, equipment and systems instruction manuals will be furnished with the system.
The manuals will cover installation and operation instructions, drawings, illustrations, manufacturer's part numbers, service/lubrication instructions, assembly and disassembly instructions, along with safety precautions, to ensure proper installation, operation, and maintenance.
Complete wiring diagrams will be furnished. These will be specific to the completed installation and will not be "generic" in nature.
Current versions of programming and maintenance software for each device and system installed will be provided at the time of delivery, and licenses for the same, if required, will be provided to the Customer

1.4 Codes

The proposed solution will comply with all applicable Federal, State, City, or other regulatory agency codes and regulations relative to communications equipment and installation requirements. Equipment and installation will comply with building codes, and fire rules and regulations. Johnson Controls and its Sub-Contractors will be responsible obtaining all necessary plan checks, permits, and inspections.

1.5 Conduct of the Work

The Customer will assist Johnson Controls and its Sub-Contractors to schedule and access city-owned sites and work areas. Johnson Controls and its Sub-Contractors will provide security for the procured equipment and will conduct his operations without interference to Customer's normal operations. The Customer reserves the right to make unannounced inspections and to observe any manufacturing methods or procedures, at unscheduled intervals.

Where Johnson Controls and its Sub-Contractors connect equipment within existing facilities, Johnson Controls will coordinate with the City's project representative so that minimum downtime and disruption occurs. Johnson Controls and its Sub-Contractors will coordinate any modifications required by existing conditions to avoid conflicts of building systems and other building components.

1.6 Drawings and Project Plans

The drawings, maps, site descriptions, coordinates and project plans will be typically diagrammatic and indicate the character of the work included. The acceptable file formats will be provided in CAD and/or ESRI shape files. As-built will be as accurate as scale permits and Johnson Controls and its Sub-Contractors will follow them as closely as possible. Work intended, but having minor details obviously omitted or not shown, will be furnished and installed complete to perform the functions desired. All offsets required for installation of conduit and wiring systems will be included in this project at no additional cost to Customer.

1.7 Johnson Controls' Responsibility

Johnson Controls will assume full responsibility for the acts and omissions of all its agents, servants, and employees, and all Sub-Contractors, their agents, servants, and employees, and all other persons performing any of the work required under this SOW and any resulting agreement. In addition, Johnson Controls will be responsible for the following:

- Installation requirements. Building Access. Installation and mounting methods. Power and connections.
- All outdoor mounted hardware installations of the wireless components must be mounted on a building, pole, mast, or tower per manufacturer's specifications and on pre-approved mounting assets. Ethernet cables, LAN switches, and all AC power source terminations are the responsibility of the turnkey Sub-Contractor. Before mounting antennas, bridge links, or other permanent components, the Sub-Contractor must confirm that appropriate and approved locations have been selected for each antenna. The Sub-Contractor will be responsible to coordinate mounting rights and power for mounting equipment on any Customer-owned or non-Customer owned mounting asset.
- All nodes will be identified, at minimum, with pole number, height of AP mounting, wood or metal, owner of pole, and unique identifiers as with the following sample Node Identification Documentation:

ITEM DESC	SERIAL #	MAC ADDRESS	INSTALL DATE	LOCATION DEPLOYED	GPS COORD		Pole #	AP Height	Wood or Metal	Owner
IAP 4300 MWR	5837JC2261	00195EB560B6	09-15-08	1 NW Martin Luther King, Junior	26.01168	-80.13254	215	30	Wood	City
IAP 4300 MWR	5837JX3746	00195EB646E4	04/16/09	505 SE 6th St.	26.02832	-80.23342	183	25	Metal	City

1.8 Software Updates

Johnson Controls will require that its Sub-Contractors and Vendors will provide the City with the most current versions of software and firmware available at the time of the negotiated delivery within the project schedule. Johnson Controls will require that its Sub-Contractors will provide, at no additional charge, software releases and associated documentation that are intended by the vendor as generic version updates to correct reproducible and/or recurring defects, i.e. software bugs, during the period of the contract and any succeeding warranty period as well as maintenance agreements.

Johnson Controls will require that its Sub-Contractors and Vendors will provide timely pre-release notification and documentation of all planned system software upgrades during the project (including the follow-on maintenance period).

1.9 System Requirements

1.9.1 General

The System will provide 95% outdoor City-wide (approximately 40 mi^2) coverage in the following scenarios:

- With externally mounted antenna and a unity gain omni-directional trunk mounted antenna, and
- With a commercial off the shelf laptop containing a standard Wi-Fi device

No indoor coverage is specified. Coverage will be tested using the vehicle configuration identified above.

Prior to installation, detailed documentation of the proposed system and service specifications of the wireless network system will include (at a minimum):

- All proposed hardware specifications,
- Preliminary system design - Required quantity and model numbers of proposed access points to provide 95% City-wide coverage (Include coverage analysis data that supports

the proposed design. The design documents will indicate with coverage maps the extent of RF coverage from each of the nodes and Wi-Fi access points.),

- Additional services included in the proposed design (i.e., system installation, system acceptance testing, system user/admin training, etc.),
- A complete list of standards compatibility and RFC support for all networking elements.
- Where licensed frequencies are utilized, Johnson Controls and its Sub-Contractors will be responsible for applying for and obtaining necessary FCC licenses (with Customer assistance) to implement and operate the network.

Expected System components for the basis of design include the following:

A. Wireless data backhaul network to support wireless mesh systems and Automated Meter Reading system.

B. Mobile data distribution to Public Works clients.

C. Mobile data distribution to Public Safety wireless clients (PD/FD/EMS)

D. Mobile data distribution to Customer and public wireless clients

E. 2.4 GHz open-air data distribution to Public Access with the capability of data rate limiting (so as not to compete with commercial data systems)

F. Network management system to monitor and control the mesh network

G. Battery backup on all primary components of one hour

1.9.2 Wireless Networking Functional Requirements

The **network management system** will support the following functionality:

A. Management of Multiple Wireless Networks on Single NMS Screen

B. Real-Time Monitoring and Logging of Performance Statistics and Faults

C. Automated reporting of component outages or network degradation sent by text, email or other means acceptable to Customer

D. Ability to automatically re-route traffic around failed or degraded components

E. Real-Time Graphical View of Wireless Topology, Statistics, and Events

F. Multi-User Management

G. Transmitter Power and RSSI Threshold Control

H. Centralized Policy Management

I. Certificate-based Remote Firmware Updates

J. Centralized Configuration Management

K. Inventory Management

L. Disabling/Enabling of Specific Devices and Links

M. Rogue Access Point/Node Detection

N. 802.1x RADIUS Authentication for all Clients

Johnson Controls and its Sub-Contractors will provide spectrum-compatible external fixed-mounted antennas for Customer-owned Public Safety vehicles. This will be a turnkey solution furnishing and installing all necessary cabling, mounts and power devices. The antennas will be installed and tested per manufacturer's specifications. The spectrum-compatible external-mounted antenna solution should provide a minimum

of 3 dB omni-directional gain and RF connectivity to the network modem for two hundred and fifty (250) vehicles.

1.9.3 Mode of Operation

The AP nodes will have the ability to repeat received networking traffic to allow for additional range and mitigation of line-of-sight issues with clients.

1.9.4 Throughput

At a minimum, each AP node will be capable of supporting eight clients. To accommodate expected areas of dense user population, including the downtown area, parks, the riverfront, and other areas of higher density, the proposal will include an increased node capacity of 20 users per node for half-mile radius around the following locations:

RRRRR. PD Headquarters – 15 NW Martin Luther King Jr. Blvd

SSSSS. East Sector PD Station – 4900 Shamrock Dr

TTTTT. South Sector PD Station – 315 Taylor Av

UUUUU. West Sector PD Station – 401 E Columbia St

1.9.5 Security and Authentication

The access point radios will support minimum of AES 128-bit encryption, or higher. The radios will support certification-based authentication.

1.9.6 Environmental

The AP nodes will be designed to operate in a temperature range of -40 to +131 °F (-40 to +55 °C) at 10-90% humidity, non-condensing. The nodes will be provided in a NEMA 4 enclosure and will be weatherproof and rated for up to 100 MPH sustained wind. All connectors on outdoor-rated equipment will be weatherproof.

1.9.7 Wi-Fi Access Point Requirements

This section contains the minimum requirements for the Wi-Fi access points. Spectrum Band of Operation:

Wi-Fi access points will operate in the unlicensed 2.4 GHz and 5 GHz bands. The Wi-Fi access point will operate within the specific FCC identified frequency ranges within the 2.4 and 5 GHz band for outdoor usage. In most cases, Wi-Fi access points will be connected to the network via the 5.8 GHz backhaul radio.

1.9.8 Mode of Operation

The Wi-Fi access point will establish connections with Wi-Fi clients over IEEE 802.11 b/g/n networking protocol.

1.9.9 Data Rate

The Wi-Fi access point will be capable, at minimum, of an overall throughput of 54 Mbps in a 20 MHz channel to a single Wi-Fi client (no channel contention with other Wi-Fi clients and in an interference free environment). The data rate will be controllable via the network management system (e.g. data rate can be reduced so as not to compete with commercial data systems).

1.9.10 Throughput

The Nodes for Public Access will be designed and arrayed so as to allow at minimum access to clients (concurrent users) equal to or greater than 10% of the total population within each defined Census Tract coverage area (see Census Tract Maps). Concurrent users equal to or greater than 10% of the total population within each Census Tract will have Wi-Fi internet access at a minimum speed of 300kbps or greater. (The intent is to provide open-air Wi-Fi access to users with 802.11 b/g/n equipped devices, not single wall building penetration.) Nodes should be configured to account for minimum coverage with consideration given to topology, foliage, buildings, and shadowing.

The Wi-Fi access point will support 802.11i security including WPA2 and AES 128-bit or greater encryption. Johnson Controls and its Sub-Contractors will configure the Wi-Fi access points to work with Customer's current VPN solution and configure the Wi-Fi access point to only provide Customer network access to VPN users; non-VPN users will only access public internet service.

1.9.11 Environmental

The Wi-Fi access points will be designed to operate in a temperature range of -40 to +131 °F (-40 to +55 °C) at 10-90% humidity, non-condensing. The access points will be provided in a NEMA 4 enclosure and will be weatherproof and rated for up to 100 MPH sustained wind. All connectors on outdoor-rated equipment will be weatherproof.

1.9.12 Wireless Backhaul Requirements

Johnson Controls and its Sub-Contractors will provide an end-to-end wireless solution that provides adequate wireless data backhaul capacity to meet the data transport requirements of the proposed network solution.

1.9.13 Network Management System

Johnson Controls and its Sub-Contractors will provide and install a network management system (NMS) that meets the requirements of Section 1.9.2. The NMS will be installed at a Customer facility to be determined. The NMS will include all hardware required for the NMS.
Johnson Controls and its Sub-Contractors will configure the NMS to operate, maintain, and manage Johnson Controls and its Sub-Contractors-provided mesh network. Johnson Controls and its Sub-Contractors will populate the inventory control portion of the NMS with a list of all installed network equipment, including their serial number, IP address, MAC address, installed GPS location, address, and a detailed description to identify its location (e.g., "traffic light pole at northwest corner of Main St. and Oak Ave). If the network equipment is installed at a Customer facility, list the facility and its installed location within the facility (e.g., Police Department Headquarters, 2nd Floor, East Wing).

1.9.14 Network Connection

Johnson Controls and its Sub-Contractors will be responsible for connecting the wireless systems to Customer's data network and the NMS. Connection will be a copper (RJ45) Ethernet connection. The Customer will coordinate and will provide the information necessary so that Johnson Controls can facilitate the required connection location and method.

1.9.15 Automatic Meter Reading System (AMR) Backhaul

The preliminary system design identifies the need for up to eight Tower Gateway Base stations (TGBs) and approximately 68,000 end points (meters). The end points transmit meter data wirelessly to/from the TGBs. Each TGB is connected to the Regional Network Interface (RNI),

where the system data is processed and stored. The AMR system requires 64 kbps bandwidth for system backhaul support (TGB-to-RNI, or six connections).

The eight TGB locations will be as determined by EWSU and will be installed on City-owned assets. Based on final locations and designs, the backhaul will be accomplished by either wireless backhaul, or fiber backhaul (if any of the eight locations is included as part of the fiber ring and/or spur locations).

1.10 Training

Johnson Controls and its Sub-Contractors will include a complete package of formal technical training for system Executives and technicians and fully describe all proposed and available training courses.

Training will be performed on-site. The training package will include any and all classes or courses available that relate to the new equipment, operations, processes, and management functions. Johnson Controls and its Sub-Contractors will provide training for the installation, operation, configuration, maintenance, and management of the wireless networking equipment.

Training will be for up to six Customer employees or designees and will record all training session on DVD and turn over to Customer for use by Customer for refresher training. All written and presentation training materials will become the property of Customer.

1.11 Performance Verification

Johnson Controls and its Sub-Contractors will demonstrate (to Customer personnel) that the provided system is functioning as required in this SOW. Johnson Controls and its Sub-Contractors will document the test results and submit a formal report to Johnson Controls for review. Johnson Controls and its Sub-Contractors will also document a list of required system repairs that will include when system issues were encountered, corrected, and retested. Retests will also be witnessed by Contractor personnel.

1.11.1 Preconstruction Testing

Prior to construction of the wireless network, Johnson Controls and its Sub-Contractors will demonstrate the ability of the wireless network to meet the requirements of the contract. The intent is to ensure that the system will function as proposed, prior to implementation. Utilizing (TBD) Customer facilities, Johnson Controls and its Sub-Contractors will demonstrate the operation of multiple wireless network clients transporting data feeds through the network while simultaneously providing Internet access to Wi-Fi clients. The number of wireless network clients in which simultaneous operation will be demonstrated will be recommended in Johnson Controls and its Sub-Contractors proposal and approved by the Project Executive and the City's Project Representative. The testing period will be for seven (7) consecutive days, to validate performance of the system.

1.11.2 Wireless Network Testing

Johnson Controls and its Sub-Contractors will demonstrate that the wireless network is capable of supporting the throughput and data rates required herein as demonstrated over a 30 day average.

Johnson Controls and its Sub-Contractors will be responsible for providing any required staff, vehicles and test equipment and system test software (i.e., reports, system loading software, etc.). Customer may choose to observe this process.

1.11.3 Reliability Testing

Johnson Controls and its Sub-Contractors will conduct an acceptance test to prove the reliability of the system as part of final system acceptance. During the test, the system will operate without a major system failure for a period of thirty (30) days. A major system failure is defined as:

1. Loss of a single AP node
2. Loss of a single Wi-Fi access point
3. Loss of a single backhaul radio
4. Loss of network management system

If, during the Reliability Test, the system experiences a major system failure, the Sub-Contractor will take the necessary steps to correct the deficiencies and a new 30-day Reliability Test will begin. If the Reliability Test is stopped due to an excusable delay, as approved by the Project Executive, the test will resume at the end of time allowed for the delay and the 30-day period will not be restarted.

1.12 Documentation/Maintenance Technical Information

All system documentation will be delivered to the Customer

1.12.1 File Formats

Starting with any documents related to this SOW, all documentation provided by the Sub-Contractor will be provided in Microsoft Office, Microsoft Project, Visio, AutoCAD, ESRI shape files, or any other format agreed to by Customer Any specialized software required to view, edit, or otherwise maintain or use information provided by Johnson Controls/Sub-Contractor will be provided.

1.12.2 Instruction Manuals

For all system hardware provided by Johnson Controls and its Sub-Contractors, and/or any appropriate Sub-Contractors, Johnson Controls and its Sub-Contractors will deliver to the Project Executive instruction manuals sufficient to permit a duly qualified service technician to install, operate, and maintain the equipment purchased. The manuals will reflect the equipment as designed, built, and installed. The cost of these manuals will be included in the equipment cost.

For each type of equipment supplied, Johnson Controls and its Sub-Contractors will provide two electronic copies that can be edited and maintained, and complete printed sets of maintenance manuals and technical documentation. All such documentation will be delivered to the Customer.

1.12.3 As-Built System Documentation

Johnson Controls and its Sub-Contractors will provide as-built system documentation that can be edited to include (at a minimum) a Master System Diagram that shows each system component and its connection to the system, and Typical Installation As-Built Drawings for each system component (including hardware components, mounting hardware, cabling, power and grounding connections, etc.). Typical Installation As-Built Drawings will include (at a minimum):

- Network node/Wi-Fi mounted on a traffic signal pole
- Network node/Wi-Fi mounted on a street light pole
- Network node/Wi-Fi mounted on a telecom tower

- Network node/Wi-Fi mounted on a building
- Backhaul radio mounted on a telecom tower
- Backhaul radio mounted on a building
- NMS equipment mounting
- Other information Customer may require such as pole number, wood vs metal, owner, notes, etc...

For as-builts: All nodes will be identified, at minimum, with unique identifiers as with the following sample Node Identification Documentation:

ITEM DESC	SERIAL #	MAC ADDRESS	INSTALL DATE	LOCATION DEPLOYED	GPS COORD		Pole #	AP Height	Wood or Metal	Owner
IAP 4300 MWR	683ZJC2201	00195EB506B6	09-16-08	1 NW Martin Luther King, Junior	26.01169	-80.13254	215	30	Wood	City
IAP 4300 MWR	683TJX3745	00195EB616E1	04/16/09	505 SE 8th St.	26.02932	-80.20942	183	25	Metal	City

2.0 Schedule of Work Section 2: Fiber Network

2.0 General Information

Johnson Controls will implement this SOW under the GMP Procurement Process. This SOW will install an outside plant fiber optic cable system suitable for supporting Customer's enterprise network, including data, voice and video systems. The basis of design is for an Aerial Fiber Ring Topology of approximately **thirty-five (35)** linear miles that will connect the head end at the Civic Center, and 6 additional primary locations. The project will feature several alternates including bid alternates for 1) 4 optional outdoor fiber nodes located in path of the fiber ring; and 2) up to 11 additional fiber spur locations. The final number of spur locations and nodes will be determined during the GMP Procurement process.

2.0.1 Purpose and Objectives

The System will include all fiber optic cabling, pole attachment devices, splices, connectors, terminating hardware, engineering, materials, installations, program management, system integration, Customer training, and warranty maintenance.

The requirements utilized in this SOW are not intended to be proprietary or restrictive to a single manufacturer. The sole intent of these requirements is to establish a "benchmark" of the equipment quality desired as an outcome of this SOW. Alternatives to the requirements listed in this SOW will be considered and evaluated by the Customer with final decisions made by the Customer and costs tracked under the project Master GMP Cost Control document.

2.0.2 Project Scope

The primary purpose of this project is to procure a turnkey solution that provides fiber optic connectivity to multiple sites throughout the City. The Customer plans to use this fiber optic infrastructure to provide the following functionality:

A. Backbone for Customer Enterprise Network – The fiber optic backbone will connect key Customer sites as listed herein and as shown on the attached maps to serve Customer's enterprise network which supports data, voice and video systems.

B. Wireless Network Backhaul – The fiber optic backbone will be used as a means of backhaul for a Customer wireless network being acquired and deployed under a separate procurement.

The Customer has identified a number of mounting assets within the City that may be utilized to implement the fiber plant. These include city-owned buildings, poles, traffic signals, and other structures. The Customer will also provide pole attachment agreements and installation guidelines for use of 3rd party mounting assets such as power poles, street lights, and communication towers. Johnson Controls and its Sub-Contractors will coordinate any necessary power connections. Johnson Controls will make every effort to ensure maximum use of Customer-owned facilities/assets in order to reduce costs.

2.0.3 Quality Assurance

Customer reserves the right to make unannounced inspections and to observe any manufacturing methods or procedures, at unscheduled intervals.

2.0.4 References

The publications listed below form a part of this specification to the extent referenced. All equipment and installation services will be manufactured and/or performed in accordance with the most recent versions of the listed standards, codes and regulations at the time of installation.

5. NFPA 70	National Electric Code
6. IEEE C2	National Electrical Safety Code
7. ICEA S-87-640	Fiber Optic Outside Plant Communications Cable
8. TIA J STD-607-A	Commercial Building Grounding (Earthing) and Bonding Requirements
9. TIA 455-107A	Component Reflectance or Link/System Return Loss using a Loss Test Set
10. TIA 455-46A	FOTP-46 Spectral Attenuation Measurement for Long-Length, Graded Index Optical Fibers
11. TIA 455-78B	FOTP-78 Optical Fibers, Part 1-40 Measurement Methods and Test Procedures – Attenuation
12. TIA 472D000-A	Fiber Optic Communications Cable for Outside Plant Use
13. TIA 492CAAA	Class IVA Dispersion-Unshifted Single Mode Optical Fibers
14. TIA 526-7	Measurement of Optical Power Loss of Installed Single Mode Fiber Cable Plant OFSTP-7
15. TIA 590-A	Standard for Physical Location and Protection of Below Ground Fiber Optic Cable Plant
16. TIA 758-A	Customer-Owned Outside Plant Telecommunications Cabling Standard
17. TIA/EIA 455-B	Standard Test Procedures for Fiber Optic Fibers, Cables, Transducers, Sensors, Connecting and Terminating Devices and other Fiber Optic Components

18. TIA/EIA 568-B.1	Commercial Building Telecommunications Cabling Standard – Part 1: General Requirements
19. TIE/EIA 568-B.3	Optical Fiber Cabling Components Standard
20. TIA/EIA 569-A	Commercial Building Standards for Telecommunications Pathways and Spaces
21. TIA/EIA 598-B	Optical Fiber Cable Color Coding
22. TIA/EIA 606-A	Administration Standard for the Telecommunications Infrastructure
23. USDA RUS 1755	Telecommunications Standards and Specifications for Materials, Equipment and Construction
24. USDA RUS Bulletin 1751F-630	Underground Plant Design
25. USDA RUS Bulletin 1751F-643	Design of Aerial Plant
26. USDA RUS Bulletin 1751F-815	Electrical Protection of Outside Plant
27. USDA RUS Bulletin 1753F-201	Acceptance Tests of Telecommunications Plant
28. USDA RUS Bulletin 1753F-401	Splicing Copper and Fiber Optic Cables

Remanufactured or used parts, components, assemblies, or equipment will not be used.

2.0.5 Software, Manuals, Handbooks, and Documentation

- All operating manuals, handbooks, repair manuals and parts breakdowns will be furnished with each component/device installed.
- All accessory, components, equipment and systems instruction manuals will be furnished with the system.
- The manuals will cover installation and operation instructions, drawings, illustrations, manufacturer's part numbers, service/lubrication instructions, assembly and disassembly instructions, along with safety precautions, to ensure proper installation, operation, and maintenance.
- Complete diagrams of the system will be furnished. These will be specific to the completed installation and will not be "generic" in nature.

2.0.6 Codes

The proposed solution will comply with all applicable Federal, State, City, or other regulatory agency codes and regulations relative to communications equipment and installation requirements. Equipment and installation will comply with building codes, and fire rules and regulations. Johnson Controls will be responsible obtaining all necessary plan checks, permits, and inspections.

2.0.7 Manufacturer Qualifications

Cabling, equipment and hardware manufacturers will have a minimum of three years experience in the manufacturer, assembly and factory testing of components which comply with TIA/EIA 568-B.1, TIA/EIA 568-B.3 AND ICEA S-87-640.

2.0.8 Delivery, Storage and Handling

Cables will be shipped on appropriately sized reels with a minimum overage of 10%. The radius of the reel drum will not be smaller than the minimum bend radius of the cable. Wind cable on the reel so that unwinding can be done without kinking the cable. A minimum of six feet of cable on both ends will be accessible for on-reel testing. Attach a permanent label on each reel showing length, cable type and size, cable identification number, and date of manufacture. Labels will be water resistant with indelible printing. Apply end seals to each end of the cable to

prevent moisture from entering the cable. Reels with cable will be suitable for outside storage conditions when temperature ranges from minus 40 degrees C to plus 65 degrees C, with relative humidity from 0 to 100 per cent. Equipment other than cable, delivered and placed in storage will be stored with protection from weather, humidity and temperature variation, dirt and dust, or other contaminants in accordance with manufacturer's specifications.

2.0.9 Conduct of the Work

Johnson Controls and its Sub-Contractors will arrange with Customer for access to the sites and work areas. Johnson Controls will provide a detailed project plan and schedule sufficient to minimize disruption and allow Customer to plan for the work to be performed at each site. Johnson Controls and its Sub-Contractors will provide security for equipment and will conduct its operations without interference to Customer's normal operations. Johnson Controls and its Sub-Contractors will arrange and pay for police details to control traffic and maintain safety around areas where work is being performed under this contract. No work will be performed on public thoroughfares without a police detail being present.

Before ordering materials or performing work that is dependent on proper size or installation requiring coordination with site conditions, Johnson Controls will verify all dimensions at the site. No consideration will be given to any claim based on the difference between the actual dimensions and those indicated on drawings. Any discrepancies between drawings and/or specifications and the existing conditions will be referred to Customer's Project Representative for approval of the work or modifications of the documentation before any work affected thereby is begun.

2.1 SYSTEM REQUIREMENTS

2.1.1 General

Through this SOW, the Customer intends to obtain an outside plant fiber optic cable system suitable for supporting Customer's enterprise network, including data, voice and video systems. The topology of the system will be in the form of a ring connecting several Customer buildings and towers. Smaller Customer sites may be supported by fiber spurs as indicated in the table below. The final number of spur locations and nodes will be determined during the GMP Procurement process.

The maps provided by the Customer represent the Customer's best estimate of the desired routing of the system and Customer owned assets to which the system can be attached. In some cases, multiple routes are shown, where one may show the shortest length, and the other may contain more Customer assets for attachment. The Customer and Johnson Controls will agree to the specific route and assets to which the system will attach based on the final engineering and design to be performed by Johnson Controls' Fiber Sub-Contractor.

The core ring will consist of 144 strands of single mode fiber, and all fiber strands will be terminated at all sites on the ring, forming a complete 144 strand ring approximately 21 miles in length with fiber spurs (see buildings schedule). Termination locations for the ring will be in Customer buildings or radio tower shelters. The hub of the network will be the Civic Center. The table below identifies the sites to be included on the fiber ring.

In addition, several sites are identified as optional fiber spurs (see buildings schedule). Each spur site will have twelve (12) fiber strands run from the closest node on the fiber ring. In its pricing, Contractors will identify the costs for each link on the fiber ring and each individual fiber spur. Customer may elect to include none, some, or all of the fiber spur sites in the final design. See maps section for proposed aerial fiber route and available utility poles.

2.1.2 Initial Engineering and Design

Johnson Controls and its Sub-Contractors will be responsible for submitting an initial design with its bids. To complete the initial design, Johnson Controls' Sub-Contractor will conduct initial surveys of the proposed fiber routes (and any alternate routes proposed by the Customer). Johnson Controls' Sub-Contractor will also survey each Customer facility (building or radio tower) to be connected in order to determine the best method and locations for building entrances. Johnson Controls' Sub-Contractor will determine whether additional racks or cabinets and associated grounding are required to support the fiber terminations. If such racks or cabinets are required, Johnson Controls will include them in the bid proposal for Customer review. The initial survey will be adequate to develop a reasonably accurate cost estimate for the project.

2.1.3 Final Engineering and Design

Upon award, Johnson Controls' Sub-Contractor will conduct detailed engineering and submit a final design and GMP cost for this SOW within the project. Johnson Controls' Sub-Contractor will submit a detailed engineering plan, survey of route(s), deviations from Customer suggested routes and justification, and identification of each pole, building or other structure to which the fiber will be attached. For attachment to non-Customer owned assets such as poles owned by telephone carriers or electric utilities, Johnson Controls will review pole attachment agreements and related regulation regarding attaching Customer-owned cable within the municipal gain; undertake any required notifications and negotiations with utility, securing right of way on said assets, and pay any necessary make-ready costs levied by utility for pole modifications, improvements or replacements required prior to attachment. The final design will also include detailed scale schematic drawings illustrating how the cable will be extended from the pole into each Customer facility, the planned cable route, exterior and interior wall penetrations, conduits, cable tray, any additional racks/cabinets, grounding requirements, and wall/rack elevations showing the location of the terminating hardware.

2.1.4 System Components

Johnson Controls and its Sub-Contractors will furnish all components necessary to form a complete outside plant fiber optic cable system connecting Customer facilities as listed and shown on the map. Components will include:

2.1.4.1 Fiber Optic Cabling

Bulk fiber optic cabling for the fiber ring will be 144 strand, single mode, 8/125 um, 0.10 aperture1310 nm fiber optic cable in accordance with TIA-492CAAA specifically designed for aerial installation. The fiber optic cable will meet the optical and mechanical performance requirements in accordance with ICEA S-87-640.

For spur sites, 12 strand fiber optic cables with the identical performance specifications as the 144 strand cable will be provided.

Provide central strength members with sufficient tensile strength for installation and residual rated loads to meet the applicable performance requirements in accordance with ICEA S-87-640. The strength member is intended to reduce strain on the fibers, and will not be used as a pulling strength member.

2.1.4.2 Fiber Optic Attachment Apparatus

When installed on existing Customer owned poles, the fiber optic cable must be attached directly to the pole surface or attached using metallic of fiberglass offset brackets. Offset brackets should only be used to provide the required horizontal clearance to buildings, signs, trees, and similar facilities or to reduce the change in direction/angle of the cable. Attachment to metal poles must be clamped or banded to the poles with stainless steel straps. Drilling of holes in a metal pole for a bolt attachment should not be done unless

approved by Customer. All attachments to Customer owned poles require prior approval by Customer.

All cables will be attached to the roadside of the pole unless otherwise approved by Customer. Johnson Controls and its Sub-Contractors will install cables in their appropriate position on poles and maintain proper clearances between electrical and communications cable, as defined in NESC.

2.1.4.3 Fiber Optic Splice and Splice Enclosures

Provide fiber optic cable splices and splicing materials for fusion or mechanical splice methods at suitable locations along the route, with as few splices as necessary to minimize attenuation. The splice insertion loss will be no greater than 0.3 dB when measured in accordance with TIA 455-78-B using an optical time domain Reflectometer (OTDR). Splices will be designed for a return loss of 40.0 dB maximum when tested in accordance with TIA 455-107A. Each splice will be protected by a splice kit specifically designed for the splice.

Provide splice enclosures suitable for housing and protecting fiber optic splices in a neat and orderly fashion. Splice organizers will allow for a minimum of one meter of fiber for each fiber within the cable to be neatly stored without kinks or twists. Splice organizers will accommodate individual strain relief for each splice and allow for future maintenance or modification, without damage to the cable or splices. Provide splice enclosures and organizer hardware, such as splice trays, protective shelves and shield bond connectors in a splice organizer kit.

2.1.4.4 Optical Fiber Distribution Panels

Cabinet, rack or wall mounted optical fiber distribution panels (OFDP) will be provided as necessary, depending on the facilities available at each site. OFDPs will be constructed in accordance with CEA-310-E utilizing 16 gauge steel or 11 gauge aluminum minimum. Panels will be divided into two sections, distribution and user. The distribution section will have strain relief, routing guides, splice tray and will be lockable, and the user section will have a cover for patch cord protection.

Each panel will provide single-mode pigtails and adapters. Provide optical fiber adapters suitable for duplex SC in accordance with TIA/EIA-604-3A with zirconia ceramic alignment sleeves or MT-RJ in accordance with TIA/EIA-604-12 with thermoplastic alignment sleeves. Provide dust cover for adapters. Optical fiber adapters will comply with TIA-455-21-A for 500 mating cycles.

For sites on the fiber ring, provide adequate adapters to support 288 fiber connections, since all 144 strands of fiber will be terminated for both the incoming and outgoing segments of the fiber ring. For spur sites, provide adequate adapters to support the termination of twelve (12) fiber strands.

2.1.4.5 Fiber Optic Connectors

Optical fiber connectors will be duplex SC in accordance with TIA/EIA-604-3A with zirconia ceramic or MT-RJ in accordance with TIA/EIA-604-12 with ferrule, epoxyless compatible with 8/125 single-mode fiber. The connectors will provide a maximum attenuation of 0.3 dB 1310 nm with less than a 0.2 dB change after 500 mating cycles.

Provide adequate SC connectors (cost to provide LC connectors) to support 288 fiber connections, since all 144 strands of fiber will be terminated for both the incoming and outgoing segments of the fiber ring. For spur sites, provide adequate SC connectors to support the termination of twelve (12) fiber strands.

2.1.4.6 Cable Pathways

Johnson Controls will provide all materials, components and work activity necessary for the installation of the fiber optic cabling and terminating hardware into Customer facilities (buildings and radio tower shelters). This includes building penetrations, conduits, cable trays, inner ducts, firestopping, racks/cabinets, and associated grounding, and other necessary materials, components and activity necessary to extend the fiber optic cable to Customer's selected termination point in each facility.

2.1.5 Installation

Johnson Controls and its Sub-Contractors will install all system components and appurtenances in accordance with manufacturer's instructions, IEEE C2, and NFPA 70. Provide all necessary interconnection terminations, splices, services and adjustments required for a complete and operable outside plant fiber optic cable system.

2.1.5.1 Cable Pulling

Johnson Controls and its Sub-Contractors will obtain from the manufacturer and provide to Customer the maximum allowable pulling tension. This tension will not be exceeded.

2.1.5.2 Cable Splicing

Fiber optic splicing will be in accordance with manufacturer's specification and will exhibit an insertion loss not greater than 0.2 dB for fusion splices and not greater than 0.4 dB for mechanical splices.

2.1.5.3 Labeling

All fiber strands and optical fiber distribution panels will be labeled in accordance with TIA/EIA 606-A. All fiber strands will be terminated in the same order and located in the same position in optical fiber distribution panels throughout the system. Handwritten labeling is unacceptable. Stenciled lettering for cable and termination hardware will be provided using thermal ink transfer process or laser printer.

2.2 Testing and Performance Verification

Johnson Controls and its Sub-Contractors will demonstrate (to Customer personnel) that the provided system is functioning as required in this SOW. Johnson Controls and its Sub-Contractors will document the test results and submit a formal report to Customer for review. Johnson Controls and its Sub-Contractors will also document a list of required system repairs that will include when system issues were encountered, corrected, and retested. Retests will also be witnessed by Customer personnel.

2.2.1 Factory Testing

All fiber optic cable strands will be factory tested prior to shipping to the job site, using an OTDR, in accordance with TIA/EIA 568-B.1, TIA/EIA 568-B.3, and TIA 526-7. Calibrate the OTDR to show anomalies of 0.2dB minimum. Submit test reports, including manufacture date for each cable reel and obtain Customer approval prior to delivery of the cable reel to the job site.

2.2.2 Field Quality Control

Provide Customer with at least 10 days advance notice prior to all testing. Provide all labor, materials and equipment required for testing. Correct all defective material and workmanship disclosed as a result of the tests. Furnish a signed copy of the test results to Customer within

three days of after each segment of construction is completed. Perform testing as construction progresses and do not wait until all construction is complete before starting field tests.

2.2.3 Acceptance Testing

Perform acceptance testing in accordance with RUS Bulletin 1753F-201 and as specified. Provide personnel, equipment, instrumentation and supplies necessary to perform required testing. Notification of any planned testing will be given to Customer at least 14 days prior to any test unless specified otherwise. Test plans will define the tests required to ensure that the system meets technical, operational and performance requirements. The test plan will identify the capabilities to be tested. Test results will be provided in hard copy and electronic format suitable to Customer.

Test fiber optic cable in accordance with TIA/EIA-455-B and as further specified in this section. Two optical tests will be performed on all optical fibers: Optical Time Domain Reflectometry (OTDR) Test, and Attenuation Test. These tests will be performed on the completed end-to-end spans which include the near-end pre-connectorized single fiber cable assembly, outside plant as specified, and the far-end pre-connectorized single fiber cable assembly.

2.2.4 OTDR Test

The OTDR test will be used to determine the adequacy of the cable installations by showing any irregularities, such as discontinuities, micro-bendings or improper splices for the cable span under test. Hard copy fiber signature records will be obtained from the OTDR for each fiber in each span and will be included in the test results. The OTDR test will be measured in both directions. A reference length of fiber, 20m minimum, used as the delay line will be placed before the new end connector and after the far end patch panel connectors for inspection of connector signature. Conduct OTDR test and provide calculation or interpretation of results in accordance with TIA-526-7 for single-mode fiber. Splice losses will not exceed 0.3 db.

2.2.5 Attenuation Test

End-to-end attenuation measurements will be made on all fibers, in both directions, using an 850 nanometer light source at one end and the optical power meter on the other end to verify that the cable system attenuation requirements are met in accordance with TIA-526-7 for single-mode fiber optic cables. The measurement method will be in accordance with TIA-455-78-B. Attenuation losses will not exceed 0.5 db/km at 1310 nm and 1550 nm for single-mode fiber.

2.3 Documentation/Maintenance Technical Information

All system documentation will be delivered to Customer's CIO.

2.3.1 File Formats

Starting with any documents related to this SOW, all documentation provided will be provided in Microsoft Office, AutoCAD, ESRI shape files, or any other format agreed to by Customer. Any specialized software required to view, edit, or otherwise maintain or use information provided by the Sub-Contractor/Contractor will be provided and included as part of the Proposal.

2.3.2 As-Built System Documentation

Registered Communications Distribution Designer (RCDD) approved drawings and documentation in accordance with TIA/EIA-606-A will be provided to the Customer. The identifier for each termination and cable will appear on the drawings. Drawings will depict the final outside plant fiber optic cable system in accordance with TIA/EIA-606-A. The drawings should provide details required to demonstrate a completely operational outside plant fiber optic cable system.

For each Customer facility in which cables are terminated, provide a plastic laminated schematic of the as-installed system including routing from the street to the terminating location, strand counts and other relevant information.

3 Schedule of Work Section 3: Wireless WAN

3.0 General Information

Johnson Controls will implement this SOW under the GMP Procurement Process. The overall goal of this section of the SOW is to deploy a Municipal Wireless Wide Area Network (WAN) to serve up to twenty-six (26) of the City's current Opt-E-Man locations with a high-speed wireless Wide Area Network (WAN) system. This connectivity will be designed to accommodate both the present and future digital application needs. The intent is to achieve an industry-standard based wireless WAN infrastructure, which will provide voice and data services at all the sites delineated herein with the flexibility to support of future needs of the Customer. Any of the current Opt-E-Man locations that will not be served by the new fiber infrastructure to these City sites will necessitate a wireless/aerial WAN solution.

3.1 Purpose and Objectives

The System is to include all WAN networking equipment, hardware, software, engineering, materials, installations, program management, system integration, customer training, programming, and warranty maintenance. The requirements utilized in this SOW are not intended to be proprietary or restrictive to a single manufacturer. The sole intent of these requirements is to establish a "benchmark" of the equipment quality desired as an outcome of this SOW.

3.2 Project Scope

The purpose of this section of the SOW is to deploy a turnkey solution that provides Municipal Wireless Wide Area Network (WAN) to serve up to twenty-six (26) of its locations. This wireless data connectivity will be designed to accommodate both the present and future digital application needs. The intent is to achieve an industry-standard based wireless WAN infrastructure, which will provide voice and data services at all the sites delineated herein with the flexibility to support of future needs of the Customer. Johnson Controls and its Sub-Contractors will coordinate any necessary power connections with the Customer. Where possible, City-owned assets will be utilized to the greatest extent possible in order to reduce costs. If the use of non-City facilities are required to achieve the best solution, Johnson Controls and the Customer agree to work together to negotiate access rights with 3rd Part Owners.

3.3 Quality Assurance

The Customer reserves the right to make unannounced inspections and to observe any manufacturing methods or procedures, at unscheduled intervals.

3.4 Workmanship

All equipment and installation services will be manufactured and/or performed in accordance with all applicable OSHA and FCC standards and regulations in effect at the time of manufacture for all installed equipment. Remanufactured or used parts, components, assemblies, or equipment will not be used. All equipment, cabling, etc. will be installed and electrically grounded in accordance within the guidelines of NFPA 70, IEEE Std. 1100, the National Electric Code, and local building codes. Software, Manuals, Handbooks, and Documentation
All operating manuals, handbooks, repair manuals and parts breakdowns will be furnished with each device installed.

All accessory, components, equipment and systems instruction manuals will be furnished with the system.

The manuals will cover installation and operation instructions, drawings, illustrations, manufacturer's part numbers, service/lubrication instructions, assembly and disassembly instructions, along with safety precautions, to ensure proper installation, operation, and maintenance.

Complete wiring diagrams will be furnished. These will be specific to the completed installation and will not be "generic" in nature.

Current versions of programming and maintenance software for each device and system installed will be provided at the time of delivery, and licenses for the same, if required, will be provided to Johnson Controls.

3.5 Codes

The installed solution will comply with all applicable Federal, State, City, or other regulatory agency codes and regulations relative to communications equipment and installation requirements. Equipment and installation will comply with building codes, and fire rules and regulations. Johnson Controls and its Sub-Contractors will be responsible obtaining all necessary plan checks, permits, and inspections.

3.6 Conduct of Work

Johnson Controls and its Sub-Contractors will coordinate with the Customer for access to the sites and work areas. Johnson Controls and its Sub-Contractors will provide security for equipment and will conduct his operations without interference to the Customer's normal operations. Before ordering materials or performing work that is dependent on proper size or installation requiring coordination with site conditions, Johnson Controls and its Sub-Contractors will verify all dimensions at the site. A list of materials to be ordered will be submitted to the Project Executive, and no material is to be procured until the submittals are approved by the Project Executive.

Johnson Controls and its Sub-Contractors will coordinate any modifications required by existing conditions to avoid conflicts of building systems and other building components.

3.7 Johnson Controls' Responsibility

Johnson Controls and its Sub-Contractors will assume full responsibility for the acts and omissions of all its agents, servants, and employees, and all Sub-Contractors, their agents, servants, and employees, and all other persons performing any of the work required under this SOW and any resulting agreement. In addition, Sub-Contractors will be responsible for the following:

- Installation requirements. Building Access. Installation and mounting methods. Power and connections.
- All outdoor mounted hardware installations of the wireless components must be mounted the on a building, pole, mast, or tower per manufacturer's specifications and on pre-approved mounting assets. Ethernet cables, LAN switches, and all AC power sources are the responsibility of the turnkey Sub-Contractor. Before mounting antennas, bridge links, or other permanent components, the Sub-Contractor must confirm that appropriate and approved locations have been selected for each antenna. The Sub-Contractor will be responsible to coordinate mounting rights and power for mounting equipment on any city-owned or non-city owned mounting asset.

- The Sub-Contractor will include in the bid costs associated with acquiring mounting rights, power and any required power meters for nodes mounted on non-city owned assets.
- Prior to installing any nodes on city-owned buildings and assets, the Sub-Contractor will verify that building access, location, and power sources have been approved by the Customer.

3.8 Software Updates

Johnson Controls requires that its Sub-Contractors provide the most current versions of software and firmware available at the time of the negotiated delivery within the project schedule. Johnson Controls will require that its Sub-Contractors will provide, at no additional charge, software releases and associated documentation that are intended by the vendor as generic version updates to correct reproducible and/or recurring defects, i.e. software bugs, during the period of the contract and any succeeding warranty period as well as maintenance agreements.

3.9 General

1. Johnson Controls will implement a citywide wireless WAN data network to support Customer and Private data transport. The installation of secure and dedicated wireless WAN connectivity, which is to be backhauled to at least two (2) aggregate centers connected to the existing fiber WAN and provide data transport for up to twenty-six (26) locations.
2. The installation of secure and dedicated connectivity between the City's Network, which is the aggregate center of the WAN, to the designated fifteen (15) sites and alternate eleven (11) sites which each will have a minimum data connection of 10 Mbps per site as noted in the building schedule, and full duplex capability. The City prefers to have the current speeds of 5 Mbps to 10 Mbps speeds respectively upgraded to at least 10 and 20 Mbps respectively per site. In the event higher throughput rates can be achieved, this would be considered desirable and should be noted in Sub-Contractor's response.
3. The basis of design is a wireless WAN Point to Point ring, or Point to Multipoint solution with two (2) data aggregate centers for redundancy.
4. Those links will have the capabilities to back haul voice services as well as data. The design could aggregate several facilities in a point-to-multipoint architecture or point-to-point. The radio links will operate in a radio spectrum which will provide the best design solution. The Sub-Contractor will perform a site survey of all the facilities and associated predictive RF propagation analysis. The Sub-Contractor will provide a statistical summary of the propagation study with detailed results. Prior to installing the equipment, the Sub-Contractor will perform a frequency analysis to determine what channels are available to use and to avoid interference with existing radio links operating on the frequency band.
5. The Sub-Contractor will guarantee a 4-hour response time in response to all network outages.

3.10 System Requirements: SCOPE OF PROJECT

1. Wireless WIDE AREA NETWORK (WAN): Base bid will be for an aerial (licensed) based 10-20 Mbps full duplex wireless WAN connectivity from the network to sites (see table). The wireless WAN Sites will be bid as alternates through the GMP Procurement process for the Customer to assess the best value solution of either Fiber or Wireless WAN for those sites. The wireless WAN services will be delivered to any of the available aggregate backhaul fiber WAN points to maximize bandwidth delivered.
2. An uptime guarantee of 99% or better will be provided on a 24x7 basis average over a seven-day period. Johnson Controls will solicit bids under the GMP Procurement to state additional cost to the project to provide uptime guarantees per the following table:

	Base	Alt. 1	Alt. 2	Alt. 3
Uptime	**99**	**99.9**	**99.99**	**99.999**
Minutes/week	**10080**	**10080**	**10080**	**10080**
Downtime/minutes/week	**100.8**	**10.08**	**1.008**	**0.1008**

3. Penalties for exceeding downtime over the course of a thirty (30) day period will be assessed per post-bid negotiated terms.
4. The circuits will be capable of carrying multiple data services such as computer networks, voice over IP, digital video, etc.
5. Johnson Controls and its Sub-Contractors will have the responsibility to install, configure and commission all equipment. The Sub-Contractor will verify that there is no interference with the frequencies and equipment of other operators.
6. Johnson Controls and its Sub-Contractors will be responsible to coordinate frequency channel use to avoid transmission interruption or interference.
7. Johnson Controls and its Sub-Contractors will develop a frequency plan for all sites and validate that these frequencies are available for use following the site survey and frequency "sweep".
8. The equipment proposed will need to have QoS capabilities to prioritize voice service over data and minimize latency to an acceptable level to back haul voice application.
9. A complete wireless WAN solution would include, but not limited to all cabling, low and high voltage. The Sub-Contractor will provide all accommodations for electrical power, where needed; including, but not limited to pathways, cabling, conduit, fire-stopping, etc.
10. Johnson Controls and its Sub-Contractors will provide tower installations (on existing ESWU or city-owned assets) of adequate height and placement for unobstructed line of site for wireless data transfer. If non-line of sight technologies are deployed, the Sub-Contractor will demonstrate communication and performance criteria to meet the minimum required data transfer rates.
11. Johnson Controls and its Sub-Contractors is responsible for any or all BLM, DSA, geological, geographical, local and state licensing and insurances for placement of any hardware or equipment.
12. All equipment will be new. No refurbished or used equipment will be accepted.
13. A minimum of 10-20Mbs, connectivity will be required for all sites.
14. A minimum of 30 minutes of UPS Back up power will be provided at each tower and IDF location and utilize existing emergency generator circuits where available.
15. Licensed frequencies are preferred and Sub-Contractor is responsible for acquiring any and all FCC licenses if and where applicable.
16. Fail-over with redundant data pathways will be built in order to keep all sites connected in the event of a failure at one site.
17. The proposed system should include the following baseline requirements:
    1. 802.11e Multimedia Quality of Service
    2. 802.1p Quality of Service
    3. 802.1q VLAN Trunking
    4. AES 128 bit encryption
    5. VPN Tunneling and filtering
    6. WPA2
    7. ESSID Encryption
    8. Authentication via digital certificate
    9. MAC Address filtering
    10. Maximum 3-ms latency per hop
    11. Congestion control
    12. Access Control
18. The proposed system will include a fully operational Wireless Control System for network management.

3.11 Training

Johnson Controls and its Sub-Contractors will include a complete package of formal technical training for system Administrators and technicians and fully describe all proposed and available training courses. Training will be performed on-site. The training package will include any and all classes or courses available that relate to the new equipment, operations, processes, and management functions. Johnson Controls and its Sub-Contractors will provide training for the installation, operation, configuration, maintenance, and management of the wireless networking equipment. Johnson Controls and its Sub-Contractors will train up to six City employees or designees. Johnson Controls and its Sub-Contractors will record all training session on DVD and turn over to the customer for use by the City for refresher training. All written and presentation training materials will become the property of the City. Proposals must separately identify the following:

15. Each training class to be provided
16. The maximum number of attendees in each session and class
17. Prerequisite knowledge and experience requirements
18. The duration of each class

3.12 Performance Verification

Sub-Contractor personnel will demonstrate (to City personnel) that the provided system is functioning as required in this SOW. Johnson Controls and its Sub-Contractors will document the test results and submit a formal report to Johnson Controls for review. Johnson Controls and its Sub-Contractors will also document a list of required system repairs that will include when system issues were encountered, corrected, and retested. Retests will also be witnessed by Contractor personnel.

3.12.1 Preconstruction Testing

Prior to construction of the wireless WAN network, Johnson Controls and its Sub-Contractors will demonstrate the ability of the wireless network to meet the requirements of the contract. The intent is to ensure that the system will function as proposed, prior to implementation. Utilizing (TBD) City facilities, Johnson Controls and its Sub-Contractors will demonstrate the operation of multiple wireless WAN network transporting data feeds through the network without disruption of data transfer. The testing period will be for seven (7) consecutive days, to validate performance of the system, as determined by Johnson Controls.

In the event Johnson Controls and its Sub-Contractors is unable to demonstrate the performance of the system, the Customer may find Johnson Controls and its Sub-Contractors in default and take appropriate actions pursuant to the Contract Documents.

3.12.2 Wireless WAN Testing

Johnson Controls and its Sub-Contractors will demonstrate that the wireless WAN network is capable of supporting the throughput and data rates required herein as demonstrated over a 30 day average. The data rates must meet or exceed the speeds indicated in the building schedule and the aggregated backhaul of the data transfer must be adequate so as not to impede data speeds.
The proposal will include a preliminary test procedure that will be finalized during contract negotiations. Johnson Controls and its Sub-Contractors will be responsible for providing any required staff, vehicles and test equipment and system test software (i.e., reports, system loading software, etc.). City may choose to observe this process.

3.12.3 Reliability Testing

Johnson Controls and its Sub-Contractors will conduct an acceptance test to prove the reliability of the system as part of final system acceptance. Notification of any planned testing will be given to the Customer at least fourteen (14) days prior to any test unless specified otherwise. Test plans will define the tests required to ensure that the system meets technical, operational and performance requirements. During the test, the system will operate without a major system failure for a period of thirty (30) days. Test results will be provided in hard copy and electronic format suitable to the city.

A major system failure is defined as:

- Loss of a single wireless WAN node
- Interruption of data transfer from any of the wireless WAN sites

If, during the Reliability Test, the system experiences a major system failure, the Sub-Contractor will take the necessary steps to correct the deficiencies and a new 30-day Reliability Test will begin. If the Reliability Test is stopped due to an excusable delay, as approved by the Project Executive, the test will resume at the end of time allowed for the delay and the 30-day period will not be restarted.

3.13 Documentation/Maintenance Technical Information

All system documentation will be delivered to the Customer.

3.13.1 File Formats

Starting with any documents related to this SOW, all documentation provided by the Sub-Contractor will be provided in Microsoft Office, Microsoft Project, Visio, AutoCAD, ESRI shape files, or any other format agreed to by the City. Any specialized software required viewing, editing, or otherwise maintaining or use information provided by the Sub-Contractor will be provided and included as part of the Proposal.

3.13.2 Instruction Manuals

For all system hardware provided by Johnson Controls and its Sub-Contractors, and/or any appropriate Sub-Contractors, Johnson Controls and its Sub-Contractors will deliver to the Project Executive instruction manuals sufficient to permit a duly qualified service technician to install, operate, and maintain the equipment purchased. The manuals will reflect the equipment as designed, built, and installed. The cost of these manuals will be included in the equipment cost. For each type of equipment supplied, Johnson Controls and its Sub-Contractors will provide two electronic copies that can be edited and maintained, and complete printed sets of maintenance manuals and technical documentation. All such documentation will be delivered to the City's Project Representative.

3.13.3 As-Built System Documentation

Johnson Controls and its Sub-Contractors will provide as-built system documentation that can be edited to include (at a minimum) a Master System Diagram that shows each system component and its connection to the system, and Typical Installation As-Built Drawings for each system component (including hardware components, mounting hardware, cabling, power and grounding connections, etc.). Typical Installation As-Built Drawings will include (at a minimum):

- Network wireless WAN node mounted on a telecom tower
- Network wireless WAN node mounted on a building

- Network wireless WAN node mounted on a water tower
- Network wireless WAN node mounted on any other pole or structure
- NMS equipment mounting

For as-built documentation: All installed equipment will be identified in a spreadsheet, at minimum, with unique identifiers such as location, mounting asset identifier, GPS coordinates, serial numbers, etc. Sub-Contractors will include samples of as-built documentation with their proposals.

4 Schedule of Work Section 4: Fiber Optical Network Hardware

4.0 General Information

Johnson Controls will implement this SOW under the GMP Procurement Process. This SOW will deploy DWDM-based optical networking equipment to light fiber routes installed under SOW Section 2. In addition, this SOW seeks the procurement and deployment of equipment for MPLS-TP Switching and Network Management.

The core ring will consist of four (4) sites with up to (17) remote sites attached to the fiber ring. The new fiber cable plant will consist of Single Mode Fiber which will meet or exceed the ITUT G.652 Standard. The Network topology consists of a network that is fiber ring topology connecting Customer locations. The Optical Nodes will be strategically located around Customer locations, with nodes deployed at five (5) locations and optional spurs as outlined in SOW Section 2 and listed herein (replacing the current Opt-E-Man WAN).

4.1 Project Scope

The core ring will consist of four (4) sites with up to (17) remote sites attached to the fiber ring (see buildings schedule).

1. The basis of design will be to provide a three (3) node optical ring to create wavelength services which consists of Core facilities (see buildings schedule).
2. Primary MAN consists of a shared 10GE Ring to the Core facilities and will need to traverse on the Wavelength service. *This bandwidth will be shared among the Core sites only.*
3. Secondary MAN consists of a shared 10GE Ring to the Core facilities and will need to traverse on the Wavelength service. This bandwidth is for the spur locations. A spur facility will be able to join/connect to the closest Core locations to hop on the ring. Based on the geography, groups of spurs have the flexibility to join at one or more sites.
4. The Spur locations will require a switch with a GE interface to connect to the optical ring.
5. The following design requirements will be priced within the Base Bid:

    A. Reconfigurable Optical Add/Drop Multiplexors (ROADM) -

    B. Wavelength services, initial solution would deliver 10 channels. Each channel is able to deliver services up to 100G via transponders and muxponders currently available. Support for linear, ring, multi-ring and mesh topologies

    C. Network level alarm correlation

    D. Optical circuits pass through two or more nodes

    E. Software controlled optical power management

F. Wavelength services are based on services being introduced at various points throughout the fiber network. The solution must dynamically monitor and automatically adjust the optical power levels as required to maintain reliability.

G. High density shelf support 2.5G/10G/40G/100G wavelengths

H. Customer requires that the solution be able to accommodate new services from the initial platform deployed. The ROADM must support 2.5G/10G/40G/100G services from within a single platform

I. Dynamic multi-degree support

J. Wavelengths arriving on a span of fiber have to be deliverable at the node or passed on to any other fiber span without regeneration. This will need to be controlled via software and configurable at the individual wavelength level.

K. A-Z provisioning

L. The solution must support the provisioning of services from a single process. It is not acceptable to have to provision each node that a circuit passes through.

M. Power monitoring per wavelength as it passes through the system

N. The solution needs to provide visibility to optical power levels on an individual wavelength as it passes through each node. The composite (combination of all wavelengths) power levels need to be monitor-able as the signal passes through each card through each node.

O. Alien wavelength support

P. The solution needs to provide the same optical power balancing and monitoring for DWDM signals sourced from external devices.

Q. AC and DC support

R. The solution must support both AC and DC power options from the same platform.

S. Single management interface

T. The ROADM based wavelength service must support end to end management from a single management interface.

8. An uptime guarantee of 99% or better will be provided on a 24x7 basis average over a seven-day period. Johnson Controls will solicit bids under the GMP Procurement to state additional cost to the project to provide uptime guarantees per the following table:

	Base	Alt. 1	Alt. 2	Alt. 3
Uptime	**99**	**99.9**	**99.99**	**99.999**
Minutes/week	**10080**	**10080**	**10080**	**10080**
Downtime/minutes/week	**100.8**	**10.08**	**1.008**	**0.1008**

- Penalties for exceeding downtime over the course of a thirty (30) day period will be assessed per post-bid negotiated terms.
- All operating manuals, handbooks, repair manuals and parts breakdowns will be furnished with each component/device installed. All accessory, components, equipment and systems instruction manuals will be furnished with the system. Sub-Contractor will include As-built drawings detailing location of installed devices. All fiber optic terminating equipment, materials and services furnished by Johnson Controls and its Sub-Contractors will be warranted free from defects in material and workmanship, and will conform to this SOW.

4.1.1 Quality Assurance

The Customer reserves the right to make unannounced inspections and to observe any installation methods or procedures, at unscheduled intervals.

4.1.2 Codes

The proposed solution will comply with all applicable Federal, State, City, or other regulatory agency codes and regulations relative to communications equipment and installation requirements. Equipment and installation will comply with building codes, and fire rules and regulations. Johnson Controls and its Sub-Contractors will be responsible obtaining all necessary plan checks, permits, and inspections.

4.2 Johnson Controls' Responsibility

Johnson Controls and its Sub-Contractors will assume full responsibility for the acts and omissions of all its agents, servants, and employees, and all Sub-Contractors, their agents, servants, and employees, and all other persons performing any of the work required under this SOW and any resulting agreement. In addition, Sub-Contractors will be responsible for the following:

a. Installation requirements.

b. Building Access.

c. Installation and mounting methods.

d. Power and connections.

4.3 Software Updates

Johnson Controls requires that its Sub-Contractors will provide the most current versions of software and firmware available at the time of the negotiated delivery within the project schedule. Johnson Controls will require that its Sub-Contractors will provide, at no additional charge, software releases and associated documentation that are intended by the vendor as generic version updates to correct reproducible and/or recurring defects, i.e. software bugs, during the period of the contract and any succeeding warranty period as well as maintenance agreements.

Johnson Controls will require that its Sub-Contractors will provide timely pre-release notification and documentation of all planned system software upgrades during the project (including the follow-on maintenance period).

4.4 System Requirements

4.4.1 General

The core ring will consist of four (4) sites with up to seventeen (17) remote sites attached to the fiber ring (see buildings schedule).

The basis of design will be a core network consisting of a Multiservice Transport Platform capable of a shared 10GIGE DWDM solution which will provide redundancy, topology flexibility, integrated metro core applications, as well as unmatched service and support. The additional hardened sites will require Ethernet switches with layer 2/3 capability with a minimum of one GIGE interface each with the ability to support wireless backhaul and optional DWDM capability. The Sub-Contractor will offer a design that provides the most advantageous solution based on the identified criteria. Johnson Controls will be a firm which is regularly and professionally engaged in the business of installing, testing and maintaining outside plant fiber optic network systems. Johnson Controls will provide evidence of this experience by submitting a minimum of three successful outside plant fiber optic network system installations within the past three years

as references. The installations will be of similar size and complexity as Customer's project. Include the client's name, contact information and a brief description of the project. Customer will contact all references provided.

4.4.2 System Requirements: SCOPE OF PROJECT

A. WIDE AREA NETWORK (WAN): Multiservice Transport Platform capable of a shared 10GIGE DWDM solution which will provide redundancy, topology flexibility, integrated metro core applications, as well as unmatched service and support. The additional hardened sites will require Ethernet switches with a minimum of (1) GIGE interface each with the ability to support wireless backhaul and optional DWDM capability.

B. Three (3) Primary Network Super-Nodes will be located as noted "Core" in the column marked "Nodes" in the building schedule below.

4.4.3 System Requirements: Performance Requirements

1. The networks will meet or exceed the following minimum performance requirements:
    a. The networks will be deployed using a highly reliability architecture. Clearly identify the proposed architecture, supporting protocols and expected reliability (Customer requires carrier quality networks with selection of x. 9's reliability per alternate pricing schedule below). Bidders will describe the technologies/protocols used to enhance reliability and survivability of the networks and the cost per incremental x.9's uptime guarantee.
    b. The networks will be capable of automatically rerouting all data types, including multicasting data, around broken or failed links without manual intervention.
    c. The networks will simultaneously support multiple virtual local area networks (VLANs), 802.1Q and DMZ.
    d. The networks will be capable of prioritizing critical traffic over other traffic by user, by application, or a combination of both. The networks will support multiple levels of prioritization to ensure that the most important applications or users have the access and bandwidth that are required for successful communication.
    e. The networks will be capable of treating content through prioritization and bandwidth management to provide guaranteed Quality of Service (QoS). In the event of a disaster, where security and public safety applications must have priority, the networks will automatically adjust QoS for prioritization. Describe business continuity plan.
    f. The networks will use traffic shaping and traffic policing to insure that the network content meet their performance contracts.
2. The networks will provide multiple levels of access control methodology In addition, the network will include a Network Intrusion Detection System capable of detecting any connection that is not encrypted, and will detect any node (even if spoofed) that is not authorized on the networks and disallow that node from access to the networks. Describe the security processes and mechanisms your proposed networks include. Describe how your proposal will address the following security issues.
    a. Address spoofing
    b. Denial of service and other suspected intrusions
    c. Undelivered packets
    d. Physical security
    e. Security of the information on the networks

3. Latency on the networks will be less than twenty (20) milliseconds on 99.9% of network traffic from any point to any other point on the networks in normal (non-emergency) operation.
4. Jitter on the proposed networks will be less than 1% in normal (non emergency) operation.
5. The proposed networks will support remote access by authorized users via the Customer's authorized process.
6. The solution cannot rely on spanning tree to deliver a loop free environment. This eliminates the possible interaction of Customer's network.
7. The Ethernet service must have a minimum of a 10G shared fabric. Unused bandwidth must be made available to other ports.
8. An uptime guarantee of 99% or better will be provided on a 24x7 basis average over a seven-day period. The Sub-Contractor will state additional costs to provide uptime guarantees per the following table:

	Base	Alt. 1	Alt. 2	Alt. 3
Uptime	**99**	**99.9**	**99.99**	**99.999**
Minutes/week	**10080**	**10080**	**10080**	**10080**
Downtime/minutes/week	**100.8**	**10.08**	**1.008**	**0.1008**

9. Penalties for exceeding downtime over the course of a thirty (30) day period will be assessed per post-bid negotiated terms.

4.5 Training

Johnson Controls and its Sub-Contractors will include a complete package of formal technical training for system Executives and technicians and fully describe all proposed and available training courses. Training will be performed on-site. The training package will include any and all classes or courses available that relate to the new equipment, operations, processes, and management functions. Johnson Controls and its Sub-Contractors will provide training for the installation, operation, configuration, maintenance, and management of the networking equipment. Johnson Controls and its Sub-Contractors will train up to six Customer employees or designees. Johnson Controls and its Sub-Contractors will record all training session on DVD and turn over to Customer for use by Customer for refresher training. All written and presentation training materials will become the property of Customer.

Proposals must separately identify the following:

1. Each training class to be provided

B. The maximum number of attendees in each session and class

C. Prerequisite knowledge and experience requirements

D. The duration of each class

4.6 Acceptable Manufacturers

Under the GMP Procurement process, Johnson Controls in conjunction with the Customer will deliver a solution for this section SOW from one of the following manufacturers.

I. Alcatel-Lucent

J. Cisco Systems

4.7 Performance Verification

Sub-Contractor personnel will demonstrate (to Customer personnel) that the provided system is functioning as required in this SOW. Johnson Controls and its Sub-Contractors will document the test results and submit a formal report to Johnson Controls for review. Johnson Controls and its Sub-Contractors will also document a list of required system repairs that will include when system issues were encountered, corrected, and retested. Retests will also be witnessed by Contractor personnel.

4.7.1 Preconstruction Testing

Prior to construction of the network, Johnson Controls and its Sub-Contractors will demonstrate the ability of the network to meet the requirements of the contract. The intent is to ensure that the system will function as proposed, prior to implementation. Utilizing (TBD) Customer facilities, Johnson Controls and its Sub-Contractors will demonstrate the operation of multiple network clients transporting data feeds through the network. The testing period will be for seven (7) consecutive days, to validate performance of the system, as determined by Johnson Controls.

In the event Johnson Controls and its Sub-Contractors is unable to demonstrate the performance of the system in accordance with Johnson Controls and its Sub-Contractors' proposal, Johnson Controls may find Johnson Controls and its Sub-Contractors in default and take appropriate actions pursuant to the Contract Documents.

4.7.2 WAN Testing

Johnson Controls and its Sub-Contractors will demonstrate that the network is capable of supporting the throughput and data rates required herein as demonstrated over a thirty (30) day average.

The proposal will include a preliminary test procedure that will be finalized during contract negotiations. Johnson Controls and its Sub-Contractors will be responsible for providing any required staff, vehicles and test equipment and system test software (i.e., reports, system loading software, etc.). Customer may choose to observe this process.

4.7.3 Reliability Testing

Johnson Controls and its Sub-Contractors will conduct an acceptance test to prove the reliability of the system as part of final system acceptance. During the test, the system will operate without a major system failure for a period of thirty (30) days. A major system failure is defined as:

A. Loss of a single WAN node

B. Interruption of data transfer from any of the WAN sites

If, during the Reliability Test, the system experiences a major system failure, the Sub-Contractor will take the necessary steps to correct the deficiencies and a new thirty (30) day Reliability Test will begin. If the Reliability Test is stopped due to an excusable delay, as approved by the Project Executive, the test will resume at the end of time allowed for the delay and the thirty (30) day period will not be restarted.

The proposal will include a preliminary test procedure that will be finalized during contract negotiations.

4.8 Documentation/Maintenance Technical Information

All system documentation will be delivered to the Customer.

4.8.1 File Formats

Starting with any documents related to this SOW, all documentation provided by the Sub-Contractor will be provided in Microsoft Office, Microsoft Project, Visio, AutoCAD, ESRI shape files, or any other format agreed to by Customer/City's CIO. Any specialized software required to view, edit, or otherwise maintain or use information provided by the Sub-Contractor will be provided and included as part of the Proposal.

4.8.2 Instruction Manuals

For all system hardware provided by Johnson Controls and its Sub-Contractors, and/or any appropriate Sub-Contractors, Johnson Controls and its Sub-Contractors will deliver to the Project Executive instruction manuals sufficient to permit a duly qualified service technician to install, operate, and maintain the equipment purchased. The manuals will reflect the equipment as designed, built, and installed. The cost of these manuals will be included in the equipment cost.

For each type of equipment supplied, Johnson Controls and its Sub-Contractors will provide two electronic copies that can be edited and maintained, and complete printed sets of maintenance manuals and technical documentation. All such documentation will be delivered to the Customer.

4.8.3 As-Built System Documentation

Johnson Controls and its Sub-Contractors will provide as-built system documentation that can be edited to include (at a minimum) a Master System Diagram that shows each system component and its connection to the system, and Typical Installation As-Built Drawings for each system component (including hardware components, mounting hardware, cabling, power and grounding connections, etc.). Typical Installation As-Built Drawings will include (at a minimum):

- Riser diagram
- All installed components with a unique identifier

For as-builts: All installed equipment will be identified in a spreadsheet, at minimum, with unique identifiers such as location, mounting asset identifier, GPS coordinates, serial numbers, etc. Sub-Contractors will include samples of as-built documentation with their proposals.

All such documentation will be delivered to the Customer.

4.9 Warranty/Maintenance

4.9.1 Network Management, Maintenance and Post-Installation Support

A. Design and Operation

Johnson Controls and its Sub-Contractors will warrant that the equipment, components, and services sold or provided in response to this SOW will perform in accordance with their respective design specifications, and will operate in accordance with the manufacturer's published specifications when operated and maintained in accordance with the manufacturer's recommendations for a minimum of two (2) years from Project Acceptance.

B. Configurations

Johnson Controls and its Sub-Contractors will warrant that the configurations of equipment and services proposed in response to this SOW represent sound design principles being applied to provide a total network solution to the requirements stated in the SOW, and that the equipment and services provided will operate together in a manner to perform the functions expressed in the SOW.

C. Equipment Models

Johnson Controls and its Sub-Contractors will warrant that the equipment offered is standard new equipment, and the latest model of regular stock product, with parts regularly used for the type of equipment offered; also that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice. Contractors will furnish the current version of software for all components provided. If a new version or release is issued after contract execution, but prior to the shipment of the system, then Customer will have the option of substituting the new version or release in place of the originally proposed version or release, at no additional charge.

D. Product Life Cycle

Johnson Controls and its Sub-Contractors will warrant that the components offered are not currently at the end of their product life cycle. Contractors will submit a statement identifying the length of time from cutover that Contractors will guarantee new parts availability.

E. Warranty Coverage

Johnson Controls and its Sub-Contractors will warrant that the network components as priced, including all hardware and software, will include a complete warranty covering all parts, labor, travel and all other expenses, for a period of a minimum of one (1) year from final Acceptance. The selected Contractor will serve as a single point of contact, and provide the name, address and telephone number of the individual to contact when maintenance is required. The selected Contractor will further provide escalation procedures and contact names and numbers to be used when normal maintenance procedures are not adequate to resolve problems.

F. Network Performance Monitoring

During warranty phase, Johnson Controls will require that the SOW Section 4 Sub-Contractor will be equipped with a Network Operations Center (NOC). The NOC will be equipped with a Network Management System (NMS) that will monitor the performance of the networks. The networks will include the following minimum performance monitoring specifications:

- The NMS will be able to monitor the performance of all devices on the networks, down to the switch level.
- Contractors will identify all the monitoring points and network performance metrics that will be monitored by the NMS as well as a description of NMS elements and capabilities.
- All NMS services will be available to Customer network Executives over a secure web based interface. The NMS will allow up to five (5) simultaneous users with no degradation to the network operations or performance. The NMS will allow multiple levels of access based on logon and password. (While Customer will have rights to monitor network performance and receive alarms based on specific performance criteria, nothing in this section is intended to relieve Johnson Controls of any responsibilities it has to monitor the networks and respond to network or component failures or other performance degradations. Said responsibilities will be clearly

identified in Service Level Agreements that will be executed in conjunction with the contract award.)

- Describe the alarm notification services that Customer may utilize. Customer expects to be able to receive alarms by cell phone, pager, email, fax, or instant messaging. Describe the content of the alarm notifications and response times.
- In addition to real-time performance monitoring, the NMS will be equipped to prepare historical reports quantifying the performance of the networks. Typical reports will include latency, jitter, packet loss, throughput, traffic volumes, up time, alarms received and a description of responses and resolutions. Reports will be able to be prepared on an hourly, daily, weekly, monthly and annual basis. Trend analysis will also be included.

4.9.2 Warranty on Additional Equipment

Warranty on any additional system hardware or software purchased after acceptance of the initial system will be for not less than 12 months after the date the hardware or software is accepted and placed in service.

4.9.3 Maintenance during the Warranty Period

Proposals will describe how system and equipment maintenance and repair will be handled during the warranty period. During the warranty period, Johnson Controls and its Sub-Contractors will respond to all repair calls or notices of system malfunction at no additional cost to Johnson Controls.

4.9.4 Service Under Warranty

If it becomes necessary for Customer to contract with another vendor for warranty repairs, due to inability or failure of Johnson Controls and its Sub-Contractors to perform such repairs, Johnson Controls and its Sub-Contractors will reimburse Customer for all invoices for labor, materials required, and the shipping/handling costs thereof to perform such repairs, within 30 days from presentation of such invoices. This will only occur after Johnson Controls and its Sub-Contractors have been given reasonable time and fair opportunity to respond and correct the problem(s). The cost for such repairs will not exceed the actual parts and labor replacement price of the repair.

4.9.5 Follow-On Maintenance Following Warranty Period

Proposals will include a price for the follow-on maintenance (same as warranty service specified above).

Johnson Controls under this SOW will provide:

- Service Level Agreement (SLA) with 24 hour, 365 day monitoring coverage with a guaranteed response time of 4 hours. The SLA Sub-Contractor assigned will be able to show that they currently have these types of contracts in place and have the staff and equipment to provide the service in addition to a proven track record in performance.
- Term of SLA will be:
    - Two (2) years after Project Acceptance.
    - SLA Terms will be broken out between Hardware and Technical Labor Services.
    - SLA-provider will submit provide a complete maintenance plan, including emergency and non-emergency maintenance and periodic maintenance schedules. Such maintenance schedules will specify coverage for each system component.

- SLA-provider will state the location of the parts depot or storage warehouse which stocks parts for the system.
- Firmware updates will be applied within thirty (30) days of release if agreed upon by the Customer.
- SLA-provider will provide an escalation chart which indicates time limits, levels of escalation, and individuals' names, titles and locations to be used in case of extraordinary problems.
- All maintenance for the Network and all components will be provided directly by the successful Sub-Contractor, or any subcontracting arrangements must be clearly defined.

- Penalties for non-performance will apply, including termination of SLAs, and the Customer may correct or replace the defective or faulty Work or Work which fails to meet the requirements of the Contract by another Contractor. The cost of correcting or replacing same will be subject to obligation from the original Sub-Contractor/Installer.

Scope of Work - 4: Improvements to Treatment Plants

The project scope consists of the following work items that were identified by Johnson Controls, Inc. All of the project items will be executed and commissioned per the requirements of the applicable engineering standards.

A. Primary Clarifiers Inlet Gate Automation – East and West Wastewater Treatment Plants (WWTPs):

This project item will include installation of automated inlet gate(s) for effective flow maintenance of the primary clarifiers. The equipment included is as follows:

- Furnish and install actuators, with adaptors to fit to existing gates and hand wheels;
- PLC Cabinet, conduit, and wire for control of new actuators

B. Secondary Sludge Thickening Automation and Odor Control – East Wastewater Treatment Plant:

- New PLC for the gravity belt thickening (GBT) equipment operation;
- Odor control hood (custom fabricated);
- Carbon absorption odor control system;
- Provide and install (10) IP type cameras, wireless communication devices and display monitor as approved by Customer.

C. Centrifuge Dewatering – East Wastewater Treatment Plant:

This project includes addition of a centrifuge to dewater the anaerobically digested sludges. This project will provide centrifuge-dewatered sludge-cake with higher solids compared to current digested sludge processing in the belt filter presses (BFPs). The centrifuge will process the digested sludges at a rate of 250 gallons per minute (gpm). The installation of new centrifuge includes the components, as follows:

- Remove existing aluminum window on second floor of press building;
- Cut new expansion joint through existing brick veneer for removal of brick;
- Remove existing brick and save for reinstallation;
- Remove existing concrete masonry below window;
- Remove existing concrete containment walls;
- Remove two (2) existing belt filter presses, walkway and appurtenances;
- Remove and cap one (1) sludge feed piping;
- Remove and cap existing polymer and wash water piping;
- Remove and cap existing polymer and wash water piping;
- Install new concrete containment wall for installation of new centrifuge;

- Install one (1) new centrifuge;
- Install one (1) new screw conveyor from centrifuge to transfer conveyor;
- Install new sludge feed piping from existing sludge feed piping to centrifuge;
- Re-use existing sludge pumps and polymer feed systems;
- Install new concrete masonry units;
- Re-install aluminum window;
- Modify electrical system as needed to accommodate new centrifuge.

D. Fats, Oils, and Grease (FOG) Co-digestion and Energy Cogeneration – East Wastewater Treatment Plant:

The FOG project at the East WWTP is to co-digest the FOG material, currently designed at 30,000 gallons per week, in the existing anaerobic digesters and recover the additional biogas produced. This recovered biogas under the FOG project is designed to clean-up and condition to combust in the internal combustion engines, or, equivalent, to generate electric power and recover waste heat, i.e., in a Cogen mode of operation. Under the current (pre-FOG project) operations, the excess biogas is continuously flared. With the FOG project installed and commissioned the recovered biogas will be reused for energy recovery, and the flaring will be discontinued.

The project elements to install, construct, and commission under the FOG program are as follows:

- Two (2), cogeneration units consisting of:
  a. Engine
  b. Generator
  c. PLC - Digital Screen Display
  d. Enclosure on Skid
  e. Exhaust Gas Heat Exchanger
  f. Dual Gas Trains (Natural gas and Biogas)
  g. Heating Loop Pumps
  h. External Waste Heat Radiators
  i. Control Panel
- Gas Conditioning
  - Gas Conditioning Enclosure consisting of:
    - Gas Compression/Moisture Removal System
    - Siloxane Removal System

  C. Hydrogen Sulfide Removal System – Standalone

D. Glycol Chiller – Standalone

E. Control System - Standalone

U. Piping and Valves between Equipment and Existing Piping

V. Wall Pipe Penetrations

W. Heat Tracing of Exposed Piping as necessary for freeze protection

X. Hot Water Expansion Tank

Y. Hot Water/Glycol Recirculation Pumps

Z. 4" Hot Water/Glycol Piping and Valves

AA. Gas Safety Equipment - Sediment Trap, Drip Trap, Manometer, etc.

BB. Gas Meter

CC. Modifications to Existing Boiler Piping, *as required*

DD. Concrete Pads

EE. Concrete FOG Receiving Station

FF. FOG Hauler Truck Connection

GG. 4" Piping and Valve from Connection to 8" Pipe

HH. Concrete Grinder Vault

II. Inline Grinder

JJ. 8" Piping and Valves from FOG Receiving Station to Receiving Tank

KK. 6" DS and FOG Bypass Piping and Valves

LL. FOG Odor Control Unit

MM. Concrete FOG Receiving Tank

NN. FOG Mixing Pumps, two (2)

OO. 6" FOG Mixing Piping and Valves

PP. FOG Transfer Pumps, two (2)

QQ. 4" FOG Transfer Piping and Valves

RR. Cogen MCC

SS. Buried Yard Conduit to 081-SBD

TT. Fused Switch (for power transfer to grid)

UU. Wiring Between MCC and Equipment

VV. Power Meters

WW. Site preparation and restoration:

- Excavation/Backfill
- Site Grading

- Site Paving
- Sidewalks/Stone
- Coatings
- Seeding
- Light Pole Relocation

E. Building Automation Systems at Water Treatment Plant and East Wastewater Treatment Plant:

- Water Treatment Plant

  The existing temperature control system for the Water Department Filter Plant consists of light commercial non-programmable thermostats to control the air conditioning systems in the office area and laboratory area. Scope is as follows:

  - Replace all non-programmable thermostats with Energy Star rated programmable thermostats to provide a setback schedule and accurate control of the conditioned space temperature;
  - Install thermostat controls on all fan powered steam unit heaters throughout the facility with the exception of the chlorine storage, south filters and the new filters. The thermostats will replace the existing switches or worn out thermostats that control the fan motors only. For the 3 – Phase units, the thermostats will be installed with a starter and relay to start and stop the fan.

- East Wastewater Treatment Plant
  - Replace existing control system with a direct digital control system platform. The system will remove the need for the existing pneumatic air system and be replaced with more reliable and accurate digital control devices on all zone terminal units, chilled water and hot water valve actuators, and variable speed supply fan. A new web-based user interface will be enabling night setback scheduling and monitoring of system performance.
  - Major equipment that will be controlled will be the air handling units located in the basement of the main office building at the East Wastewater Treatment Plant facility, the hot water boiler and air cooled chiller, and approximately ten (10) variable air volume terminal units located on the first floor.

F. Lighting Upgrades at Water Treatment Plant, Allen's Lane, East Wastewater Treatment Plant, and West Wastewater Treatment Plant:

- Water Treatment Plant and Allen's Lane Facility

  The existing lighting systems throughout the Filter Plant and the Allen's Lane facility consist of various lighting technologies and ages including: T-8 and T-12 fluorescent tubes with electronic or magnetic ballasts, 100-watt to 400-watt metal-halide lamp wall mount and high bay fixtures, and various incandescent fixtures. Exterior lighting fixtures include wall mounted

metal-halide and various incandescent lamps. There are approximately 650 fixtures in the Water Treatment Plant and approximately 325 fixtures in the Allen's Lane Facility, with several usage schedules. See Attachment 5 for line-by-line fixture types.

- Replace existing fluorescent lighting fixtures with new, high efficient 25-watt T-8 fluorescent lamps with electronic ballasts, 55-watt to 200-watt induction fixtures and compact fluorescent lamps.

- East Treatment Plant

The existing lighting systems throughout the facility consist of various lighting technologies and ages including: T-8 and T-12 fluorescent tubes with electronic or magnetic ballasts, 100-watt to 400-watt metal-halide lamp wall mount and high bay fixtures, and various incandescent fixtures. Exterior lighting fixtures include wall mounted metal-halide and pole mounted high pressure sodium fixtures. There are approximately 690 fixtures in the facility with several usage schedules.

- Replace existing fluorescent lighting fixtures with new, high efficient 25-watt T-8 fluorescent lamps with electronic ballasts, 55-watt to 200-watt induction fixtures and compact fluorescent lamps.

10. West Treatment Plant

The existing lighting systems throughout the facility consist of various lighting technologies and ages including: T-8 and T-12 fluorescent tubes with electronic or magnetic ballasts, 100-watt to 400-watt metal-halide lamp wall mount and high bay fixtures, and various incandescent fixtures. Exterior lighting fixtures include wall mounted metal-halide and pole mounted high pressure sodium fixtures and select incandescent lamps. There are approximately 550 fixtures in the facility with several usage schedules.

- Replace existing fluorescent lighting fixtures with new, high efficient 25-watt T-8 fluorescent lamps with electronic ballasts, 55-watt to 200-watt induction fixtures and compact fluorescent lamps.

- Total fixture quantity

Facility	Fixture Quantity
Water Treatment Plant	647
Allens Lane – water operations	325
East Wastewater Treatment Plant	690
West Wastewater Treatment Plant	554

G. Power Factor Correction at Water Treatment Plant, East Wastewater Treatment Plant and West Wastewater Treatment Plant:

Power Factor Correction (PFC) is a technique of counteracting the undesirable effects of electric loads that create a power factor (PF) that is less than 1.00. Power factor correction may be applied either by an electrical utility to improve the stability and efficiency of the transmission network, or by individual electrical customers to reduce the costs charged to them by their energy supplier.

- Water Treatment Plant

  Capacitors are to be installed on main service medium voltage feeders. Locations to be determined with final engineering and will be selected to avoid minimal down time.

  - Provide and install (1) 600 Kvar 4160 fixed capacitor bank at the main service. Capacitor bank engineered to correct to 0.98 net average monthly power factor;
  - Install concrete foundation;
  - Size, provide and install all feeders and grounding per NEC;
  - Provide and install MV capacitor bank including all medium voltage terminations;
  - Start-up and commissioning;
  - Electrical permits and inspection.

- East Wastewater Treatment Plant

  Capacitors are to be installed on main service medium voltage feeders. Locations to be determined with final engineering and will be selected to avoid minimal down time.

  - Provide and install (1) 400 Kvar 4160 fixed capacitor bank at the main service. Capacitor bank engineered to correct to 0.98 net average monthly power factor;
  - Install concrete foundation;
  - Size, provide and install all feeders and grounding per NEC;
  - Provide and install MV capacitor bank including all medium voltage terminations;
  - Start-up and commissioning;
  - Electrical permits and inspection.

- West Wastewater Treatment Plant

  Capacitors are to be installed on main service medium voltage feeders. Locations to be determined with final engineering and will be selected to avoid minimal down time.

  - Provide and install (1) 400 Kvar 4160 fixed capacitor bank at the main service. Capacitor bank engineered to correct to 0.98 net average monthly power factor;
  - Install concrete foundation;
  - Size, provide and install all feeders and grounding per NEC;
  - Provide and install MV capacitor bank including all medium voltage terminations;
  - Start-up and commissioning;

- Electrical permits and inspection.

H. HVAC at East Wastewater Treatment Plant:

Replace the hot water boiler to a condensing boiler that will have potential efficiencies approaching 98% given proper operating conditions. The proposed controls system will provide the scheduled operating hours for the boiler. The recommended boiler will have a modulating burner to maximize heating efficiency.

Scope of Work - 5: Owner Controlled Contingency

This Agreement includes a Customer-controlled contingency fund in the amount of One Million Dollars ($1,000,000) that may be applied to repairs and upgrades to existing water and sewer utility infrastructure, to any change orders to the Improvement Measures hereunder or to any related project, at Customer's discretion, at any time during the construction period or prior to Final Completion of all Work, or within a reasonable time thereafter.

ASSURED PERFORMANCE GUARANTEE

I. NON-WATER METER PROJECT BENEFITS

A. Certain Definitions. For purposes of Schedule 2 to this Agreement and for purposes of the Improvement Measures discussed in this Schedule 2, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Annual Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

Annual Project Benefits Surplus is the amount by which the Annual Project Benefits Realized exceeds the Annual Project Benefits in any one year of the Guarantee Term.

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Section IV below.

Guarantee Term will commence on the first day of the month next following the Final Completion date of the Project and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement; provided, however, JCI shall not terminate its provision of M&V Services except (i) in accordance with the terms hereof, or (ii) upon termination of all M&V Services by Customer upon written notice of such termination by Customer to JCI.

Installation Period is the period beginning on JCI's receipt of Customer's Notice to Proceed and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the utility savings and cost avoidance calculated in accordance with the methodologies set forth in Section III below.

Non-Measured Project Benefits are identified in Section II below. The Non-Measured Project Benefits have been agreed to by Customer and will be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below. Customer and JCI agree that: (i) the Non-Measured Project Benefits may include, but are not limited to, future capital and operational costs avoided as a result of the Work and implementation of the Improvement Measures, (ii) achievement of the Non-Measured Project Benefits is outside of JCI's control, and (iii) Customer has evaluated sufficient information to conclude that the Non-Measured Project Benefits will occur and bears sole responsibility for ensuring that the Non-Measured Project Benefits will be realized. Accordingly, the Non-Measured Project Benefits shall not be measured or monitored by JCI at any time during the Guarantee Term, but rather shall be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below.

Project Benefits are the Measured Project Benefits plus the Non-Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

Total Project Benefits are the projected Project Benefits to be achieved during the entire term of this Agreement.

B. Project Benefits Summary. Subject to the terms and conditions of this Agreement, JCI and Customer agree that Customer will be deemed to achieve a total of **$2,170,981** in Non-Measured Project Benefits

and JCI guarantees that Customer will achieve a total of **$8,475,372** in Measured Project Benefits during the Guarantee Term, for Total Project Benefits of **$10,646,353** as set forth in the Total Project Benefits table below. In the event that Customer does not achieve Measured Project Benefits in the amounts and during the time periods set forth on the Total Project Benefits table below, JCI shall pay to Customer the deficiency or shortfall measured by the Measured Project Benefits (shown as Utility Cost Avoidance in such table) less the Measured Project Benefits actually achieved by Customer in such year (presuming the assumptions set forth in this Schedule and the obligations set forth in Schedule 3 are implemented in all material respects) (the "Assured Performance Guarantee"); provided, however, Customer may choose to have such amounts handled in any manner set forth in Section C of this Schedule 2 instead of having such amounts paid directly to Customer. If Customer chooses to have JCI pay any deficiency/shortfall directly to Customer, such deficiency or shortfall, if any, shall be paid by JCI to Customer in cash or immediately available funds within ninety (90) days after the end of such year. The Assured Performance Guarantee shall be calculated, and any resulting deficiencies/shortfalls paid, in each year of the Guarantee Term. Notwithstanding the foregoing, JCI's obligation to pay any such deficiencies or shortfalls accrued during any period prior to termination or expiration of this Agreement shall survive termination or expiration of the Guarantee Term.

Total Project Benefits

	Measured Project Benefits	Non Measured Project Benefits	Total Project Benefits
Year	Utility Cost Avoidance*	Operations & Maintenance Cost Avoidance**	Annual Project Benefits
1	$321,886	$109,008	$430,894
2	$330,899	$112,060	$442,959
3	$340,164	$115,198	$455,362
4	$349,689	$118,423	$468,112
5	$359,480	$121,739	$481,219
6	$369,545	$86,998	$456,543
7	$379,893	$89,434	$469,327
8	$390,530	$91,938	$482,468
9	$401,464	$94,512	$495,976
10	$412,705	$97,159	$509,864
11	$424,261	$99,879	$524,140
12	$436,140	$102,676	$538,816
13	$448,352	$105,551	$553,903
14	$460,906	$108,506	$569,412
15	$473,812	$111,544	$585,356
16	$487,078	$114,667	$601,745
17	$500,717	$117,878	$618,595
18	$514,737	$121,179	$635,916
19	$529,149	$124,572	$653,721
20	$543,965	$128,060	$672,025
Total	**$8,475,372**	**$2,170,981**	**$10,646,353**

*Utility Cost Avoidance figures in the table above are based on anticipated increases in unit energy costs as set forth in the table in Section IV below.
** Operations & Maintenance Cost Avoidance and Future Capital Cost Avoidance are Non-Measured Project Benefits. Operations & Maintenance Cost Avoidance and Future Capital Cost Avoidance figures in the table above are based on a mutually agreed fixed annual escalation rate of Two and Eight Tenths (2.8%).

Within sixty (60) days of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved during the Installation Period plus any Non-Measured Project Benefits applicable to such period and advise Customer of same. Any Project Benefits achieved during the Installation Period may, at JCI's discretion, be allocated to the Annual Project Benefits for the first year of

the Guarantee Term. Within sixty (60) days of each anniversary of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved for the applicable year plus any Non-Measured Project Benefits applicable to such period and advise Customer of same.

Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of its responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, JCI shall provide notice of such breach or failure to Customer, and Customer shall have a period of thirty (30) days to cure such breach or failure; provided, however, in the event that such breach or failure cannot be cured within such thirty (30) day period, Customer shall promptly take steps in furtherance of such cure within such thirty (30) day period and shall thereafter diligently pursue such cure until completion. In the event that Customer fails to cure such breach or failure within the thirty (30) day cure period or the extended cure period referenced above, JCI may, upon notice to Customer, terminate the Assured Performance Guarantee.

C. Project Benefits Shortfalls or Surpluses.

(i) *Project Benefits Shortfalls*. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, in Customer's sole discretion, Customer shall direct JCI to and JCI shall either: (a) set off the amount of such shortfall against any unpaid balance Customer then owes to JCI, (b) where permitted by applicable law, increase the next year's amount of Annual Project Benefits by the amount of such shortfall, (c) pay to Customer the amount of such shortfall within ninety (90) days, or (d) subject to Customer's agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer.*

(ii) *Project Benefits Surpluses*. If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, Owner may, at its sole discretion, use such surplus.*

(iii) *Additional Improvements*. Where an Annual Project Benefits Shortfall has occurred, JCI may, subject to Customer's approval (which approval shall not be unreasonably withheld, conditioned, or delayed), implement additional Improvement Measures, at no cost to Customer, which may generate additional Project Benefits in future years of the Guarantee Term.

* Annual Project Benefits Shortfalls and Annual Project Benefits Surpluses under each of Schedule 2 and Schedule 2A shall be reconciled against one another.

II. NON-MEASURED PROJECT BENEFITS

The Project Benefits identified below were derived using engineering calculations based on pre-retrofit field measurements and data provided by the City of Evansville Water and Sewer Utility. Operational and Maintenance project benefits were derived from studies of the Waste Water Treatment Plant's operations and data provided by the Customer. Post-retrofit measurements will not be taken due to a change in baseline conditions caused by the more efficient operation of the PC Gate Actuators and Sludge Thickening ECMs. These project benefits shall be Non-Measured Project Benefits (as defined above) under this Schedule. The amount of the Non-Measured Project Benefits shall be deemed to increase during each year of the Guarantee Term by the escalation percentages set forth below.

Source of Non-Measured Project Benefit	First Year Project Benefits	Escalation
Annual Electric Savings	$24,222	2.8%
Annual Operational Savings	$75,778	2.8%
Annual Material Savings	$33,230	2.8%
Total Non-Measured Project Benefits	**$133,230**	

All of the mutually agreed to savings listed above will be considered achieved upon substantial completion of the installation of the Customer Plant enhancements as described in Schedule 1 of this agreement. The non energy items were provided by the Customer and will be considered achieved upon substantial completions. The following table summarizes the electric savings calculated using the formulas shown on the following pages. These calculations are based on pre-retrofit conditions and mutually agreed to post-retrofit conditions.

Facility	Annual Guaranteed Energy Savings (kWh)	Annual Guaranteed Cost Savings
East WWTP	128,847	$10,140
West WWTP	168,852	$14,082

City of Evansville, IN Eastside and Westside WWTPs
Estimated Savings - Primary Clarifier Gate Automation

Eastside							
Energy Savings	No. Running	hp	Extra Run time (hrs)	Days	Electrical Energy Savings (kWh)	Electrical Energy Savings ($)	Notes
Primary Pumps	1	15	2	40	850	$67	1, 2
Activated Sludge Blowers	1	100	24	40	67,857	$5,340	1, 2
Total Estimated Eastside Electrical Consumption Savings:					**68,708**	**$5,407**	
Westside							
Energy Savings	No. Running	hp	Extra Run time (hrs)	Days	Electrical Energy Savings (kWh)	Electrical Energy Savings ($)	Notes
Primary Pumps	1	25	1	40	679	$57	1, 2
Activated Sludge Blowers	1	100	24	40	67,857	$5,659	1, 2
BAF Backwash Pumps	2	15	2	40	1,701	$142	1, 2
BAF Blowers	5	75	8	40	85,044	$7,093	1, 2
Influent Pumps	1	20	24	40	13,571	$1,132	1, 2
Total Estimated Westside Electrical Consumption Savings:					**168,852**	**$14,082**	

Notes:

1 Based on an estimated 8 major wet weather events per year and 5 days per event of extra pumping and increased aeration demand.

2 Based on electricity cost of $0.0834/kwh in the West Plant and $0.0787 in the East Plant

3 Based on cleaning out excessive solids from primary clarifiers and chlorine contact tank.

City of Evansville, IN Eastside and Westside WWTPs
Estimated Electrical Savings - Sludge Thickening Automation and Odor Control

Eastside

Pump Energy Savings	No. Running	hp	Extra Run Time (hrs)	Electrical Energy Savings (kWh)	Electrical Energy Savings ($)	Notes
Primary Pumps	1	15	4	13,580	$1,069	1, 2
Digester Feed Pumps	1	15	4	13,580	$1,069	1, 2
Digester Transfer Pumps	1	15	4	13,580	$1,069	1, 2
Sludge Conditioning Tank Feed Pumps	1	15	4	13,580	$1,069	1, 2
Dewatering Belt Filter Press Feed Pumps	1	15	4	13,580	$1,069	1, 2
Less Electrical Consumption of Odor Control				(7,760)	($611)	
Total Estimated Eastside Annual Electrical Savings:				**60,142**	**$4,733**	

Notes:
1. Based on electricity cost of $0.0787/kwh.

2. Based on GBT capacity of 63,000 gpd and 2007-2011 MRO average of 105,000 gpd of WAS pumped to GBT, . 105,000-63,000 = 42,000 gpd overflows back to primary clarifiers, 200 gpm primary sludge pump takes 3.5 hrs/d to pump additional sludge to digesters.

Sources of Operational and Maintenance Cost Avoidance

The Sources of Operational and Maintenance Cost Avoidance are shown in the table below.

$33,230	The result of the replacing existing lighting equipment with new equipment and is limited to material only.
$85,500	The result of reducing the amount of wet tons produced that must be sent to the landfill. The savings utilize a disposal cost of $18 per wet ton.
$ (9,722)	The result of an $0.08 tipping fee for receiving FOG Less Maintenance Costs

Evansville Water and Sewer Utility
FOG Cogeneration

Basis for Design

Phase 0	93	Avg. scfm gas produced
Phase 1	142.27	Avg. scfm gas produced
	49.66	Additional gas from FOG

FOG Phase 1

30,000	gal/wk FOG
18	cf/lb
$0.08	$/gal
$124,800	Annual Revenue
$6,414	Annual O&M
$118,386	FOG Net

Cogen Phase 1

300	Engine Rated Output kW (2 engines)		
10,812	Cogen Engine Heat Rate Btu/kWh		
640	Gas Heat Content Btu/cf		
5,463,210	Btu/hr Gas	505	kW possible
505	kW produced		
33	kW Unison parasitic electric		
472	kW net		
95%	Availability		
3,930,409	Annual kWh		
267	kW Displaced Demand		

Savings

$255,477	Electric Energy		
$32,040	Electric Demand		
$118,386	FOG Net	**Total O&M Savings**	
-$49,500	Unison O&M	$118,386	FOG Net
-$78,608	Engine O&M	-$49,500	Unison O&M
$277,794	Total Savings	-$78,608	Engine O&M
		($9,722)	

Evansville Water & Sewer Utility
revised 9-26-2011
Centrifuge

Sludge Savings			
Current biosolids production		36.9	wet tons/day
Current dryness		18%	
Proposed Dryness		28%	
Disposal cost		$18.00	$/wet ton
Dry solids production		6.65	dry tons/day
Proposed volume		23.75	wet tons/day
Volume Reduction (current - proposed)		13.19	
	Annual savings =	**$85,500**	

Customer has furnished the foregoing information to JCI, which information forms the basis of the Non-Measured Project Benefits. Customer agrees that the Non-Measured Project Benefits are reasonable and that the installation of the Improvement Measures will enable Customer to take actions that will result in the achievement of such Non-Measured Project Benefits.

III. MEASUREMENT AND VERIFICATION METHODOLOGIES

The following is a brief overview of the measurement and verification methodologies applicable to the Improvement Measures set forth below. JCI shall apply these methodologies, as more fully detailed in the guidelines and standards of the International Measurement and Verification Protocol (IPMVP) and/or the Federal Energy Management Program (FEMP), in connection with the provision of M&V Services hereunder.

Option A
Partially Measured Retrofit Isolation

Measured Project Benefits are determined by partial field measurement of the energy use of the system(s) to which an Improvement Measure was applied separate from the energy use of the rest of the facility. Measurements will be short-term with only one-time measurements before and after the Installation Period.

Partial measurement means that some but not all parameters will be measured. Careful review of the design and installation of Improvement Measures is intended to demonstrate that the stipulated values fairly represent the probable actual values. Agreed-upon values will be shown in the measurement and verification plan, along with analysis of the significance of the error they may introduce. Engineering calculations using short-term pre and post-retrofit measurements and stipulations are used to calculate Measured Project Benefits for the duration of the Guarantee Term.

Measured Project Benefits from the following Improvement Measures will be calculated using Option A (as more fully described in the IPMVP).

Measurement and Verification for all Lighting Measures

Baseline Development

The Baseline for this energy conservation measure ("ECM") was developed by a thorough and detailed audit of the lighting equipment installed in the individual buildings. The audit produced a room-by-room list of existing lighting systems and measured light levels. Baseline fixture wattage is based on spot measurement of a sample of fixtures within each significant electrical fixture configuration. Lighting burn hours are based on logged hours by room type. The sample sizes for the spot measurement and logging were selected to achieve a precision level of 20% and a confidence level of 80%.

Baseline Data Collected:
Lamp and ballast types

1. Sampling of electricity demand (kW) for electrically significant fixture configurations
2. Data logging of fixture burn hours for each significant room type, where feasible given room use or configuration
3. Areas where upgrades were not needed

FORMULA 1

EFWi = EMCWi ÷ NFi
EADC = {EFWi *NM * EDR}
Where:
EFW: Existing fixture kilo-wattage for each fixture type (kW per fixture type)
EMCW: Existing measured circuit kilo-wattage for each fixture type (kW)
NF: Number of fixtures on circuit for each type
NM: Number of months per year
EDR: Electrical demand rate ($/kW)
EADC: Existing annual demand cost for the existing lighting system ($/yr)

Johnson Controls will then determine Existing Annual Electrical Consumption Cost (EAECC) for the existing lighting system according to the following formula:

FORMULA 2

EAECC = {∑EFWi * ABH * EER}
Where:
EAECC: Existing annual electrical consumption cost for the existing lighting system($/yr)
∑EFWi: The sum of the existing fixture kW for all existing fixture types (kW)
ABH: Annual burn hours
EER: Electrical energy rate ($/kWh)

Proposed Savings

The expected Year 1 savings are described in Table 1

Table 1: Year 1 Savings for Lighting ECM

Site	Electric Energy Use (kWh)	Electric Energy Cost	Electric Demand (kW)	Electric Demand Cost	Other Energy-Related O&M Costs	Total Costs
Water Treatment Plant	68,397	$4,446	305	$3,048	$9,700	$17,194
Allen's Lane	75,755	$7,272	223	$1,228	$6,030	$14,530
East Waste Water Treatment Plant	226,613	$14,730	458	$4,579	$9,200	$28,509
West Waste Water Treatment Plant	171,903	$11,174	380	$3,800	$8,300	$23,273

Notes:
MMBtu = 1,000,000 Btu
Annual electric demand savings (kW/Yr) is the sum of the monthly demand savings.
Other Energy Related O&M Costs include Year 1 lighting material savings.

If energy is reported in units other than MMBtu, provide a conversion factor to MMBtu for link to cost schedules (e.g. 0.003413 MMBtu/kWh)

Other Energy related O&M costs include lamp and ballast replacement maintenance.

Energy rates are the same for all ECMs and are discussed in Table 4 of the Project Data Assumptions.

O&M Cost Savings

The O&M savings of $33,230 for this ECM is the result of the replacing existing lighting equipment with new equipment and is limited to material only.

Post-Installation M&V Activities

The Post-Installation energy consumption is the product of post-installation fixture wattage multiplied by the annual hours of usage. Factors that can affect the Post-Installation energy use are building usage and hours of operation.
The Post-Installation performance factors include space light levels, fixture wattage (efficiency), and lighting fixture burn hours. The electricity demand measurements for the sample of fixtures will be extrapolated to similar fixture types within each specific population. Light levels will be measured in similar locations in the same rooms as those taken during development. The Excel spreadsheet will be updated to reflect actual lighting fixture counts, the specific retrofits performed, and the measured Post-Installation fixture wattage. The O&M savings will be updated to reflect actual equipment counts. The fixture burn hours will not be measured. The updated ECM calculation files will be provided as part of the Post-Installation Report.

At the completion of each building under the project scope, Johnson Controls will calculate post retrofit power (kilo-watt) consumption and demand from actual as-built fixture quantities, and, catalog data on the retrofit system as installed. This information will be used to determine post installation energy consumption.

FORMULA 3

NFWi = NMCWi ÷ NFi
NADC = {NFWi * NM * EDR}
Where:
NFWi: New fixture kilo-wattage for each fixture type (kW per fixture type)
NMCWi: New measured circuit kilo-wattage for each fixture type (kW)
NFi: Number of fixtures on circuit for each type
NM: Number of months per year
EDR: Electrical demand rate ($/kW)
NADC: New annual demand cost for the new lighting system ($/yr)

Johnson Controls will then determine New Annual Electrical Cost (NAEC) for the new lighting system according to the following formula:

FORMULA 4

NAEC = {∑NFWi * ABH * EER}
Where:
NAEC: New annual electrical cost for the new lighting system ($)
∑NFWi: The sum of the new fixture kW for all new fixture types (kW)
ABH: Annual burn hours as defined in Schedule 2, Exhibit 5
EER: Electrical energy rate ($/kWh)

Calculation of Savings

Johnson Controls will determine net annual savings resulting from the Lighting Energy Conservation Measures according to the following formula:

FORMULA 5

NAS = {(EAEC - NAEC) + (EADC – NADC)}
Where:
NAS: Net annual savings ($/yr)
EAEC: Existing annual electrical cost ($/yr)
NAEC: New annual electrical cost ($/yr)
EADC: Existing annual demand cost for the existing lighting system ($/yr)
NADC: New annual demand cost for the new lighting system ($/yr)

Measurement and Verification for all Building Automation Measures

Baseline Development

The Baseline for this ECM was developed using mechanical equipment nameplate data and equipment operating profiles based on system type, building occupancy, and building function. A Microsoft Excel® calculation spreadsheet model is used to compute Baseline and Post-Installation energy consumption. The Post-Installation scenario is based on the same building load and operating profiles, with night setback strategy being employed as a method to reduce total energy consumption.

Buildings Impacted
Water Treatment Plant
East Waste Water Treatment Plant

Post Installation
The new Energy Management System ("EMS") equipment and programming will undergo a comprehensive Post-Installation Commissioning and documentation program. The Commissioning Report will be reviewed to ensure the equipment has been installed and is operating as intended. If the EMS fails to perform as specified in the Final Proposal, necessary adjustments will be made to the system or the savings calculations upon mutual agreement of the parties, based on industry standards.

Performance Period
Throughout the Performance Period, a sample of space temperatures and equipment status points will be trended via data logger to ensure that the night temperature setback and equipment shutdown algorithms are in place and operating as intended. The modified installed EMS components will be visually inspected annually. The results of the inspection and data review and the effect on savings will be summarized in an Annual Report. If the equipment fails to perform as specified in the Final Proposal, the Annual Report will propose a remedy to Evansville Water and Sewer Utility to minimize the potential for lost savings.

Proposed Savings
The expected Year 1 savings are described in Table 2

Table 2: Year 1 Savings for Building Automation ECM

	Electric Energy Use (kWh)	Electric Energy Cost	Electric Demand (kW)	Electric Demand Cost	Natural Gas Use (Therms)	Natural Gas Cost	Other Energy-Related O&M Costs	Total Costs
Water Treatment Plant	0	$0	0	$0	5,428	$3,420	-	$3,420
East Waste Water Treatment Plant	41,191	$2,677	0	$0	4,306	$2,926	-	$5,603

Calculation of Savings

The net annual savings will be calculated as follows:

FORMULA 6

NAS = AES * EER + ADS * ADR+ AFFS * AFFR
Where:
NAS: Net annual savings ($/yr)
AES: Annual electrical savings (kWh/Yr.)
AER : Average Electric Rate ($/kWh)
ADR: Average Electric Demand Rate ($/kW)
AAFS Annual Fossil Fuel Savings
AFFR Average Fossil Fuel Rate ($/Mcf)

O&M Cost Savings

There are no O&M cost savings proposed with this ECM

Measurement and Verification for all Power Factor Correction Measures

Baseline Development

The energy study for this ECM entailed utility bill analysis for each of the sites for the time period of July 2010 to June 2011. From the utility bills, the kW demand as well as the power factor was noted for each month throughout the base year. The Baseline energy consumption is the product of the existing Kw demand and the individual site's power factor, resulting in a calculated kVAR which is then used to calculate a monthly demand charge. The data collected during this energy analysis was input into an Excel spreadsheet for the purposes of comparing actual expenses to Post-Installation proposed monthly demand based upon installation of capacitor banks for each site.

The Post- Installation savings calculations have taken the following into account:
The same kW demand as in the Baseline
A new proposed power factor of .98

Johnson Controls determined the Existing Annual Electrical Demand Cost (EAEDC) for the existing electrical system according to the following formula:

FORMULA 7

EADC = {∑(EMD / EPF) * EEDR}
Where:
EADC: Existing annual electrical demand cost for the existing electrical system ($/yr)
∑(EMD / EPF)$_i$: The sum of the existing monthly electrical demand / the Existing monthly power factor (kVAR)
EEDR: Electrical energy demand rate ($/kW)

Proposed Savings
The expected Year 1 savings are described in Table 3

Table 3: Year 1 Savings for Power Factor Correction ECM

	Electric Energy Demand (kW)	Electric Energy Cost	Other Energy-Related O&M Costs	Total Costs
Water Treatment Plat	-	$6,747	-	$6,747
East Waste Water Treatment Plant	-	$10,798	-	$10,798
West Waste Water Treatment Plant	-	$7,991	-	$7,991

Notes:

Savings are based entirely on increasing the power factor at the individual sites and not in a reduction in real electrical demand energy.

O&M Cost Savings

There are no O&M cost savings proposed with this ECM

Post-Installation M&V Activities

The post -installation electrical savings are based on the observed increased power factor. The individual sites' utility bills will be monitored to verify the increased power factor. The Excel spreadsheet will be updated to reflect actual observed power factor. The updated ECM calculation files will be provided as part of the Post-Installation Report.

Johnson Controls will then determine New Annual Electrical Demand Cost (NAEC) for the electrical system according to the following formula:

FORMULA 8

NADC = {∑(NMD / NPF) * EEDR}
Where:
NADC: New annual electrical demand cost for the existing electrical system ($/yr)
$\sum$**(EMD / NPF)$_i$:** The sum of the existing monthly electrical demand / the New monthly power factor (kVAR)
EEDR: Electrical energy demand rate ($/kW)

Calculation of Savings

Johnson Controls will determine net annual savings resulting from the Power Factor Correction Energy Conservation Measures according to the following formula:

FORMULA 9

NAS = {EADC - NADC}
Where:
NAS: Net annual savings ($/yr)
EADC: Existing annual electrical demand cost ($/yr)
NADC: New annual electrical demand cost ($/yr)

Measurement and Verification for FOG Cogeneration Measure

Baseline Development

The energy study entailed the on-site documentation and inspection of systems and equipment, review of MRO data, and interviews with City of Evansville utility staff. The data collected during this study was used as inputs for the analysis model included in the ECM Appendix.

Post Installation
The new equipment will undergo a comprehensive Post-Installation Commissioning and documentation program. The Commissioning Report will be reviewed to ensure the equipment has been installed and is operating as intended. Electrical savings are based on the agreed upon value of the heat content of the digester gas as well as the measured efficiency of the cogeneration engines.

The Post- Installation savings calculations have taken the following into account:
Anticipated FOG receiving capacity
Anticipated heat content of the digester gas
Heating requirement of the digesters
Thermal penalty for diverting digester gas away from heating to the cogeneration engines.

The following assumptions are made for this ECM:

1. Baseline equipment use patterns reflect information gathered during the energy study and will be constant throughout the performance period
2. Anticipated FOG receiving will be at least 30,000 gallons per week
3. Heat content of the digester gas will be at least 630 Btu/cf
4. FOG tipping fee of $.08/gal
5. FOG cogeneration engines will have a 95% availability
6. Contracts with FOG material haulers will be executed prior to start of construction

Detailed calculations are imbedded in the Excel spreadsheet provided in the ECM Appendix. Equations used by the spreadsheet analysis are based on standard engineering fundamentals, manufacturer equipment data, and industry standards.

Performance Period
The Performance Period performance factors include reliable operation of the FOG Cogeneration Engines, the reliable delivery of at least 30,000 gallons per week of FOG, and the heat content of the digester gas being at least 640 Btu/cf.

Only the efficiency of the cogeneration engines is guaranteed. The savings will be adjusted accordingly if the heat content of the digester gas is less than 640 Btu/cf or less than 30,000 gallons per week of FOG is received. The intent of the performance period activities is to verify that the installed cogeneration unit is operating as specified in the final proposal. The following are mutually agreed upon process parameters:

- Biogas heat value of 640 Btu/cf
- Existing digester biogas production of 20 cf/lb volatile suspended solids (VSS)
- Digester temperature of 95 degrees F
- Baseline annual average digester gas production of 93 scfm
- Existing digester natural gas usage 21,462 therms/year
- 65% FOG VSS destroyed
- Biogas production from FOG 18 cf/lb VSS
- FOG annual maintenance cost of $6,415
- FOG revenue based on $0.08/gal

Cogeneration Guaranteed Values (Option A):

- Power conversion rate of 11,381 Btu/kWh (guaranteed at 95% derate)

Cogeneration Mutually Agreed Upon Values:

- Availability 95%
- Electric demand savings equal full output of one engine
- 80% overall efficiency
- 33 kW parasitic electric usage

- Engine maintenance cost of $0.02/kWh
- Annual gas skid maintenance cost of $49,500
- Electric Rate $10/kW demand, $0.065/kWh energy
- Natural gas rate $0.68/therm

Throughout the Performance Period, the new equipment will be visually inspected annually. The results of the inspection and data review and the effect on savings will be summarized in the Annual Report. If the installed equipment fails to perform as specified in the Final Proposal, the Annual Report will propose a remedy to minimize the potential for lost savings.

Proposed Savings
The expected Year 1 savings are described in Table 4

Table 4: Year 1 Savings for FOG Program ECM

	Electric Energy Use (kWh)	Electric Energy Savings	Electric Energy Demand (kW)	Electric Energy Demand Savings	Natural Gas Use (Therms)	Natural Gas Cost	Other Energy-Related O&M Costs	Total Costs
Savings	3,733,888	$242,703	3,044	$30,438	(71,865)	($48,868)	($9,722)	$214,550

(Note: at 95% guarantee)

Calculation of Savings

The net annual savings will be calculated as follows:

FORMULA 10

NAS = AES * AER + ADS * ADR+ ANGS * NGR
Where:
NAS: Net annual savings ($/yr)
AES: Annual electrical savings (kWh/Yr.)
AER : Average Electric Rate ($/kWh)
ADS: Average Electrical Demand Savings (kW)
ADR: Average Electric Demand Rate ($/kW)
ANGS Annual Natural Gas Savings (Therm)
NGR: Natural Gas Rate ($/Therm)

O&M Cost Savings

The O&M savings of $118,386 for this ECM is the result of a $0.08 tipping fee for receiving FOG. Additional costs from this ECM come as a result of $128,108 for operations and maintenance of the equipment for a net benefit of ($9,722).

Measurement and Verification for the Sludge Dewatering (Centrifuge) Measure

Baseline Development

The energy study for this ECM entailed the on-site documentation of equipment nameplate data, inspection of systems and equipment, measurement of system operating parameters, review of MRO data, and interviews with City of Evansville utility staff. The data collected during this study was used as inputs for the analysis model included in the ECM Appendix.

- Current biosolids production.
- Current percent dryness
- Motor HP and run time for the existing belt press

The Baseline energy consumption is the product of the existing belt press motor electrical demand and run time. Also included in the Baseline analysis is the cost to dispose of the wet tons produced by the current process. The data collected during this energy analysis was input into an Excel spreadsheet to define electrical consumption of the process as well as disposal costs.

FORMULA 11

EEC = hp x .746 x Qty x RT
Where:
EEC: Existing Motor Electrical Consumption
hp: Motor hp
Qty: Qty of motors (4)
RT: Run Time of the motors (8hr./day x 365 days/yr)

Post Installation
The new equipment will undergo a comprehensive Post-Installation Commissioning and documentation program. The Commissioning Report will be reviewed to ensure the equipment has been installed and is operating as intended. Electrical savings are based on the agreed upon run times of both the existing belt filter press and the new centrifuge and are assumed to occur throughout the Performance Period and will not be re-measured. Electricity consumption for the centrifuge will be verified during ECM Commissioning. Dryness % of the centrifuge effluent may be recorded periodically to ensure proper operation of the process, however, this parameter is not guaranteed.

The Post- Installation savings calculations have taken the following into account:

- Proposed dryness percentage of 28% (vs. 18% currently)
- No longer using four (4) motors for the existing belt presses at five (5) hp each
- Addition of electrical energy as modeled in the spreadsheet analysis for the operation of the new centrifuge de-watering system

FORMULA 12

NEC = hp x .746 / Eff x RT
Where:
NEC: Electrical Consumption of the New Centrifuge
hp: Total hp of the Centrifuge unit
Eff: Motor efficiency of the Centrifuge
RT: Proposed Run Time of the Centrifuge (10hrs/day x 365 days/yr)

Performance Period
The intent of the performance period activities is to verify that the installed centrifuge is operating as specified in the final proposal. The Performance Period performance factors include reliable operation of the centrifuge and delivery of sludge at 28 % dryness content. The run time of the centrifuge is agreed upon and will not be measured throughout the performance period.

Throughout the Performance Period, the new equipment will be visually inspected annually. Maintenance task sheets will be reviewed quarterly. Trended sludge dryness % may be recorded, however, this parameter is not guaranteed. The results of the inspection and data review and the effect on savings will be summarized in the Annual Report. If the installed equipment fails to perform as specified in the Final Proposal, the Annual Report will propose a remedy to minimize the potential for lost savings.

Proposed Savings
The expected Year 1 savings are described in Table 5

Table 5: Year 1 Savings for Centrifuge ECM

	Electric Energy Use (kWh)	Electric Energy Cost	Other Energy-Related O&M Costs	Total Costs
Savings	(145,433)	($11,445)	$85,500	$73,555

Calculation of Savings

The net annual savings will be calculated as follows:

FORMULA 13

NAS = (EEC - NEC) * ECC
Where:
NAS: Net annual savings ($/yr)
EEC: Existing Electrical Consumption
NEC: New Electrical Consumption
EEC: Electrical Consumption Cost

O&M Cost Savings

The O&M savings of $85,500 for this ECM is the result of reducing the amount of wet tons produced that must be sent to the landfill. The savings utilize a disposal cost of $18.00 per wet ton. The savings are non-measured and the calculations can be found in the ECM appendix.

Savings Break-out by Utility: Treatment Plants

Description	Energy Savings	O&M Savings	Savings to Water Utility	Savings to Sewer Utility
Primary Clarifier Gate Automation	$19,489			$19,489
Sludge Thickening	$4,733			$4,733
FOG Program	$224,273	($9,722)		$214,551
Centrifuge	($11,445)	$85,500		$74,055
Lighting (Water Plant)	$15,994	$15,730	$31,724	
Lighting (Sewer Plants)	$34,283	$17,500		$51,783
Building Automation	$9,023		$3,420	$5,603
Power Factor Correction	$25,536		$6,747	$18,789
	$321,886	$109,008	$41,891	$389,003
			TOTAL	$430,894

CHANGES IN USE OR CONDITION; ADJUSTMENT TO BASELINE AND/OR ANNUAL PROJECT BENEFITS

Customer agrees to use reasonable efforts to notify JCI, within fourteen (14) days, of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Improvement Measure to which this Schedule applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Benefits realized under this Agreement.

Notwithstanding the foregoing, failure to timely provide such notice shall not constitute a default hereunder.

Such a change, expansion, addition, or condition would include, but is not limited to: (a) changes in the primary use of any facility, Improvement Measure, or portion of the premises; (b) changes to the hours of operation of any facility, Improvement Measure, or portion of the premises; (c) changes or modifications to the Improvement Measures or any related equipment; (d) changes to the M&V Services provided under this Agreement; (e) failure of any portion of the premises to meet building codes; (f) changes in utility suppliers, utility rates, method of utility billing, or method of utility purchasing; (g) insufficient or improper maintenance or unsound usage of the Improvement Measures or any related equipment at any facility or portion of the premises (other than by JCI); (h) changes to the Improvement Measures or any related equipment or to any facility or portion of the premises required by building codes or any governmental or quasi-governmental entity; or (i) additions or deletions of Improvement Measures or any related equipment at any facility or portion of the premises.

Such a change or condition need not be identified in the Baseline in order to permit JCI to make an adjustment to the Baseline and/or the Annual Project Benefits. If JCI does not receive the notice within the time period specified above or travels to either Customer's location or the project site to determine the nature and scope of such changes, Customer agrees to pay JCI, in addition to any other amounts due under this Agreement, the applicable hourly consulting rate for the time it took to determine the changes and to make any adjustments and/or corrections to the project as a result of the changes, plus all reasonable and documented out-of pocket expenses, including travel costs. Upon receipt of such notice, or if JCI independently learns of any such change or condition, JCI shall calculate and send to Customer a notice of adjustment to the Baseline and/or Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose. Should Customer fail to promptly provide JCI with notice of any such change or condition, JCI may make reasonable estimates as to the impact of such change or condition and as to the date on which such change or condition first arose in calculating the impact of such change or condition, and such estimates shall be conclusive.

IV. BASELINE CALCULATIONS AND UTILITY RATES

The unit utility costs for the Baseline period are set forth below as "Base Utility Cost" and shall be used for all calculations made under this Schedule. The Base Utility Cost shall be escalated annually by the actual utility cost escalation but such escalation shall be no less than the mutually agreed "floor" escalation rate of Two and eight tenths percent (2.8%). The Base Utility Cost for each type of utility represents the 12 month average utility costs from July 2010 through July 2011.

Utility Type	Base Utility Cost
Electric Energy	
Water Treatment Plant	$0.079
East WWTP	$0.079
West WWTP	$0.083
Electric Demand	$10.000
Natural Gas	
Water Treatment Plant	$0.630
East WWTP	$0.680
West WWTP	$0.630

V. PRIMARY OPERATIONS SCHEDULE PRE & POST RETROFIT

Pre-Retrofit Facility/Area

All Facilities	Lighting		HVAC	
	Time On	Time Off	Time On	Time Off
Monday	0700	1530	24/7	24/7
Tuesday	0700	1530	24/7	24/7
Wednesday	0700	1530	24/7	24/7
Thursday	0700	1530	24/7	24/7
Friday	0700	1530	24/7	24/7
Saturday	0700	1530	24/7	24/7
Sunday	0700	1530	24/7	24/7
Holidays	0700	1530	24/7	24/7

Occupied Room Temperature During Heating Season: N/A to N/A degrees F
Unoccupied Low Temperature Limit During Heating Season: N/A degrees F
Heating season is October to April
Occupied Room Temperature During Cooling Season: N/A to N/A degrees F
Unoccupied High Temperature Limit During Cooling Season: N/A degrees F
Cooling season is April to October

Post-Retrofit Facility/Area

All Facilities	Lighting		HVAC	
	Time On	Time Off	Time On	Time Off
Monday	0700	1530	24/7	24/7
Tuesday	0700	1530	24/7	24/7
Wednesday	0700	1530	24/7	24/7
Thursday	0700	1530	24/7	24/7
Friday	0700	1530	24/7	24/7
Saturday	0700	1530	24/7	24/7
Sunday	0700	1530	24/7	24/7
Holidays	0700	1530	24/7	24/7

Occupied Room Temperature During Heating Season: 70 to 72 degrees F
Unoccupied Low Temperature Limit During Heating Season: 65 degrees F
Heating season is October to April
Occupied Room Temperature During Cooling Season: 72 to 74 degrees F
Unoccupied High Temperature Limit During Cooling Season: 80 degrees F
Cooling season is April to October

VI. MEASUREMENT & VERIFICATION SERVICES

JCI will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a JCI Performance Assurance Specialist will track Measured Project Benefits. JCI will report the Measured Project Benefits achieved during the Installation Period, as well as any Non-Measured Project Benefits applicable to the Installation Period, to Customer within 60 days of the commencement of the Guarantee Term.

2. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will provide Customer with an annual report containing:

    A. an executive overview of the project's performance and Project Benefits achieved to date;

    B. a summary analysis of the Measured Project Benefits accounting; and

    C. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.

3. During the Guarantee Term, a JCI Performance Assurance Specialist will monitor the on-going performance of the Improvement Measures, as specified in this Agreement, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Specialist will periodically assist Customer, on-site or remotely, with respect to the following activities:

    A. review of information furnished by Customer from the facility management system to confirm that control strategies are in place and functioning;

    B. advise Customer's designated personnel of any performance deficiencies based on such information;

    C. coordinate with Customer's designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and

    D. inform Customer of opportunities to further enhance project performance and of opportunities for the implementation of additional Improvement Measures.

4. For all Improvement Measures, JCI will:

    A. conduct pre and post installation measurements required under this Agreement;

    B. confirm the building management system employs the control strategies and set points specified in this Agreement; and

    C. analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).

ASSURED PERFORMANCE GUARANTEE – UTILITY METERS

I. PROJECT BENEFITS

A. Certain Definitions. For purposes of Schedule 2A to this Agreement and for purposes of the Improvement Measures discussed in this Schedule 2A, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

Annual Project Benefits Surplus is the amount by which the Annual Project Benefits Realized exceeds the Annual Project Benefits in any one year of the Guarantee Term.

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Section IV below.

Guarantee Term will commence on the first day of the month next following the Final Completion date for the Project and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement; provided, however, JCI shall not terminate its provision of M&V Services except (i) in accordance with the terms hereof, or (ii) upon termination of all M&V Services by Customer upon written notice of such termination by Customer to JCI.

Installation Period is the period beginning on JCI's receipt of Customer's Notice to Proceed and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the increased meter accuracy benefits calculated in accordance with the methodologies set forth in Section III below.

Non-Measured Project Benefits are identified in Section II below. The Non-Measured Project Benefits have been agreed to by Customer and will be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below. Customer and JCI agree that: (i) the Non-Measured Project Benefits may include, but are not limited to, future capital and operational costs avoided as a result of the Work and implementation of the Improvement Measures, (ii) achievement of the Non-Measured Project Benefits is outside of JCI's control, and (iii) Customer has evaluated sufficient information to conclude that the Non-Measured Project Benefits will occur and bears sole responsibility for ensuring that the Non-Measured Project Benefits will be realized. Accordingly, the Non-Measured Project Benefits shall not be measured or monitored by JCI at any time during the Guarantee Term, but rather shall be deemed achieved in accordance with the schedule set forth in the Total Project Benefits table below.

Post Retrofit Guaranteed Accuracy is the agreed upon percent (%) of meter accuracy a replaced meter should perform at or exceed during the Measurement and Verificiation period.

Post Retrofit Tested Accuracy is the actual percent (%) of meter accuracy a meter performs at during the Measurement and Verification process.

Project Benefits are the Measured Project Benefits plus the Non-Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

Revised Guaranteeed Annual Project Benefits are the Annual Project Benefits multiplied by the percentage increase in the sewer rates in 2012.

Total Project Benefits are the projected Project Benefits to be achieved during the entire term of this Agreement.

Total Volume Charge is the amount charged by Customer to its customer for water usage based upon the applicable rate; provided, however, Total Volume Charge shall not include Customer's base charge or fire protection surcharge.

B. Project Benefits Summary. Subject to the terms and conditions of this Agreement, JCI and Customer agree that Customer will be deemed to achieve a total of **$30,985,759** in Non-Measured Project Benefits and JCI guarantees that Customer will achieve a total of **$41,343,203** in Measured Project Benefits during the Guarantee Term, for Total Project Benefits of **$72,328,962**, as set forth in the Total Project Benefits table below. In the event that Customer does not achieve Measured Project Benefits in the amounts and during the time periods set forth on the Total Project Benefits table below, JCI shall pay to Customer the deficiency or shortfall measured by the Measured Project Benefits (shown as Utility Cost Avoidance in such table) less the Measured Project Benefits actually achieved by Customer in such year (presuming the assumptions set forth in this Schedule and the obligations set forth in Schedule 3 are implemented in all material respects) (the "Assured Performance Guarantee"); provided, however, Customer may choose to have such amounts handled in any manner set forth in Section C of this Schedule 2A instead of having such amounts paid directly to Customer. If Customer chooses to have JCI pay any deficiency/shortfall directly to Customer, such deficiency or shortfall, if any, shall be paid by JCI to Customer in cash or immediately available funds within ninety (90) days after the end of such year. The Assured Performance Guarantee shall be calculated, and any resulting deficiencies/shortfalls paid, in each year of the Guarantee Term. Notwithstanding the foregoing, JCI's obligation to pay any such deficiencies or shortfalls accrued during any period prior to termination or expiration of this Agreement shall survive termination or expiration of the Guarantee Term.

Measured Project Benefits / Non-Measured Project Benefits / Annual Project Benefits

Evansville, IN Water Meter / AMR Benefit Summary

Year	Increased Small Meter Accuracy Benefit*	Increased 2 inch Meter Accuracy Benefit*	Increased Large Meter Accuracy Benefit* (Tested)	Increased Large Meter Accuracy Benefit* (Not Testable)	2 inch Meter Right-Typing**	Large Meter Right-Typing**	Leak Detection**	Operations & Maintenance Cost Avoidance**	Annual Project Benefits
Implementation	$136,743	$110,742	$1,530,863	$914,255	$24,041	$454,082		$ 484,500	$ 3,655,227
1	$146,926	$118,666	$728,749	$500,792	$14,316	$280,873	$ 58,737	$ 792,106	$ 2,641,165
2	$148,328	$119,731	$735,118	$504,729	$14,435	$282,838	$ 60,382	$ 814,285	$ 2,679,847
3	$152,482	$123,084	$755,702	$518,861	$14,840	$290,758	$ 62,072	$ 837,085	$ 2,754,883
4	$156,751	$126,530	$776,861	$533,389	$15,255	$298,899	$ 63,810	$ 860,523	$ 2,832,020
5	$161,140	$130,073	$798,614	$548,324	$15,682	$307,268	$ 65,597	$ 884,618	$ 2,911,316
6	$165,652	$133,715	$820,975	$563,677	$16,121	$315,872	$ 67,434	$ 909,387	$ 2,992,833
7	$170,290	$137,459	$843,962	$579,460	$16,573	$324,716	$ 69,322	$ 934,850	$ 3,076,633
8	$175,058	$141,308	$867,593	$595,685	$17,037	$333,808	$ 71,263	$ 961,026	$ 3,162,778
9	$179,960	$145,265	$891,886	$612,365	$17,514	$343,155	$ 73,258	$ 987,935	$ 3,251,336
10	$184,999	$149,332	$916,858	$629,511	$18,004	$352,763	$ 75,309	$ 1,015,597	$ 3,342,374
11	$190,179	$153,513	$942,530	$647,137	$18,508	$362,640	$ 77,418	$ 1,044,034	$ 3,435,960
12	$195,504	$157,812	$968,921	$665,257	$19,027	$372,794	$ 79,586	$ 1,073,266	$ 3,532,167
13	$200,978	$162,230	$996,051	$683,884	$19,559	$383,233	$ 81,814	$ 1,103,318	$ 3,631,068
14	$206,605	$166,773	$1,023,940	$703,033	$20,107	$393,963	$ 84,105	$ 1,134,211	$ 3,732,737
15	$212,390	$171,442	$1,052,611	$722,718	$20,670	$404,994	$ 86,460	$ 1,165,969	$ 3,837,254
16	$218,337	$176,243	$1,082,084	$742,954	$21,249	$416,334	$ 88,881	$ 1,198,616	$ 3,944,697
17	$224,451	$181,178	$1,112,382	$763,757	$21,844	$427,991	$ 91,370	$ 1,232,177	$ 4,055,149
18	$230,735	$186,251	$1,143,529	$785,142	$22,455	$439,975	$ 93,928	$ 1,266,678	$ 4,168,693
19	$237,196	$191,466	$1,175,548	$807,126	$23,084	$452,294	$ 96,558	$ 1,302,145	$ 4,285,416
20	$243,837	$196,827	$1,208,463	$829,725	$23,730	$464,959	$ 99,262	$ 1,338,605	$ 4,405,408
Totals	$ 3,938,543	$ 3,179,640	$ 20,373,240	$ 13,851,781	$ 394,053	$ 7,704,209	$ 1,545,566	$ 21,340,931	$ 72,328,962

*Meter Accuracy Benefits are Measured Project Benefits and future benefits are based on annual water escalation rates of **two and eight/tenths percent (2.8%) starting with year 2 and annual sewer escalation rates of two and eight/tenths percent (2.8%) starting with year 3**.

Meter Right-Typing Benefits are Non-Measured Project Benefits and are based on annual water escalation rates of **two and eight/tenths percent (2.8%) starting with year 2 and annual sewer escalation rates of two and eight/tenths percent (2.8%) starting with year 3.

Leak Detection and Operations & Maintenance Cost Avoidance Benefits are Non-Measured Project Benefits and are based on a mutually agreed fixed annual escalation rate of **two and eight/tenths percent (2.8%).

Within sixty (60) days of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved during the Installation Period plus any Non-Measured Project Benefits applicable to such period and advise Customer of same. Any Project Benefits achieved during the Installation Period may, at JCI's discretion, be allocated to the Annual Project Benefits for the first year of the Guarantee Term. Within sixty (60) days of each anniversary of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved for the applicable year plus any Non-Measured Project Benefits applicable to such period and advise Customer of same.

Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of its responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, JCI shall provide notice of such breach or failure to Customer, and Customer shall have a period of thirty (30) days to cure such breach or failure; provided, however, in the event that such breach or failure cannot be cured within such thirty (30) days period, Customer shall promptly take steps in furtherance of such cure within such thirty (30) day period and shall thereafter diligently pursue such cure until completion. In the event that Customer fails to cure such breach or failure within the thirty (30) day cure period or the extended cure period referenced above, JCI may, upon notice to Customer, terminate the Assured Performance Guarantee.

C. Project Benefits Shortfalls or Surpluses.

(iv) *Project Benefits Shortfalls*. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, in Customer's sole discretion, Customer shall direct JCI to and JCI shall either: (a) set off the amount of such shortfall against any unpaid balance Customer then owes to JCI, (b) where permitted by applicable law, increase the next year's amount of Annual Project Benefits by the amount of such shortfall, (c) pay to Customer the amount of such shortfall within ninety (90) days, or (d) subject to Customer's agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer.*

(v) *Project Benefits Surpluses*. If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, Owner may, at its sole discretion, use such surplus.*

(vi) *Additional Improvements*. Where an Annual Project Benefits Shortfall has occurred, JCI may, subject to Customer's approval (which approval shall not be unreasonably withheld, conditioned, or delayed), implement additional Improvement Measures, at no cost to Customer, which may generate additional Project Benefits in future years of the Guarantee Term.

* In the event JCI is providing an Assured Performance Guarantee under Schedule 2 and Schedule 2A, Annual Project Benefits Shortfalls and Annual Project Benefits Surpluses under each of Schedule 2 and Schedule 2A shall be reconciled against one another.

II. NON-MEASURED PROJECT BENEFITS

Source of Non-Measured Project Benefits	First Year Project Benefits	Escalation
Meter Reading Cost Benefit	$468,646	2.8%
Vehicle Cost Benefit	$17,460	2.8%
Repair Parts Cost Benefit	$306,000	2.8%
Automated Leak Detection Benefit	$58,737	2.8%
2 Inch Meter Right Typing	$14,316	2.8%
Large Meter Right Typing	$280,873	2.8%
Total Non-Measured Project Benefits	**$1,146,032**	**N/A**

The first four above project benefits have been calculated using data provided by the EWSU to Johnson Controls, Inc. The meter right-typing benefit was derived by analyzing the utility billing data provided by EWSU and logging the usage of meters which appeared to be good candidates for compound meters. These benefits will be mutually agreed to for the entire term of the guarantee contract and will not be measured or tracked during the term of this guarantee. It is the responsibility of the EWSU to take the appropriate action(s) related to each of the items below to ensure the ongoing financial benefit.

1. Meter Reading Cost Benefit

One of the primary benefits of AMR systems is that fewer people are required to read the existing meter population. It is expected that adding the AMR system will enable seven (7) meter readers to be assigned to other, non-meter-reading, tasks allowing the Customer to avoid hiring additional personnel to complete these tasks. This will result in an annualized cost reduction of **$468,646.**

Meter Reading Cost Benefit				
	7	Reduction in # of Meter Readers by implementing AMR		
X	$19.07	Hourly Pay per Meter Reader		
X	8	Number of Hours per Day to read meters		
X	23	Number of Days required to read all meters per cycle		
X	12	Number of Meter Reading Cycles per year		
=		Annual Payroll for Meter Reading	=	$294,746
+	59%	Annual Fringes & Benefits as percent of Payroll		
=		**Total Avoided Annual Meter Readers Costs**	=	**$468,646**

2. Vehicle Cost Benefit

Another primary benefit of AMR systems is that fewer meter reading vehicles will be required to read the existing meter population. The installation of the AMR system will result in an annualized cost reduction of **$17,460**, a savings based on six meter reading trucks driving an average of 6,000 miles each.

3. Repair Parts Cost Benefit

Operationally, the benefit of replacing the entire water meter system is that money spent to replace a portion of the system's meter population on an annual basis will not be necessary as the meters will be new and under warranty. Replacing the water meters will result in an annual savings of **$306,000**, the cost of replacing ten percent of the meter population on an annual basis at an average cost of $45 per meter. The EWSU and Johnson Controls mutually agree that this project benefit is effective upon completion of this project.

Repair Parts Cost Benefit				
	6800	Annual Number of Meters Replaced		
X	$45.00	Unit Cost per Meter Replaced		
=		**Annual Meter Replacement Labor Costs*** **	=	**$306,000**

4. Automated Leak Detection System Cost Benefit

This project includes the installation of 250 acoustic sensors located throughout the distribution system to "listen" for leaks. Data provided by the EWSU has an annualized water loss of 1,493.52 MG due to leaks. Industry standards indicate that 75% of that quantity is "economically recoverable," and 80% of the recoverable quantity is "traceable."

To calculate the benefit, the annualized leakage is reduced by the factors described above and multiplied by the wholesale cost of producing water. The wholesale cost of water was reported as $385.57/MG. As a conservative estimate, the benefits calculated for this project include only 17% of the potential annual benefit from leak detection or $345,514 x 17% which equals $58,737 per year in benefit from reacting to leaks quicker and thus losing fewer gallons of water each year.

		Leak Detection Benefits		
X		Total Annual Real Losses (MG)	=	1,493.52
X	75%	Percentage that is economically recoverable	=	1,120.14
X	80%	Percentage that is traceable		
=		Total Leakage Recovered (MG)	=	896.11
X	$385.57	Cost per MG		
=		Total Benefit	=	$345,514
X	17%	Savings Multiplier		
=		**Leak Detection Benefit**	=	**$58,737**

Customer has both reviewed and agreed to the calculations outlined in the Automated Leak Detection System verbiage above. Customer understands that JCI is only supplying the technology to locate leaks and that JCI will have no responsibility to operate the leak detection equipment supplied, to repair the leaks identified, or to actualize the benefits calculated.

5. Two Inch Meter Right-Typing Benefit

An analysis of two inch meters found thirty-four (34) meters that were under-registering water usage at low-flow conditions. By replacing these meters with compound meters, the EWSU will realize an annual benefit of **$14,316** due to an increase in the billable metered usage as represented in the following table.

Evansville, IN - 2 Inch Right Typing Summary

ID	Account No.	Projected Annual Meter Typing Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Projected Sewer Benefit	Projected Water Benefit	Projected Annual Meter Typing Benefit
1	611-20310	$369	$255	11%	$283	$114	$398
2	611-20970	$807	$545	11%	$605	$263	$867
3	611-22550	$279	$192	11%	$213	$87	$300
4	612-20950	$201	$136	11%	$150	$65	$216
5	612-21370	$329	$223	11%	$248	$106	$354
6	612-21610	$265	$179	11%	$198	$86	$284
7	612-22470	$346	$234	11%	$260	$112	$371
8	612-22510	$575	$389	11%	$432	$186	$617
9	612-22530	$217	$155	11%	$172	$61	$234
10	613-21550	$239	$163	11%	$180	$76	$257
11	613-21650	$218	$150	11%	$166	$68	$234
12	613-22110	$231	$159	11%	$176	$73	$249
13	613-22130	$291	$197	11%	$218	$94	$312
14	614-20034	$628	$423	11%	$470	$204	$674
15	614-20330	$189	$134	11%	$149	$55	$204
16	614-20365	$191	$129	11%	$143	$62	$206
17	614-20400	$176	$120	11%	$133	$56	$189
18	614-20720	$501	$340	11%	$378	$160	$538
19	614-20910	$186	$126	11%	$140	$61	$200
20	614-20970	$197	$135	11%	$150	$63	$212
21	614-21330	$815	$552	11%	$613	$263	$876
22	614-22480	$854	$576	11%	$639	$278	$917
23	614-22890	$701	$473	11%	$525	$228	$753
24	614-22990	$244	$174	11%	$193	$70	$263
25	614-23016	$408	$275	11%	$305	$133	$438
26	614-23090	$344	$232	11%	$258	$112	$370
27	615-21290	$401	$272	11%	$302	$128	$431
28	617-22880	$384	$260	11%	$289	$124	$412
29	618-21810	$230	$160	11%	$177	$70	$248
30	618-21930	$320	$216	11%	$240	$104	$344
31	618-22190	$388	$262	11%	$291	$126	$417
32	618-22210	$211	$149	11%	$165	$63	$228
33	619-43230	$421	$288	11%	$320	$133	$452
34	681-20530	$1,164	$796	11%	$883	$368	$1,251
TOTAL		$13,319	$9,067		$10,064	$4,252	$14,316

6. Large Meter Right-Typing Benefit

An analysis of the large meters found thirty-eight (38) meters that were under-registering water usage at low-flow conditions. By replacing these meters with compound meters, the EWSU will realize an annual benefit of **$280,873** due to an increase in the billable metered usage as represented in the following table.

Evansville, IN Large Meter Right-Typing Summary

ID	Account No.	Omni C^2 or Itron FloStar SJ		Horizontal Turbine Meter		Annual Benefit from Changing Meter Type	Annual Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Annual Sewer Benefit	Annual Water Benefit	Revised Annual Benefit from Changing Meter Type
		% Accounted For H_2O	% In-Normal Range	% Accounted For H_2O	% In-Normal Range						
1	611-20190	98.50%	99.99%	59.87%	36.17%	$10,948	$7,992	11%	$8,871	$2,956	$11,827
2	611-20250	82.42%	62.52%	16.99%	14.61%	$809	$590	11%	$655	$218	$874
3	611-21850	98.42%	99.74%	73.93%	52.82%	$6,620	$4,833	11%	$5,365	$1,788	$7,152
4	611-22330	98.49%	99.98%	31.35%	7.45%	$12,041	$8,790	11%	$9,757	$3,251	$13,008
5	612-20240	93.76%	82.12%	44.57%	37.03%	$1,282	$936	11%	$1,039	$346	$1,385
6	615-21370	98.40%	99.35%	64.91%	48.49%	$7,023	$5,127	11%	$5,691	$1,896	$7,587
7	618-21790	11.60%	11.77%	0.00%	0.00%	$0	$0	NA	$0	$0	$0
8	619-41580	98.49%	99.81%	36.74%	12.59%	$11,551	$8,432	11%	$9,360	$3,119	$12,478
9	619-42410	8.85%	8.74%	0.00%	0.00%	$4	$3	11%	$3	$1	$4
10	681-21420	98.52%	100.00%	37.70%	22.91%	$12,225	$8,924	11%	$9,906	$3,301	$13,207
11	612-21830	89.41%	70.87%	0.03%	0.00%	$1,923	$1,404	11%	$1,558	$519	$2,078
12	613-22090	98.44%	99.56%	58.83%	37.63%	$9,280	$6,775	11%	$7,520	$2,506	$10,026
13	613-23010	98.49%	99.75%	13.29%	5.77%	$8,388	$6,124	11%	$6,797	$2,265	$9,062
14	613-23030	98.48%	99.81%	39.29%	14.30%	$10,722	$7,827	11%	$8,688	$2,895	$11,582
NA	614-23010	Service is properly typed for the application				$0	NA	NA	NA	NA	$0
15	614-23570	98.49%	99.99%	48.91%	26.61%	$25,360	$18,513	11%	$20,550	$6,847	$27,397
16	615-21330	80.56%	69.06%	14.12%	8.57%	$835	$609	11%	$676	$225	$902
17	617-22920	98.50%	99.92%	70.33%	46.46%	$15,718	$11,474	11%	$12,737	$4,244	$16,980
18	680-21850	98.15%	99.09%	45.82%	17.68%	$5,961	$4,352	11%	$4,831	$1,610	$6,440
19	681-21210	97.25%	96.66%	80.06%	64.77%	$1,157	$845	11%	$938	$312	$1,250
20	617-22110	98.08%	87.68%	71.39%	69.25%	$22,145	$16,166	11%	$17,944	$5,979	$23,923
21	611-21800	98.49%	99.87%	95.03%	93.32%	$2,499	$1,824	11%	$2,025	$675	$2,699
22	614-22810	98.49%	99.96%	98.15%	99.18%	$430	$314	11%	$348	$116	$464
23	618-21610	98.23%	97.79%	6.36%	93.00%	$7,667	$5,597	11%	$6,212	$2,070	$8,282
24	619-41660	98.47%	99.85%	94.63%	93.37%	$3,237	$2,363	11%	$2,623	$874	$3,497
25	619-42590	98.51%	97.17%	98.50%	99.97%	$27	$20	11%	$22	$7	$30
26	614-20230	98.51%	100.00%	52.56%	19.50%	$22,454	$16,391	11%	$18,194	$6,063	$24,257
27	614-20530	97.73%	96.99%	23.09%	12.74%	$3,036	$2,216	11%	$2,460	$820	$3,280
NA	616-21330	97.92%	98.48%	93.94%	93.95%	$0	NA	NA	NA	NA	$0
28	617-22060					$0	$0	NA	$0	$0	$0
29	617-23040	96.56%	92.41%	5.96%	1.91%	$1,143	$834	11%	$926	$309	$1,235
30	681-20030	98.50%	99.98%	86.15%	76.81%	$5,813	$4,244	11%	$4,711	$1,570	$6,280
31	681-20070	98.48%	99.98%	72.15%	42.80%	$9,292	$6,783	11%	$7,529	$2,509	$10,038
32	681-21125	98.47%	99.97%	84.89%	63.27%	$11,498	$8,393	11%	$9,317	$3,104	$12,421
33	681-21355	92.81%	81.53%	33.64%	29.63%	$1,580	$1,153	11%	$1,280	$427	$1,707
34	681-21630	98.51%	99.98%	86.68%	77.25%	$5,534	$4,040	11%	$4,484	$1,494	$5,979
NA	681-21660	97.98%	99.09%	91.94%	91.78%	$0	NA	11%	NA	NA	$0
35	616-21810	98.48%	99.92%	14.00%	2.17%	$10,217	$7,458	11%	$8,279	$2,759	$11,037
NA	617-22080	ling only six hours after being installed; Scope of Work cal				$0	NA	NA	NA	NA	$0
36	617-23426	98.42%	99.43%	49.97%	33.42%	$9,360	$6,833	11%	$7,585	$2,527	$10,112
37	681-20940	95.71%	93.33%	52.60%	41.89%	$1,974	$1,441	11%	$1,599	$533	$2,132
38	612-22270	Meter not logged				$242	$176	11%	$196	$65	$261
						$259,995	**$189,796**		**$210,674**	**$70,199**	**$280,873**

The foregoing information forms the basis of the Non-Measured Project Benefits. Customer agrees that the Non-Measured Project Benefits are reasonable and that the installation of the Improvement Measures will enable Customer to take actions that will result in the achievement of such Non-Measured Project Benefits.

7. Summary of Year 1 Non-Measured Benefits by Utility

Non-Measured Benefit: Break-out by Utility

Item Description	Savings	% to Water	% to Sewer	$ to Water	$ to Sewer
Meter Reading	$468,646	50%	50%	$234,323	$234,323
Vehicle	$17,460	50%	50%	$8,730	$8,730
Repair Parts	$306,000	50%	50%	$153,000	$153,000
Automated Leak Detection	$58,737	100%	0%	$58,737	$0
2" Meter Right-Typing	$14,316	30%	70%	$4,252	$10,064
Large Meter Right-Typing	$280,873	25%	75%	$70,199	$210,674
	$1,146,032			$529,241	$616,791

III. MEASUREMENT AND VERIFICATION METHODOLOGY

Based upon JCI's and Customer's investigation of the existing condition of certain of Customer's water meters, Customer has concluded that a significant percentage of such meters do not accurately measure billable consumption, and Customer is losing potential billable consumption revenue due to this inaccuracy. By replacing inaccurate meters with more accurate meters, it is expected that Customer will increase the volume of water registered by such meters and thereby increase measured billable consumption, assuming the same consumption levels prior to and after the Work has been performed. By applying accuracy increases to the Baseline water billing amounts supplied to JCI by Customer and set forth in Section IV below, it is expected that the impact of billing for the additional billable consumption would have resulted in increased billable consumption revenue of **$1,495,012** in the first year of the Guarantee Term as compared to the Baseline year. Customer recognizes, however, that actual revenues may differ from billable revenues and that the amount of actual revenues achieved in future periods will depend on other factors besides improved meter accuracy, such as, by way of example, collections ratio, consumption, and water utility rates, among others.

The pre-retrofit weighted average accuracy of meter sizes smaller than 3" has been calculated by testing a representative sample of the meter population as set forth in Schedule 1 (Scope of Work). The pre-retrofit accuracy of meter sizes 3" and larger has been calculated by testing the accuracy of the meter population set forth in Schedule 1 (Scope of Work). Weighted average accuracy is based on the American Water Works Association (AWWA) guidelines as set forth in the Manual of Water Supply Practices - M6, Fourth Edition, Water Meters - Selection, Installation, Testing and Maintenance. ©1999 American Water Works Association, ISBN 1-58321-017-2, as may be updated or revised from time to time by AWWA. The post-retrofit accuracy of new meters will be tested using the same AWWA guidelines.

Calculations of Increased Meter Accuracy and Billable Usage
JCI uses a proprietary software modeling tool - H2Optimizer - to accurately quantify the financial benefits from a meter replacement project. The detailed account history from the Customer is imported and goes through numerous accuracy checks to confirm data integrity before the analysis is begun. Actual rate schedules are used to verify the billing information and for projecting the new billed amounts.

Increased billable usage due to higher meter accuracies are calculated on a per meter, per month basis from the Customer's Baseline billing information. Each customer's 12-month usage and cost history is recalculated based on the higher meter accuracy using the appropriate rates. The Project Benefit for a given meter is calculated as follows:

(a) The Annual Project Benefit for a given meter shall be (A) the product of (1) the Total Volume Charge for such meter based on Customer's Baseline billing information and (2) the quotient of (i) the Post Retrofit Guaranteed Accuracy of the new meter[1] and (ii) the Post Retrofit Tested Accuracy for such meter as set forth in the Baseline billing information, LESS (B) the Total Volume Charge for such meter based on Customer's Baseline information.

(b) The Revised Guaranteed Annual Project Benefit for a given meter shall be the Annual Project Benefit for such meter multiplied by 1.11 (being an 11% increase in the sewer rates in 2012).

(c) The Annual Project Benefit Realized for a given meter for the first year after Project Completion shall be (A) the product of (1) the Total Volume Charge for such meter based on Customer's Baseline billing information and (2) the quotient of (i) the Post Retrofit Guaranteed Accuracy of the new meter and (i) the Post Retrofit Tested Accuracy for such meter as set forth in the Baseline billing information, LESS (B) the Total Volume Charge for such meter based on Customer's Baseline billing information as identified in the Agreement.

(d) The Revised Guaranteed Annual Project Benefit Realized for a given meter will be the Annual Project Benefit Realized for such meter multiplied by 1.11 (being an 11% increase in the sewer rates in 2012).

[1] Each new meter is deemed to be 98.5% accurate.

(e) The Annual Project Benefit Shortfall or Annual Project Benefit Surplus, as the case may be, shall be calculated as follows: For each meter, the surplus or shortfall shall be determined by subtracting the Annual Project Benefit for such meter from the Annual Project Benefit Realized for such meter. A negative difference shall constitute a shortfall and a positive difference shall constitute a surplus. The sum of all such surpluses and shortfalls shall constitute (i) the Annual Project Benefit Surplus if such amount is positive and (ii) the Annual Project Benefit Shortfall if such amount is negative.

In the event that a meter's baseline accuracy is determined to be incorrect, the amount of the Total Project Benefits will remain unchanged. To acknowledge any such discrepancy, both parties will execute a Change Order detailing the meter baseline accuracy change and any associated impact on projected benefit for that particular meter.

JCI's Assured Performance Guarantee is based upon certain assumptions, including the accuracy of the meters, operating under normal conditions, which meters have been replaced pursuant to this Agreement as set forth in the table of meter sizes and quantities in Section V below. JCI's Assured Performance Guarantee shall not include the following items (and the effects thereof):

- *total water system revenue*
- *water usage/consumption trends*
- *water rationing programs*
- *demographic and/or population shifts*
- *changes in the industrial or commercial base*
- *regulatory changes*
- *droughts, floods, rainfall, or other weather or climactic conditions*
- *water system pressure variations*
- *non-metered water usage*
- *failure to collect amounts due for billable consumption*
- *changes in monthly base charges, monthly allowable minimum base consumption, or monthly volume charges*
- *changes to water and sewer rate schedules*
- *water quality*
- *failure of the water system to meet governmental requirements*
- *improper maintenance or unsound usage of the Improvement Measures or any related equipment*
- *performance of automatic meter reading equipment*

IV. BASELINE CALCULATIONS & POST-RETROFIT INCREASED METER ACCURACY BENEFIT

Annual Water Consumption, Revenue, and Related Data from 2/1/2010 to 1/31/2011

Evansville, IN Small Meter Benefit Summary

Accounts	Meter Size	Rate Code	Pre-Retrofit Volume-Based Revenue	Pre-Retrofit Weighted Average Meter Weighted Accuracy	Post-Retrofit Weighted Average Meter Weighted Accuracy	Post-Retrofit Volume-Based Revenue	Projected Accuracy Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Sewer Benefit	Projected Water Benefit	Revised Projected Accuracy Benefit
706	0.625	IR- I- N	$157,187	98.6%	99.5%	$158,659	$1,472				$1,472	$1,472
1,128	0.625	IR- O- N	$268,308	98.6%	99.5%	$270,820	$2,512				$2,512	$2,512
26,363	0.625	SR- I- N	$5,812,612	98.6%	99.5%	$5,867,040	$54,427	$54,427	11%	$60,414		$60,414
4	0.625	SR- I- Y	$595	98.6%	99.5%	$600	$6	$6	11%	$6		$6
7,716	0.625	SR- O- N	$2,657,700	98.6%	99.5%	$2,682,586	$24,886	$24,886	11%	$27,623		$27,623
26,984	0.625	WR- I- N	$2,771,014	98.6%	99.5%	$2,796,961	$25,947				$25,947	$25,947
4	0.625	WR- I- Y	$340	98.6%	99.5%	$343	$3				$3	$3
11,799	0.625	WR- O- N	$1,478,507	98.6%	99.5%	$1,492,352	$13,844				$13,844	$13,844
78	1	IR- I- N	$41,357	97.5%	99.5%	$42,184	$827				$827	$827
43	1	IR- O- N	$14,922	97.5%	99.5%	$15,220	$298				$298	$298
563	1	SR- I- N	$301,090	97.5%	99.5%	$307,111	$6,021	$6,021	11%	$6,685		$6,685
1	1	SR- I- Y	$372	97.5%	99.5%	$380	$7	$7	11%	$8		$8
165	1	SR- O- N	$95,180	97.5%	99.5%	$97,083	$1,903	$1,903	11%	$2,113		$2,113
608	1	WR- I- N	$143,943	97.5%	99.5%	$146,822	$2,879				$2,879	$2,879
1	1	WR- I- Y	$282	97.5%	99.5%	$288	$6				$6	$6
561	1	WR- O- N	$114,505	97.5%	99.5%	$116,795	$2,290				$2,290	$2,290
TOTALS			**$13,857,915**			**$13,995,244**	**$137,329**	**$87,251**		**$96,848**	**$50,078**	**$146,926**

Evansville, IN - 2 Inch Meter Benefit Summary

Accounts	Meter Size	Rate Code	Revenue	Pre-Retrofit Volume-Based Revenue	Pre-Retrofit Weighted Average Meter Weighted Accuracy	Post-Retrofit Weighted Average Meter Weighted Accuracy	Post-Retrofit Volume-Based Revenue	Projected Accuracy Benefit	Guarantee Factor	Revised Projected Accuracy Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Sewer Benefit	Projected Water Benefit	Revised Projected Accuracy Benefit
66	2	II- I-N	$450	$87,339	95.7%	99.0%	$90,159	$2,821	80.0%	$2,256				$2,256	$2,256
24	2	II- O-N	$248	$24,350	95.7%	99.0%	$25,137	$787	80.0%	$629				$629	$629
987	2	SI- I-N	$112,374	$2,431,782	95.7%	99.0%	$2,503,516	$71,734	80.0%	$57,388	$57,388	11%	$63,700		$63,700
30	2	SI- I-Y	$1,281	$27,585	95.7%	99.0%	$28,453	$867	80.0%	$694	$694	11%	$770		$770
142	2	SI- O-N	$29,679	$600,645	95.7%	99.0%	$618,742	$18,097	80.0%	$14,478	$14,478	11%	$16,070		$16,070
4	2	SI- O-Y	$82	$3,305	95.7%	99.0%	$3,405	$100	80.0%	$80	$80	11%	$89		$89
1,037	2	WI- I-N	$55,073	$1,108,002	95.7%	99.0%	$1,143,033	$35,031	80.0%	$28,025				$28,025	$28,025
38	2	WI- I-Y	$1,528	$26,719	95.7%	99.0%	$27,574	$856	80.0%	$684				$684	$684
200	2	WI- O-N	$11,240	$252,732	95.7%	99.0%	$260,728	$7,996	80.0%	$6,396				$6,396	$6,396
4	2	WI- O-Y	$40	$1,773	95.7%	99.0%	$1,829	$56	80.0%	$45				$45	$45
				$4,564,231			**$4,702,576**	**$138,345**		**$110,676**	**$72,639**		**$80,630**	**$36,037**	**$118,666**

Evansville, IN - Large Meter Benefit Summary - Tested Meters

Account	Meter Size	Meter Type	Overall Weighted Average Tested Accuracy	Guaranteed Annual Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Projected Sewer Benefit	Projected Water Benefit	Revised Guaranteed Annual Benefit
611-20450	3"	Compound	38.0%	$8,004	$5,751	11%	$6,384	$2,252	$8,636
611-21290	4"	Compound	79.0%	$2,598	$1,812	11%	$2,011	$786	$2,797
611-22530	3"	Compound	57.9%	$946	$666	11%	$740	$280	$1,020
612-21110	6"	Compound	26.9%	$64,080	$44,081	11%	$48,930	$19,999	$68,929
612-21271	6" x 2"	Fire Service	69.9%	$25,028	$17,291	11%	$19,193	$7,737	$26,931
612-21570	3"	Compound	110.1%	$0	$0	11%	$0	$0	$0
612-22597	4"	Compound	34.0%	$327	$229	11%	$254	$98	$352
612-22830	4"	Compound	68.7%	$1,360	$984	11%	$1,092	$376	$1,468
613-20410	4"	Compound	65.0%	$1,243	$893	11%	$991	$350	$1,341
613-22050	4"	Compound	33.50%	$18,751	$13,116	11%	$14,559	$5,635	$20,194
613-22150	6" x 1.5"	Fire Service	56.7%	$6,830	$4,785	11%	$5,312	$2,045	$7,357
613-22390	6" x 1.5"	Fire Service	70.0%	$103,223	$72,984	11%	$81,012	$30,239	$111,251
614-22000	4"	Compound	49.0%	$16,221	$11,187	11%	$12,418	$5,034	$17,452
614-23023	4"	CMPD	101.2%	$2,521	$1,767	11%	$1,962	$754	$2,716
614-23350	4"	Compound	33.4%	$263	$184	11%	$205	$79	$283
614-23560	6" x 1.5"	Fire Service	71.3%	$5,569	$3,849	11%	$4,273	$1,720	$5,992
614-23705	4"	Compound	95.5%	$441	$306	11%	$340	$135	$474
615-20340	4"	Compound	73.8%	$5,576	$3,849	11%	$4,272	$1,727	$5,999
615-21130	4"	Compound	79.5%	$4,653	$3,207	11%	$3,560	$1,446	$5,006
617-22783	4" x 1"	Fire Service	33.4%	$15,214	$0	11%	$0	$15,214	$15,214
617-22785	6"	Compound	34.4%	$5,487	$0	11%	$0	$5,487	$5,487
617-23380	4"	Compound	48.7%	$15,372	$10,619	11%	$11,787	$4,754	$16,540
617-23890	4"	Compound	69.2%	$2,372	$1,682	11%	$1,867	$690	$2,557
617-23990	6" x 1.5"	Fire Service	49.0%	$5,591	$0	11%	$0	$5,591	$5,591
617-24329	4"	Compound	33.5%	$849	$0	11%	$0	$849	$849
617-24350	6" x 2"	Fire Service	63.4%	$3,924	$0	11%	$0	$3,924	$3,924
618-22040	4"	Compound	78.7%	$1,346	$969	11%	$1,075	$378	$1,453
618-22060	4"	Compound	70.6%	$3,426	$2,407	11%	$2,671	$1,020	$3,691
618-22080	4"	Compound	6.7%	$5,859	$4,165	11%	$4,623	$1,694	$6,318
619-40070	4"	Compound	58.3%	$1,054	$741	11%	$823	$313	$1,136
619-41660	4"	HT	15.3%	$226,154	$156,300	11%	$173,493	$69,854	$243,347
680-20970	6"	Compound	65.9%	$440	$312	11%	$346	$128	$475
681-20030	4"	Turbine	96.1%	$609	$420	11%	$466	$189	$655
681-21230	3"	Compound	95.7%	$146	$105	11%	$117	$41	$157
698-00740	4"	Compound	55.7%	$4,412	$3,119	11%	$3,462	$1,293	$4,755
698-00750	6"	Compound	81.8%	$483	$0	11%	$0	$483	$483
698-01530	4"	Compound	69.9%	$117,231	$83,798	11%	$93,015	$33,434	$126,449
698-02613	6" x 1.5"	Fire Service	36.2%	$1,471	$0	11%	$0	$1,471	$1,471
				$679,075	**$451,579**		**$501,253**	**$227,495**	**$728,749**

Large Meter Benefit Summary - Non-Testable Meters (Part 1)

(Based on June, 2010 - May, 2011 Billing Data)

Account	Meter Size	Meter Type	Mutually Agreeable Accuracy	Mutally Agreeable Annual Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Projected Sewer Benefit	Projected Water Benefit	Revised Mutally Agreeable Annual Benefit
611-20190	4"	Turbine	88.5%	$2,232	$1,545	11%	$1,715	$687	$2,402
611-20230	4"	Compound	33.3%	$1,831	$1,283	11%	$1,424	$547	$1,972
611-20830	4"	Compound	88.5%	$81	$57	11%	$63	$24	$87
611-20960	4"	Compound	88.5%	$4,298	$2,969	11%	$3,295	$1,329	$4,624
611-21430	4"	FBT	0.0%	$0	$0	11%	$0	$0	$0
611-21490	3"	Compound	88.5%	$394	$282	11%	$314	$111	$425
611-21710	3"	Compound	88.5%	$589	$424	11%	$471	$165	$636
611-21850	4"	Turbine	88.5%	$1,568	$1,086	11%	$1,206	$482	$1,687
611-22330	4"	HT	88.5%	$1,762	$1,216	11%	$1,350	$546	$1,896
612-20490	3"	Compound	88.5%	$394	$282	11%	$314	$111	$425
612-21070	6"	Compound	68.5%	$14,116	$9,761	11%	$10,835	$4,355	$15,190
612-21190	4"	Compound	88.5%	$101	$71	11%	$79	$30	$109
612-21530	3"	Compound	78.5%	$2,153	$1,514	11%	$1,680	$639	$2,319
612-21830	4"	HT	78.5%	$4,046	$2,791	11%	$3,098	$1,255	$4,353
612-21970	4"	HT	88.5%	$20,818	$14,428	11%	$16,015	$6,390	$22,405
612-22270	4"	Turbine	88.5%	$189	$133	11%	$148	$56	$203
613-20490	4"	Compound	88.5%	$938	$660	11%	$733	$278	$1,011
613-20750	4"	Compound	68.5%	$5,627	$3,901	11%	$4,330	$1,725	$6,056
613-22070	4"	Compound	88.5%	$4,219	$2,914	11%	$3,234	$1,305	$4,539
613-22170	6" x 1.5"	Fire Service	68.5%	$11,612	$7,996	11%	$8,876	$3,616	$12,492
613-22750	4"	Compound	88.5%	$1,836	$1,266	11%	$1,405	$570	$1,975
613-23010	4"	HT	88.5%	$1,113	$778	11%	$864	$335	$1,199
614-21210	4"	Compound	88.5%	$450	$326	11%	$362	$123	$486
614-21310	4"	Compound	88.5%	$9,361	$6,468	11%	$7,180	$2,892	$10,072
614-22110	6"	Compound	88.5%	$2,743	$1,887	11%	$2,095	$856	$2,951
614-23110	4"	HT	88.5%	$2,382	$1,642	11%	$1,823	$740	$2,563
614-23570	6"	Turbine	88.5%	$4,468	$3,087	11%	$3,426	$1,381	$4,807
614-23590	4"	Compound	88.5%	$445	$323	11%	$359	$122	$481
615-20330	6"	Compound	88.5%	$4,468	$3,087	11%	$3,426	$1,381	$4,807
615-20450	3"	Compound	88.5%	$163	$115	11%	$128	$48	$175
615-20490	4"	Compound	88.5%	$852	$600	11%	$666	$252	$918
615-20510	4"	Compound	88.5%	$485	$346	11%	$384	$140	$523
615-20570	4"	Compound	98.5%	$0	$0	11%	$0	$0	$0
615-21090	4"	Compound	88.5%	$1,253	$874	11%	$970	$379	$1,349
615-21170	4"	Compound	88.5%	$1,298	$903	11%	$1,002	$395	$1,397
615-21370	4"	HT	88.5%	$1,948	$1,343	11%	$1,491	$605	$2,096
616-20135	6"	Compound	88.5%	$6,769	$4,687	11%	$5,203	$2,082	$7,285
616-20890	4"	CMPD	88.5%	$160	$111	11%	$124	$49	$172
616-21425	4"	Compound	88.5%	$2,970	$2,051	11%	$2,276	$920	$3,196
617-22060	6"	HT	88.5%	$27,500	$19,377	11%	$21,509	$8,123	$29,632
617-22080	6"	HT	88.5%	$61,445	$44,586	11%	$49,491	$16,859	$66,349
617-22100	4"	Compound	88.5%	$387	$278	11%	$309	$108	$417
617-22110	8"	HT	88.5%	$11,922	$8,224	11%	$9,129	$3,697	$12,826
617-22120	6"	Compound	88.5%	$1,808	$1,247	11%	$1,384	$561	$1,946
617-22140	6"	Compound	88.5%	$977	$686	11%	$762	$291	$1,053
617-22160	6"	Compound	88.5%	$5,620	$3,888	11%	$4,316	$1,732	$6,047
617-22180	6"	Compound	88.5%	$6,663	$4,609	11%	$5,116	$2,053	$7,170

Large Meter Benefit Summary - Non-Testable Meters (Part 2)

(Based on June, 2010 - May, 2011 Billing Data)

Account	Meter Size	Meter Type	Mutually Agreeable Accuracy	Mutally Agreeable Annual Benefit	Projected Sewer Benefit	1/1/2012 Sewer Rate Increase	Revised Projected Sewer Benefit	Projected Water Benefit	Revised Mutally Agreeable Annual Benefit
617-23040	4"	HT	88.5%	$162	$0	11%	$0	$162	$162
617-23280	6"	Compound	88.5%	$22	$0	11%	$0	$22	$22
617-23300	4"	Compound	88.5%	$2,446	$1,681	11%	$1,866	$765	$2,631
617-23420	4"	Compound	68.5%	$2,944	$2,091	11%	$2,321	$853	$3,174
617-24180	4"	CMPD	88.5%	$1,750	$1,208	11%	$1,341	$541	$1,883
618-20210	4"	Compound	68.5%	$535	$379	11%	$421	$155	$576
618-20270	4"	Compound	88.5%	$221	$157	11%	$175	$64	$238
618-20630	4"	Compound	88.5%	$953	$670	11%	$744	$283	$1,027
618-20650	4"	Compound	88.5%	$136	$96	11%	$107	$40	$147
618-20950	4"	Compound	88.5%	$5,567	$3,852	11%	$4,275	$1,716	$5,991
618-21130	4"	Compound	88.5%	$2,972	$2,047	11%	$2,272	$926	$3,198
618-21230	4"	Compound	88.5%	$11,819	$8,154	11%	$9,051	$3,665	$12,716
618-21250	4"	CMPD	88.5%	$516	$370	11%	$411	$146	$557
618-21790	4"	Turbine	88.5%	$1,000	$730	11%	$810	$270	$1,080
618-21980	4"	Compound	88.5%	$1,696	$1,172	11%	$1,301	$524	$1,825
618-21990	4"	Compound	88.5%	$2,332	$1,606	11%	$1,782	$727	$2,509
618-22000	4"	Compound	88.5%	$4,919	$3,401	11%	$3,775	$1,518	$5,294
619-40730	6"	HT	88.5%	$2,656	$0	11%	$0	$2,656	$2,656
619-40925	4"	Compound	88.5%	$1,544	$1,070	11%	$1,187	$475	$1,662
619-41350	4"	Compound	88.5%	$1,829	$1,261	11%	$1,400	$568	$1,968
619-42410	4"	Turbo	78.5%	$3,362	$2,329	11%	$2,586	$1,032	$3,618
619-42610	4"	Compound	88.5%	$23,471	$16,385	11%	$18,187	$7,086	$25,273
619-42710	4"	Compound	88.5%	$1,458	$1,011	11%	$1,122	$447	$1,569
619-43510	4"	Compound	88.5%	$1,183	$825	11%	$916	$358	$1,273
680-21270	4"	Compound	88.5%	$211	$0	11%	$0	$211	$211
680-21290	3"	Compound	88.5%	$75	$53	11%	$59	$23	$81
680-21350	4"	CMPD	88.5%	$666	$476	11%	$529	$190	$718
680-21410	4"	Compound	88.5%	$2,215	$1,528	11%	$1,696	$687	$2,383
680-21850	4"	Turbine	88.5%	$4,949	$3,421	11%	$3,798	$1,527	$5,325
680-22070	4"	Compound	88.5%	$37	$26	11%	$29	$11	$40
680-22170	4"	Compound	88.5%	$138	$97	11%	$107	$41	$149
681-20310	4"	HT	88.5%	$13,661	$9,417	11%	$10,452	$4,244	$14,697
681-20370	6"	Compound	88.5%	$4,468	$3,087	11%	$3,426	$1,381	$4,807
681-20410	6"	Compound	68.5%	$449	$315	11%	$350	$134	$484
681-20430	4"	CMPD	88.5%	$142	$100	11%	$111	$42	$153
681-20570	4"	Compound	88.5%	$3,670	$2,532	11%	$2,811	$1,138	$3,949
681-20790	6"	HT	88.5%	$9,455	$6,533	11%	$7,252	$2,922	$10,173
681-21355	4"	Turbine	88.5%	$234	$166	11%	$184	$68	$252
681-21830	4"	HT	88.5%	$10,000	$7,300	11%	$8,103	$2,700	$10,803
681-21850	4"	Compound	88.5%	$1,829	$1,261	11%	$1,400	$568	$1,968
681-22130	4"	Compound	88.5%	$4,949	$3,421	11%	$3,798	$1,527	$5,325
698-00250	6"x1.5"	Fire Service	88.5%	$14,778	$10,182	11%	$11,303	$4,596	$15,898
698-01120	4"	Compound	68.5%	$1,344	$956	11%	$1,061	$387	$1,449
698-01230	4"	Compound	88.5%	$5,012	$3,464	11%	$3,845	$1,549	$5,393
698-01340	4"	Compound	88.5%	$50,199	$36,234	11%	$40,220	$13,965	$54,185
698-01460	6"	Compound	88.5%	$22,708	$15,951	11%	$17,705	$6,758	$24,463
698-01470	6"	Compound	88.5%	$1,735	$1,199	11%	$1,331	$536	$1,867
698-02737	6"	Unknown	88.5%	$100	$73	11%	$81	$27	$108
698-02740	4"	Compound	88.5%	$126	$89	11%	$99	$37	$136
			Total	**$465,099**	**$324,484**		**$360,177**	**$140,615**	**$500,792**

The unit utility costs for the Baseline period are set forth below as "Utility Rates" and shall be used for all calculations made under this Schedule. The Utility Rates shall be escalated annually by the actual utility rate escalation but such escalation shall be no less than the mutually agreed "floor" escalation rate of 2.8%.

Summary of Year 1 Measured Benefits by Utility

Measured Benefit: Break-out by Utility

Item Description	Increased Billable Reveue	% to Water	% to Sewer	$ to Water	$ to Sewer
Small meters	$146,926	34%	66%	$50,078	$96,848
2" meters	$118,666	32%	68%	$38,037	$80,630
Large meters - tested	$728,749	31%	69%	$227,495	$501,253
Large meters - non-testable	$500,792	28%	72%	$140,615	$360,177
	$1,495,133			$456,225	$1,038,908

Rates & Fees

REVISED

SCHEDULE OF SEWER CHARGES

Effective Billing Date:

January 1, 2011

REFUSE CHARGES

EFFECTIVE: January 1, 2011

CITY OF EVANSVILLE

WATER AND SEWER UTILITY

THIS SCHEDULE SUPERSEDES ALL PREVIOUS SCHEDULES ISSUED SCHEDULE OF SEWER RATES AND CHARGES

(Pursuant to City Code Chapter 13.05.280)

Rates and charges shall be collected for the use of, and the service rendered by, the sewage works of the city from the owners of each and every lot, parcel of real estate, or building that is connected with or uses such works by or through any part of the sewage system of the City, or that in any way uses or is served by such works, which rates and charges shall be payable as hereinafter provided and shall be in an amount determinable as follows:

WATER BASED CONSUMPTION CHARGE:

There shall be a service charge based on the quantity of water used on or in the property or premises served by the sewage works, as the same is measured by the water meter there in use, which charge shall be determined on the basis of the following schedule of rates:

Meter Charge per Month:

	Inside City	Outside City
5/8 inch meter	$3.42	$4.58
1 inch meter	$8.70	$11.76

1 ½ inch meter	$19.58	$26.44
2 inch meter	$34.79	$46.97
3 inch meter	$78.30	$105.70
4 inch meter	$139.21	$187.91
6 inch meter	$313.21	$422.83
8 inch meter	$556.78	$751.67
10 inch meter	$869.97	$1,174.46

Metered Water Per Month – Rate Per 1,000 Gallons

	Inside City	Outside City
First 50,000 gal.	$5.25	$7.10
Next 950,000 gal.	$3.61	$4.87
Next 2,000,000 gal.	$3.03	$4.10
Over 3,000,000 gal.	$3.03	$3.03

GOVERNMENTAL USERS:

All governmental entities shall pay the following charge per month in addition to the meter charge:

	Inside City	Outside City
First 1,000 gal.	$8.36	$11.30
All Over 1,000 gal.	$2.75	$3.71

PROPERTIES NOT USING UTILITY WATER:

In the event a lot, parcel of real estate, or building which is connected with, using, served by, or benefiting from sanitary service is not served by the City's Waterworks, and water used thereon or therein is not measured by City water of a City meter acceptable to the City the following rate shall apply on a monthly basis:

Inside City	Outside City
$45.43	$61.32

A discounted rate is available to property that is owner-occupied residential, and not more than two persons reside thereon or therein, and a properly executed affidavit is on

file with the utility. The following rates shall apply on a monthly basis:

Inside City	Outside City
$24.42	$32.95

WASTEWATER SURCHARGES:

Wastewater surcharges will be applied to contributed wastewater strengths in excess of 200 mg/liter biochemi-cal oxygen demand (BOD) or 200 mg/liter suspended solids (SS) as follows:

Per pound BOD or SS loading in excess of 200 mg/liter:

Inside City	Outside City
$.28/pound	$.38/pound

CONNECTION CHARGE:

There is hereby imposed a tap-in charge upon all persons who shall hereafter do either of the following:

1.Tap-in to the sewer system which is either publicly or privately owned and which is either a part of the City sewer system or directly or indirectly or eventually extends to or flows into the City sewer system; or

2.Add to an existing improvement a structure to which plumbing of any sort is extended.

The connection charges are referenced in City Code section 13.05.290.

SCHEDULE OF REFUSE RATES

AND CHARGES

(Pursuant to City Code Section 8.05.070 and 8.05.090)

SCOPE OF SERVICES:

Curbside collection of refuse shall be available to structures consisting of residential units of five units or less. Residential unit is defined as an occupied or unoccupied single-family residential dwelling unit including each individual housekeeping, living, or dwelling unit of a multi-family building.

Fees:

Monthly fee per residential unit..... $11.80

Backdoor collection fee (additional)..... $2.00

LATE PAYMENT FEE SEWER AND REFUSE:

All bills for sewer and refuse service not paid before the due date as stated on such bills shall be subject to a late payment fee of 10 percent.

Evansville, IN 0.625 Inch Meter Test Results - Part 1											
					Minimum Flow		Intermediate Flow		High Flow		
Ref #	Manufacturer	Serial #	Year of Mfg.	Reading In kGallons	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Weighted Average Accuracy (%)
1	Neptune	58,021,235	1996	459.9596	0.25	99.11%	2.00	100.49%	15.00	99.76%	100.18%
2	Neptune	58,042,933	1996	422.7667	0.25	98.76%	2.00	8.07%	15.00	100.01%	35.47%
3	Neptune	58,051,463	1996	493.2980	0.25	98.37%	2.00	101.05%	15.00	100.36%	100.54%
4	Neptune	58,055,174	1996	131.6158	0.25	97.38%	2.00	100.82%	15.00	99.78%	100.15%
5	Neptune	58,984,803	1996	381.9563	0.25	96.45%	2.00	101.05%	15.00	100.72%	100.31%
6	Neptune	58,001,044	1996	454.2417	0.25	99.60%	2.00	100.59%	15.00	99.88%	100.33%
7	Neptune	58,951,979	1996	591.4351	0.25	99.60%	2.00	101.14%	15.00	100.71%	100.84%
8	Neptune	58,952,745	1996	749.9033	0.25	100.09%	2.00	100.59%	15.00	101.19%	100.60%
9	Neptune	58,014,354	1996	408.2396	0.25	100.34%	2.00	100.68%	15.00	100.47%	100.60%
10	Neptune	58,031,815	1996	317.0004	0.25	100.19%	2.00	101.05%	15.00	100.36%	100.81%
11	Neptune	58,995,090	1996	441.3351	0.25	99.84%	2.00	101.05%	15.00	100.23%	100.74%
12	Neptune	58,042,618	1996	249.6173	0.25	100.34%	2.00	101.42%	15.00	101.00%	101.19%
13	Neptune	58,982,409	1996	425.4473	0.25	96.40%	2.00	100.36%	15.00	98.57%	99.49%
14	Neptune	58,042,300	1996	421.7053	0.25	100.19%	2.00	100.95%	15.00	100.45%	100.76%
15	Neptune	58,971,073	1996	723.4261	0.25	99.20%	2.00	100.68%	15.00	100.37%	100.41%
16	Neptune	58,993,722	1996	550.0371	0.25	97.63%	2.00	100.12%	15.00	99.13%	99.60%
17	Neptune	58,932,294	1996	975.2142	0.25	100.76%	2.00	92.70%	15.00	100.95%	95.14%
18	Neptune	31,432,788	1986	305.6990	0.25	100.51%	2.00	100.83%	15.00	100.97%	100.81%
19	Neptune	58,972,863	1996	1,041.4060	0.25	98.54%	2.00	99.93%	15.00	100.42%	99.80%
20	Neptune	58,982,884	1996	855.2149	0.25	98.45%	2.00	100.61%	15.00	100.55%	100.28%
21	Neptune	58,051,063	1996	139.7260	0.25	98.45%	2.00	99.48%	15.00	99.73%	99.36%
22	Neptune	58,022,791	1996	541.1705	0.25	96.33%	2.00	98.57%	15.00	99.18%	98.33%
23	Neptune	58,034,425	1996	305.2326	0.25	98.30%	2.00	99.48%	15.00	99.68%	99.33%
24	Neptune	58,982,660	1996	526.5264	0.25	100.26%	2.00	100.16%	15.00	100.84%	100.27%
25	Neptune	58,020,903	1996	7,979.5040	0.25	96.33%	2.00	96.54%	15.00	100.11%	97.04%
26	Neptune	58,002,283	1996	150.3712	0.25	97.32%	2.00	99.48%	15.00	99.07%	99.09%
27	Neptune	58,031,041	1996	349.4370	0.25	97.81%	2.00	99.70%	15.00	100.09%	99.48%
28	Neptune	58,992,295	1996	785.1122	0.25	99.13%	2.00	99.75%	15.00	100.48%	99.77%
29	Neptune	58,001,480	1996	754.0524	0.25	96.97%	2.00	100.47%	15.00	99.73%	99.84%
30	Neptune	58,990,273	1996	875.5532	0.25	99.28%	2.00	100.47%	15.00	100.08%	100.24%
31	Neptune	58,981,934	1996	1,015.5027	0.25	78.39%	2.00	97.67%	15.00	99.80%	95.10%
32	Neptune	58,035,027	1996	5,417.0508	0.25	98.54%	2.00	100.83%	15.00	100.92%	100.50%
33	Neptune	58,052,729	1996	270.0650	0.25	99.66%	2.00	100.98%	15.00	100.44%	100.70%
34	Neptune	58,022,469	1996	683.8800	0.25	101.00%	2.00	100.98%	15.00	101.25%	101.02%
35	Neptune	58,952,446	1996	654.7154	0.25	94.59%	2.00	99.26%	15.00	98.58%	98.46%
36	Neptune	58,985,246	1996	865.6649	0.25	97.05%	2.00	99.03%	15.00	99.29%	98.77%
37	Neptune	58,005,978	1996	906.5130	0.25	99.52%	2.00	101.26%	15.00	100.41%	100.87%
38	Neptune	58,952,663	1996	194.7738	0.25	99.81%	2.00	100.51%	15.00	99.34%	100.23%
39	Neptune	58,032,878	1996	242.7270	0.25	98.78%	2.00	100.98%	15.00	100.11%	100.52%
40	Neptune	58,971,640	1996	270.4982	0.25	98.68%	2.00	100.75%	15.00	100.10%	100.34%

Evansville, IN 0.625 Inch Meter Test Results - Part 2											
					Minimum Flow		Intermediate Flow		High Flow		
Ref #	Manufacturer	Serial #	Year of Mfg.	Reading In kGallons	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Weighted Average Accuracy (%)
41	Neptune	58,014,171	1996	47.6225	0.25	96.81%	2.00	100.42%	15.00	99.31%	99.71%
42	Neptune	58,902,659	1996	354.7619	0.25	99.52%	2.00	101.26%	15.00	99.50%	100.73%
43	Neptune	58,031,106	1996	191.7738	0.25	100.65%	2.00	99.49%	15.00	100.11%	99.76%
44	Neptune	58,972,605	1996	531.3285	0.25	99.17%	2.00	101.21%	15.00	100.35%	100.78%
45	Neptune	58,981,019	1996	830.1402	0.25	99.52%	2.00	100.89%	15.00	100.37%	100.60%
46	Neptune	58,000,966	1996	443.4354	0.25	97.30%	2.00	100.42%	15.00	99.51%	99.82%
47	Neptune	58,984,967	1996	849.1775	0.25	97.05%	2.00	100.89%	15.00	99.62%	100.12%
48	Neptune	58,030,458	1996	390.6522	0.25	99.52%	2.00	100.65%	15.00	99.67%	100.33%
49	Neptune	58,953,713	1996	1,112.4837	0.25	99.05%	2.00	99.41%	15.00	100.70%	99.55%
50	Neptune	58,040,258	1996	156.6166	0.25	97.93%	2.00	100.09%	15.00	99.68%	99.71%
51	Neptune	58,050,761	1996	403.2517	0.25	100.52%	2.00	99.59%	15.00	101.16%	99.96%
52	Neptune	58,990,735	1996	446.2730	0.25	1.32%	2.00	101.46%	15.00	100.48%	86.30%
53	Neptune	58,053,927	1996	131.6828	0.25	96.46%	2.00	101.01%	15.00	99.76%	100.14%
54	Neptune	58,024,782	1996	579.1020	0.25	98.91%	2.00	93.24%	15.00	100.98%	95.25%
55	Neptune	58,991,731	1996	813.9547	0.25	98.57%	2.00	101.14%	15.00	100.25%	100.62%
56	Neptune	58,053,919	1996	78.8473	0.25	97.93%	2.00	101.24%	15.00	99.71%	100.51%
57	Neptune	58,000,197	1996	534.4641	0.25	99.89%	2.00	100.55%	15.00	100.28%	100.41%
58	Neptune	58,970,233	1996	898.5477	0.25	97.93%	2.00	100.55%	15.00	89.13%	98.44%
59	Neptune	58,401,827	1996	129.2783	0.25	97.93%	2.00	101.01%	15.00	99.96%	100.39%
60	Neptune	58,024,533	1996	353.6013	0.25	99.05%	2.00	100.18%	15.00	99.60%	99.93%
61	Neptune	58,034,444	1996	478.6430	0.25	98.81%	2.00	100.64%	15.00	99.86%	100.25%
62	Neptune	58,920,750	1996	959.9826	0.25	99.64%	2.00	100.09%	15.00	99.60%	99.95%
63	Sensus	44,721,788	1990	448.4542	0.25	93.03%	2.00	101.46%	15.00	69.19%	95.36%
64	Sensus	45,496,734	1991	2,769.9015	0.25	92.05%	2.00	101.46%	15.00	99.86%	99.81%
65	Sensus	33,822,967	1984	348.1774	0.25	95.10%	2.00	100.01%	15.00	101.39%	99.48%
66	Neptune	31,093,857	1986	992.6961	0.25	96.40%	2.00	99.30%	15.00	100.07%	98.98%
67	Neptune	58,011,040	1996	8,731.2260	0.25	99.75%	2.00	100.41%	15.00	101.38%	100.46%
										Overall Weighted Average Accuracy	98.58%

Evansville, IN 1 Inch Meter Test Results

					Minimum Flow		Intermediate Flow		High Flow		
Ref #	Mfg.	Serial #	Year of Mfg.	Reading In kGallons	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Weighted Average Accuracy (%)
1	Neptune	10,050,122	Unk	603.6529	1.50	96.81%	4.00	101.08%	40.00	100.43%	100.34%
2	Neptune	10,040,196	Unk	0.0113	1.50	0.00%	4.00	0.88%	40.00	0.00%	
3	Neptune	10,100,050	Unk	92.0402	1.50	97.39%	4.00	99.44%	40.00	99.47%	99.14%
4	Neptune	10,010,093	Unk	171.8706	1.50	100.54%	4.00	101.12%	40.00	100.72%	100.98%
5	Neptune	10,951,006	Unk	461.1190	1.50	99.96%	4.00	100.42%	40.00	100.25%	100.32%
6	Neptune	34,080,205	1989	817.0767	1.50	32.19%	4.00	89.62%	40.00	98.52%	82.34%
7	Neptune	10,000,135	Unk	536.7618	1.50	98.17%	4.00	100.86%	40.00	99.66%	100.28%
8	Neptune	10,050,038	Unk	682.7030	1.50	100.68%	4.00	100.86%	40.00	100.61%	100.80%
9	Neptune	10,020,123	Unk	322.2226	1.50	99.96%	4.00	100.86%	40.00	100.18%	100.62%
10	Neptune	10,000,041	Unk	4,666.5128	1.50	99.23%	4.00	100.86%	40.00	101.23%	100.67%
11	Neptune	10,000,129	Unk	580.4780	1.50	1.94%	4.00	100.86%	40.00	100.26%	85.93%
12	Neptune	10,030,089	Unk	428.8720	1.50	97.54%	4.00	99.75%	40.00	101.14%	99.63%
13	Neptune	10,050,172	Unk	131.2431	1.50	99.81%	4.00	100.64%	40.00	101.04%	100.57%
14	Neptune	10,050,044	Unk	506.3798	1.50	2.90%	4.00	100.86%	40.00	100.21%	86.07%
15	Neptune	10,040,193	Unk	2,484.4692	1.50	100.44%	4.00	100.99%	40.00	100.80%	100.88%
16	Neptune	10,030,265	Unk	5,104.0250	1.50	100.83%	4.00	101.08%	40.00	101.05%	101.04%
17	Neptune	10,030,034	Unk	4,500.8618	1.50	4.99%	4.00	101.07%	40.00	101.00%	86.65%
18	Neptune	10,010,170	Unk	790.6076	1.50	98.99%	4.00	100.31%	40.00	100.16%	100.09%
19	Neptune	10,030,272	Unk	321.1280	1.50	98.13%	4.00	100.65%	40.00	100.63%	100.27%
20	Neptune	10,100,047	Unk	29.9051	1.50	97.66%	4.00	99.59%	40.00	99.68%	99.31%
21	Neptune	10,951,055	Unk	788.6978	1.50	0.57%	4.00	90.43%	40.00	99.45%	78.31%
22	Neptune	10,030,058	Unk	326.6463	1.50	97.56%	4.00	100.10%	40.00	99.79%	99.67%
23	Neptune	10,010,223	Unk	171.2400	1.50	98.46%	4.00	99.80%	40.00	100.95%	99.77%
24	Neptune	10,050,176	Unk	286.9937	1.50	97.89%	4.00	99.59%	40.00	100.46%	99.47%
25	Neptune	10,100,051	Unk	88.7358	1.50	96.80%	4.00	99.93%	40.00	99.73%	99.43%
26	Neptune	10,010,198	Unk	189.6254	1.50	97.85%	4.00	100.14%	40.00	100.18%	99.80%
27	Neptune	10,020,079	Unk	137.6221	1.50	98.13%	4.00	99.38%	40.00	100.01%	99.29%
28	Neptune	10,050,211	Unk	331.2221	1.50	98.94%	4.00	99.72%	40.00	100.28%	99.69%
29	Neptune	10,941,102	Unk	3,977.2170	1.50	44.81%	4.00	89.34%	40.00	100.68%	84.36%
30	Neptune	10,030,028	Unk	5,756.4009	1.50	99.79%	4.00	101.28%	40.00	100.96%	101.01%
31	Neptune	10,030,012	Unk	398.8278	1.50	99.94%	4.00	100.31%	40.00	100.96%	100.35%
32	Neptune	10,030,260	Unk	903.9595	1.50	100.03%	4.00	99.25%	40.00	99.73%	99.44%
33	Neptune	10,050,159	Unk	9,553.7945	1.50	99.69%	4.00	101.01%	40.00	100.93%	100.80%
34	Neptune	10,010,077	Unk	558.0183	1.50	100.74%	4.00	100.08%	40.00	100.26%	100.21%
35	Neptune	10,040,012	Unk	206.8589	1.50	98.97%	4.00	99.45%	40.00	100.44%	99.53%
36	Neptune	10,000,094	Unk	2,097.4458	1.50	100.88%	4.00	100.29%	40.00	100.39%	100.40%
37	Neptune	10,030,190	Unk	5,882.4047	1.50	99.78%	4.00	100.17%	40.00	100.75%	100.20%
38	Neptune	10,050,100	Unk	278.2740	1.50	99.21%	4.00	100.21%	40.00	99.73%	99.99%
39	Neptune	10,030,008	Unk	4,965.4699	1.50	98.73%	4.00	99.11%	40.00	99.79%	99.16%
40	Neptune	45,187,292	1996	1,687.1826	1.50	97.29%	4.00	99.87%	40.00	100.15%	99.52%
41	Neptune	41,421,154	1996	1,418.5263	1.50	90.10%	4.00	96.08%	40.00	99.36%	95.67%
										Overall weighted average accuracy	97.55%

Evansville, IN 2 Inch Meter Test Results

Meter Size/Type	2.0 PD				Tested By:		Hayward Bratcher		
Test Dates:	8/11/2011	to	8/17/2011		Job Classification		Development		
			Minimum Flow		Intermediate Flow		High Flow		
Ref #	Manufacturer	Serial #	Reading in kGallons	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Rate (gpm)	Accuracy (%)	Weighted Average Accuracy (%)
1	Neptune	21080045	6,158.0720	2.00	99.49%	15.00	95.40%	100.00	99.93%	96.69%
2	Neptune	31677453	21,272.2240	2.00	96.65%	15.00	99.11%	100.00	101.03%	99.03%
3	Neptune	21096023	1,842.1880	2.00	100.89%	15.00	101.00%	100.00	100.08%	100.84%
4	Neptune	21096001	2,676.2550	2.00	99.64%	15.00	100.60%	100.00	99.53%	100.30%
5	Neptune	21099023	5,053.8040	2.00	0.00%	15.00	0.00%	100.00	96.39%	14.46%
6	Neptune	21097016	6,098.6460	2.00	98.86%	15.00	99.34%	100.00	100.27%	99.41%
7	Neptune	31524773	1,042.4920	2.00	99.60%	15.00	101.41%	100.00	99.74%	100.89%
8	Neptune	21020002	24,290.4560	2.00	87.65%	15.00	98.58%	100.00	99.53%	97.08%
9	Neptune	21095024	7,256.5945	2.00	99.44%	15.00	101.17%	100.00	101.27%	100.92%
10	Neptune	31614473	5,019.3910	2.00	100.09%	15.00	100.67%	100.00	99.77%	100.45%
11	Neptune	21098040	48,385.3170	2.00	99.34%	15.00	100.67%	100.00	100.77%	100.49%
12	Neptune	21060015	1,681.9530	2.00	99.94%	15.00	100.32%	100.00	99.77%	100.18%
13	Neptune	21050011	4,494.3765	2.00	99.36%	15.00	100.15%	100.00	99.99%	100.00%
14	Neptune	21020008	3,500.7490	2.00	99.36%	15.00	99.15%	100.00	99.35%	99.21%
15	Neptune	21060000	27,013.2550	2.00	99.41%	15.00	100.10%	100.00	99.40%	99.89%
16	Neptune	21050028	6,159.2590	2.00	97.51%	15.00	100.74%	100.00	99.75%	100.11%
17	Neptune	21097002	6,435.6260	2.00	96.63%	15.00	98.62%	100.00	100.11%	98.54%
18	Neptune	31811976	16,006.7030	2.00	100.22%	15.00	98.62%	100.00	101.24%	99.25%
19	Neptune	21030009	978.1310	2.00	99.27%	15.00	100.59%	100.00	100.60%	100.39%
20	Neptune	31010022	1,066.7820	2.00	98.62%	15.00	99.31%	100.00	100.06%	99.32%
21	Neptune	31692911	7,788.0380	2.00	99.63%	15.00	98.82%	100.00	100.09%	99.13%
22	Neptune	31547394	16,210.1580	2.00	96.64%	15.00	100.77%	100.00	100.59%	100.12%
23	Neptune	21098007	2,478.1850	2.00	83.94%	15.00	92.25%	100.00	98.70%	91.97%
24	Neptune	21092019	11,504.1150	2.00	100.38%	15.00	99.55%	100.00	101.34%	99.94%
25	Neptune	21060001	1,223.7700	2.00	0.00%	15.00	1.97%	100.00	99.75%	16.35%
26	Neptune	31677437	19,642.5250	2.00	97.67%	15.00	99.73%	100.00	100.25%	99.50%
27	Neptune	21099059	2,449.0890	2.00	99.16%	15.00	101.21%	100.00	99.75%	100.69%
28	Sensus	32410503	19,787.4250	2.00	63.78%	15.00	98.75%	100.00	97.28%	93.28%
29	Sensus	40334156	4,261.8640	2.00	54.32%	15.00	57.74%	100.00	56.00%	56.97%
30	Sensus	35454693	1,228.5070	2.00	94.69%	15.00	99.69%	100.00	101.01%	99.14%
31	Sensus	34668486	32,863.6850	2.00	66.78%	15.00	95.74%	100.00	99.01%	91.89%
32	Sensus	31950953	7,618.8050	2.00	91.20%	15.00	99.69%	100.00	99.51%	98.39%
33	Sensus	42094055	10,518.5930	2.00	92.69%	15.00	99.44%	100.00	99.57%	98.45%
34	Sensus	40334200	4,024.2100	2.00	91.69%	15.00	100.42%	100.00	100.07%	99.06%
35	Sensus	35454710	2,690.3800	2.00	92.19%	15.00	99.93%	100.00	99.57%	98.72%
36	Sensus	32410527	9,507.3600	2.00	81.23%	15.00	98.45%	100.00	98.07%	95.81%
37	Sensus	40520034	5,148.5360	2.00	89.68%	15.00	98.72%	100.00	99.74%	97.52%
38	Neptune Trident 8	23466839	4,121.0720	2.00	98.65%	15.00	100.69%	100.00	100.73%	100.39%
39	Neptune Trident 8	26099182	23,158.1320	2.00	98.15%	15.00	100.94%	100.00	100.98%	100.53%
40	Neptune Trident 8	26092566	1,644.9980	2.00	100.15%	15.00	100.69%	100.00	101.22%	100.69%
									Overall weighted average accuracy	95.68%

Large Meter test results for those large meters contributing to the guarantee are listed in the following two tables which appear earlier in this contract:

- Evansville, IN – Large Meter Benefit Summary – Tested Meters
- Evansville, IN – Large Meter Benefit Summary – Non-Testable Meters

Water Meter Accuracies Used for Determining Benefit

Meter accuracy for existing meters shall be degraded at 0.10% per annum during the guarantee term. Small and intermediate accuracies are listed in the following two tables while large meters are on a meter-by-meter basis based on the accuracies listed in the large meter benefit summary tables.

Pre-Retrofit Small and Intermediate Water Meter Accuracies

	0.625 x 0.75	1	2
Measured	98.58%	97.55%	95.68%
Year 1	98.58%	97.55%	95.68%
Year 2	98.48%	97.45%	95.58%
Year 3	98.38%	97.35%	95.48%
Year 4	98.28%	97.25%	95.38%
Year 5	98.18%	97.15%	95.28%
Year 6	98.08%	97.05%	95.18%
Year 7	97.98%	96.95%	95.08%
Year 8	97.88%	96.85%	94.98%
Year 9	97.78%	96.75%	94.88%
Year 10	97.68%	96.65%	94.78%
Year 11	97.58%	96.55%	94.68%
Year 12	97.48%	96.45%	94.58%
Year 13	97.38%	96.35%	94.48%
Year 14	97.28%	96.25%	94.38%
Year 15	97.18%	96.15%	94.28%
Year 16	97.08%	96.05%	94.18%
Year 17	96.98%	95.95%	94.08%
Year 18	96.88%	95.85%	93.98%
Year 19	96.78%	95.75%	93.88%
Year 20	96.68%	95.65%	93.78%

Post-Retrofit Small and Intermediate Water Meter Accuracies

	0.625 x 0.75	1	2
Installed	99.50%	99.00%	98.50%
Year 1	99.50%	99.00%	98.50%
Year 2	99.40%	98.90%	98.40%
Year 3	99.30%	98.80%	98.30%
Year 4	99.20%	98.70%	98.20%
Year 5	99.10%	98.60%	98.10%
Year 6	99.00%	98.50%	98.00%
Year 7	98.90%	98.40%	97.90%
Year 8	98.80%	98.30%	97.80%
Year 9	98.70%	98.20%	97.70%
Year 10	98.60%	98.10%	97.60%
Year 11	98.50%	98.00%	97.50%
Year 12	98.40%	97.90%	97.40%
Year 13	98.30%	97.80%	97.30%
Year 14	98.20%	97.70%	97.20%
Year 15	98.10%	97.60%	97.10%
Year 16	98.00%	97.50%	97.00%
Year 17	97.90%	97.40%	96.90%
Year 18	97.80%	97.30%	96.80%
Year 19	97.70%	97.20%	96.70%
Year 20	97.60%	97.10%	96.60%

Meters Included in Agreement

The guarantees set forth above are based on the meter population was either replaced or repaired. No meter benefit was calculated for meters that are only being retrofitted for the AMR system.

Meter Size	Quantity*
0.625" X 0.75"	56,883
1.00"	2,404
2.00"	1,509
3.00"	12
4.00"	100
6.00"	32
8.00"	1
TOTAL	**60,941**

*As determined by scope defined in Schedule 1 of this agreement

V. MEASUREMENT & VERIFICATION SERVICES

JCI will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a JCI Performance Assurance Engineer will track Measured Project Benefits. JCI will report the Measured Project Benefits achieved during the Installation Period, as well as any Non-Measured Project Benefits applicable to the Installation Period, to Customer within 60 days of the commencement of the Guarantee Term.

2. Within 60 days of the anniversary of the commencement of the Guarantee Term, a JCI Performance Assurance Engineer will undertake the following testing activities to verify the accuracy of the meters set forth in the table below:

    A. clean meter location/setting;
    B. visually inspect location/setting for indications of water leakage;
    C. replace meters with new or refurbished meters that have been tested in accordance with AWWA standards;
    D. send removed meters to factory-approved testing facility for accuracy bench test;
    E. rebuild and clean removed meters and store for following year; and
    F. replace any damaged and/or inaccurate meters in the test set if damage and/or inaccuracy were caused by normal wear and tear (Customer shall be responsible to replace any damaged and/or inaccurate meters not in the test set, as set forth in Schedule 3 below, as well as those in the test set to the extent damage and/or inaccuracy is caused by factors other than normal wear and tear).

Meter Testing Schedule

Meter Size	# of Meters to be Tested	Frequency of Testing
0.625" x 0.75"	66	Years 5
1"	37	Year 5
2"	59	Year 5
3"	5	Annually, Years 1 - 5
4"	37	Annually, Years 1 - 5
6"	19	Annually, Years 1 - 5
8"	1	Annually, Years 1 - 5

With respect to meters smaller than 3", the average (central tendency) and variance (spread) will be calculated to estimate the population characteristics. Additional samples may be required if the variability in the sample test shows that the sample size is not sufficient to draw valid conclusions about the population. A complete retest will be conducted if the sample average is lower than the required weighted average accuracy. If these two samples are significantly different, another retest will be conducted.

3. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will provide Customer with an annual report containing:

    D. an executive overview of the project's performance and Project Benefits achieved to date;
    E. a summary analysis of the Measured Project Benefits accounting; and
    F. a detailed analysis of the Measured Project Benefits calculations.

BUSINESS SYSTEM REVIEW

For the additional fee set forth in Schedule 4, JCI will provide the performance consulting services set forth below.*

1. Site visits as necessary to review status and operation of Improvement Measures.

2. Monthly evaluations of the billed data to assess the metering system and recommend a benefit optimization strategy to maximize value. The report will include:

   A. accounts that failed to register any consumption;

   B. accounts with minimal consumption as compared to past periods;

   C. accounts with abnormally high consumption as compared to past periods;

   D. accounts whose registered consumption is approaching the manufacturer's warranted usage limits;

   E. a review of the billed consumption and revenue of up to one hundred (100) accounts that have historically generated the highest billable consumption for Customer; and

3. Quarterly review of the water pumped and billable water and sewer usage with performance period comparison to that of target values derived from Baseline year performance. Based upon trending results, a billable consumption evaluation and recommended corrective actions plan will be provided as required. Customer will be responsible for implementing any corrective actions. The report will include the following:

   a) Non-revenued water analysis,
   b) Verification that the water and sewer rate structures are being applied correctly, and Identification of operational or retrofit opportunities that would increase billable water and sewer usage and energy cost avoidance.
   c) Identification of operational or retrofit opportunities that would increase billable water and sewer usage and energy cost avoidance.

4. Training, customer consultation and telephone support as required.

*In order for JCI to provide the consulting services, Customer must have a billing system that is capable of providing billing data extracts to JCI with all billing information in a file format that will permit performance analysis of the water system. Such billing information must be suitable for use in a Microsoft Access database and be available on a monthly basis in an ASCII Comma or Tab delimited format with the first line of the file being a header line to denote the data in each column. Monthly information with respect to each account includes the following:

• Account Number • Account Sequence – (if applicable) • Meter Sequence – (if applicable) • Cycle Code – (if applicable) • Route Code – (if applicable) • Sequence – (if applicable) • Customer Name • Customer Address • Rate Code – Water, Sewer, Irrigation (please provide one line of data per rate code)	• Account Status • Serial Number • Meter Size • Meter Manufacturer • Meter Location Information • Billing Date • Current odometer reading • Usage / consumption • Bill Amount (for each rate code item)

CUSTOMER RESPONSIBILITIES

In order for JCI to perform its obligations under this Agreement with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Customer shall be responsible for:

1. Providing JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services - during normal hours of operation.

2. Securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable JCI to perform the Work;

3. Providing assistance to JCI in obtaining any permits, approvals, and licenses that are JCI's responsibility to obtain as set forth in Schedule 1;

4. Obtaining any permits, approvals, and licenses that are necessary for the performance of the Work and are not JCI's responsibility to obtain as set forth in Schedule 1;

5. Properly maintaining, and performing appropriate preventative maintenance on, all equipment affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;

6. Providing the utility bills, reports, and similar information reasonably necessary for administering JCI's obligations under the Assured Performance Guarantee within five (5) business days of Customer receipt and/or generation or JCI's request therefore;

7. Providing all records relating to water usage and related maintenance of the premises and relevant equipment requested by JCI;

8. Providing and installing utility sub-meters on all new construction and/or additions built during the Guarantee Term as recommended by JCI or, alternatively, paying JCI's applicable fees for calculating necessary adjustments to the Assured Performance Guarantee as a result of the new construction;

9. Taking all actions reasonably necessary to achieve the Non-Measured Project Benefits;

In addition to the foregoing, Customer is responsible for the items set forth below in connection with **utility meter projects**:

1. Isolating the utility system to allow for meter/valve change out, including identification of all shut-off valves;

2. Scheduling shutdowns, downtimes, and relocation of new commercial vaults;

3. Ongoing care and maintenance of the utility system, including all meters, AMR equipment and systems, meter boxes, and meter vaults in accordance with manufacturers' specifications and recommendations;

In addition to the foregoing, Customer is responsible for the items set forth below in connection with **treatment plants improvement projects:**

1. All equipment must be operated according to the applicable operational-specifications;

2. All equipment provided as part of this project must be maintained consistently with normal utility practices;

3. All gate(s) automation at the primary clarifier, aeration tanks, and secondary clarifiers must be properly operated and maintained per the manufacturer's guidelines;

4. Periodic cleaning and/or replacement of the inlet air filter that is provided as part of the blower package;

5. The DO probes must be operated, calibrated and maintained according to the operational guidelines recommended by the manufacturer;

6. The installation of new centrifuge for dewatering of digested sludges at the East WWTP is believed to be a 'replacement-in-kind' of mechanical dewatering process currently permitted. If any additional permitting requirements are applicable, the Customer will be responsible for pursuing and completing the permitting requirements. Delays associated with possible permitting will affect the completion date of the project and reduce any associated energy/operational savings.

7. The installation and construction of Fats, Oils, and Grease (FOG) project at the operation of existing anaerobic digesters will be to the enhancement of the existing wastewater treatment process in that more methane rich biogas will be recovered by co-digesting FOG received from the Customer. The additional operational change at the WWTP will be discontinuing the biogas flaring by using a Cogen unit and release of air emissions through the Cogen unit. If any additional permitting requirements are applicable, the Customer will be responsible for pursuing and completing the permitting requirements. Delays associated with possible permitting will affect the completion date of the project and reduce any associated energy/operational savings.

Schedule 4

PRICE AND PAYMENT TERMS

Customer shall make payments to JCI pursuant to this Schedule 4.

1. *Work*. The price to be paid by Customer for the Work shall be **$51,313,432** (Fifty-one million, three hundred thirteen thousand, four hundred thirty-two dollars), which amount includes a One Million Dollar ($1,000,000) Customer-controlled contingency. The first payment due hereunder shall be in the amount of $10,935,280.00, which payment shall be due upon the closing of Customer's financing. Thereafter, JCI shall submit invoices to Customer for monthly progress payments, not to exceed $40,378,152 except for amounts resulting from change orders requested and approved by Customer. Payments of all undisputed amounts of each monthly progress payment shall be made by Customer to JCI as soon as reasonably practicable after approval of such payments by the Evansville Water and Sewer Board and in no event later than thirty (30) days after Customer's receipt of JCI's invoice. Payments (including payment for materials delivered to JCI and work performed on and off site) will be made to JCI, upon Customer obtaining financing. All payments are net 30 days from date of invoice.

   It is understood that the total contract amount of $51,313,432 contains an Owner Controlled Contingency of $1,000,000 that will not become due and payable to JCI under this Agreement. The intent is that disbursements from the funding source for the Owner Controlled Contingency (initially $1,000,000) will be made directly to Customer. The amount of the Owner Controlled Contingency can be changed via change order(s) agreed to by both parties.

   Customer acknowledges that JCI has obtained an offer of financing for this project and has provided a copy of this offer to Customer. Customer shall have until one hundred twenty (120) days after IURC approval of the financing contemplated hereby has been obtained to close on reasonable financing unless the parties mutually agree to extend this deadline.

2. *M&V Services*. The total price for JCI's M&V Services, as detailed on Schedule 2 and/or Schedule 2A of this Agreement, is $827,544. This amount will be paid to JCI in quarterly installments. These payments will be due and payable when Customer receives JCI's invoice and in advance of the services JCI is to provide, and shall be made throughout the Guarantee Term.

Contract Year	M&V Annual Contract Amount
Year 1	$144,333
Year 2	$148,375
Year 3	$152,533
Year 4	$156,805
Year 5	$225,498
Total	**$827,544**

3. For M&V Services provided in Year 6 and beyond, the Customer and JCI will negotiate the scope of M&V Services to be provided and the costs associated therewith. If the Customer elects to terminate M&V Services at any time as set forth in this Agreement, equipment warranties shall not be affected by such termination.

4. All payment obligations , under the regulated water utility, shall be subject to any applicable regulatory approval, including but not limited to the Indiana Utility Regulatory Commission Indiana Finance Authority and commercially reasonable and legal financing.

Schedule 5

CHANGE ORDER

Performance Contract dated **November 15, 2011** between Johnson Controls, Inc. and Customer (as amended) (the "Agreement")	Change Order No. **1**		Date (mo/day/yr) 09/04/2012
Customer: Evansville Water & Sewer Utilities			

The above referenced Agreement is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

The intent of this change order is to remove the wireless network which includes public Wi-Fi broadband.

A. The Scope of Work (Schedule 1 to the Agreement) is changed as follows: **Schedule 1 – Scope of Work – 3: Municipal Network Infrastructure will be revised as follows:**

1) Delete all references to Municipal Wireless Network for AMR, Public Works, Public Safety, Public Access, and other Data Services.

2) Upgrade number of fiber strands on the system from 144 to 288.

3) Establish communication backhaul to five (5) Tower Gateway Basestation (TGB) sites for the AMR system, necessary due to the deletion of the Wireless Network.

4) Vectren pole make-ready fee contingency of $1,000,000. Customer will work in good faith with JCI to negotiate fees from Vectren for this work, in order to maximize the likelihood of being able to perform the work for less than the contingency amount. Any funds not used from this contingency will be reimbursed to the Customer.

B. Pricing.

The Agreement Amount will be reduced by **$4,780,000**. Details as follows:

Description	Cost
Original Cost - Wireless Network	$6,400,000
Communication backhaul to 5 AMR Sites	$275,000
Upgrade Fiber to 288 Strand	$224,000
Engineering Costs	$121,000
Vectren Make-Ready Contingency	$1,000,000
Cost Reduction	**$4,780,000**

Total amount of this Change Order	$	**($4,780,000)**
Total Performance Contract amount as revised by this Change Order	$	**46,533,432**

The time for completion is: ☐ increased, ☐ decreased, **X** unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr) **unchanged**
[check if applicable] Assured Performance Guarantee changed as follows:	
Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.	

EVANSVILLE WATER & SEWER UTILITIES	**JOHNSON CONTROLS, INC.**
Signature: Jeff Hatfield Pres	Signature:
Printed Name: JEFF HATFIELD	Printed Name: Michael Popa
Title: PRES.	Title: AGM

CHANGE ORDER

Performance Contract dated **November 15, 2011** between Johnson Controls, Inc. and Customer	Change Order No. **2**		Date (mo/day/yr) 09/04/2012
Customer Evansville Water & Sewer Utilities			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Schedule 1 – Warranties Item #2: Additional 20 year warranty on SmartPoint metering transmitting units will be removed. Owner Controlled Contingency Fund described in Schedule 1: Scope of Work - 5 Owner Controlled Contingency will be increased by **$740,628**.

Total amount of this Change Order.....	$	**0.00**
Total Performance Contract amount as revised by this Change Order.....	$	**0.00**
The time for completion is: ☐ increased, ☐ decreased, **X** unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr)	**unchanged**

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	**JOHNSON CONTROLS, INC.**
Signature: Jeff Hatfield Pres.	Signature:
Printed Name: JEFF HATFIELD	Printed Name: Michael Popa
Title: PRES	Title: AGM

CHANGE ORDER

Performance Contract dated **November 15, 2011** between Johnson Controls, Inc. and Customer	Change Order No. **3**		Date (mo/day/yr) 09/04/2012
Customer Evansville Water & Sewer Utilities			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Schedule 1 – Scope of Work – 4: Improvements to Treatment Plants

"B. Secondary Sludge Thickening Automation and Odor Control – East Wastewater Treatment Plant" will be removed. Owner Controlled Contingency Fund described in Schedule 1: Scope of Work - 5 Owner Controlled Contingency will be increased by **$752,278**.

Total amount of this Change Order.....	$ **0.00**
Total Performance Contract amount as revised by this Change Order.....	$ **0.00**
The time for completion is: ☐ increased, ☐ decreased, **X** unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr) **unchanged**

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	**JOHNSON CONTROLS, INC.**
Signature: Jeff Hatfield	Signature:
Printed Name: JEFF HATFIELD	Printed Name: Michael Pojza
Title: PRES.	Title: AGM

CHANGE ORDER

Performance Contract dated **November 15, 2011** between Johnson Controls, Inc. and Customer	Change Order No. **4**		Date (mo/day/yr) 09/04/2012
Customer Evansville Water & Sewer Utilities			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Schedule 1 – Scope of Work – 1: Meter Replacement and Advanced Metering Infrastructure

"1. Small water meter replacement and Advanced Metering Infrastructure (AMI) system installation for all existing, active services". The intent of this change order is to increase owner contingency funds by reducing the number of small meters (5/8", 3/4", and 1") that will be changed. Customer has identified 16,596 small meters that are relatively new that will not be changed. These meters will be outfitted with the Sensus 520M SmartPoint transmitter. Quantities are as follows: (15,225) 5/8" meters; (896) 3/4" meters; and (475) 1" meters. Customer is responsible for providing account numbers and service addresses for these meters prior to project implementation.

Owner Controlled Contingency Fund described in Schedule 1: Scope of Work - 5 Owner Controlled Contingency will be increased by **$1,016,000**.

Total amount of this Change Order.....	$ **0.00**
Total Performance Contract amount as revised by this Change Order.....	$ **0.00**
The time for completion is: ☐ increased, ☐ decreased, **X** unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr) **unchanged**

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	JOHNSON CONTROLS, INC.
Signature:	Signature:
Printed Name: JEFF HATFIELD	Printed Name: Michael Popa
Title: PRES.	Title: AGM

CHANGE ORDER

Performance Contract dated **November 15, 2011** between Johnson Controls, Inc. and Customer	Change Order No. **5**		Date (mo/day/yr) 09/04/2012
Customer Evansville Water & Sewer Utilities			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

JCI will provide an amount not to exceed $258,000 (two hundred fifty-eight thousand dollars) to be used by or on behalf of Customer to buy-out the final three (3) years of the Opt-E-Man fiber leasing contract from AT&T. This amount is included within the contract price set forth in Schedule 4 to the Agreement.

Total amount of this Change Order.....	$	**0.00**
Total Performance Contract amount as revised by this Change Order.....	$	**0.00**
The time for completion is: ☐ increased, ☐ decreased, **X** unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr)	**unchanged**

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	**JOHNSON CONTROLS, INC.**
Signature:	Signature:
Printed Name: JEFF HATFIELD	Printed Name: Michael Pope
Title: PRES.	Title: AGM

CHANGE ORDER

Amended and Restated Performance Contract dated **December ___, 2012** between Johnson Controls, Inc. (JCI) and Customer	Change Order No. **6**		Date (mo/day/yr) 12/___/2012
Customer: Evansville Water & Sewer Utilities (EWSU)			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Account Number: 619-41660 – Monarch Properties

The original calculations of the Annual Benefit resulting from this account were incorrect, because the meter failed after the baseline period and just prior to testing by ME Simpson. No indicators in the baseline data pointed to the time of failure. Therefore, the accuracy pickup was applied to data that occurred when the original meter was working. The amount of the Total Project Benefits set forth in Schedules 2 and 2A to the Performance Contract shall not, however, be adjusted to account for this reduction. JCI shall remain responsible for the stated amount of the Assured Performance Guarantee.

Annual Project Benefit for Monarch Management meter:

$41,508.06 x (98.5% / 15.275%) - $41,508.06 = $226,154.39

Revised Guaranteed Annual Project Benefit for Monarch Management Meter:

$226,154.39 x 1.11 = $243,347.42[2]

Estimated Annual Project Benefit Realized for Monarch Management Meter[1]:

($857.05 x 12) x (98.5% / 15.275%) – ($857.05 x 12) = $56,035.08.

Projected Annual Project Benefit Shortfall for Monarch Management meter:

$243,347.42 - $56,035.08 = $187,312.34[1,3]

Customer and JCI acknowledge and agree that the Monarch Management meter has been replaced and the parties have determined that the Baseline billing information for such meter was inaccurate. Customer and JCI further agree and acknowledge that (i) the replacement of the Monarch Management meter prior to commencement of the meter replacement project shall have no effect on the calculation of the Annual Project Benefits or the Total Project Benefits for the project, which shall be calculated as if the meter was replaced by JCI prior to Project Completion, and (ii) that JCI shall either pay to Customer the amount of the Annual Project Benefit Shortfall realized with respect to such meter or reconcile such Annual Project Benefit Shortfall against actual Annual Project Benefit Surpluses or Shortfalls achieved on other aspects of the Project as provided in Schedules 2 and 2A to the Agreement.

[1] Based on information available for September, 2012 only. Annual Project Benefit Realized for the Monarch Management meter will be based upon full year's data in determining actual Annual Project Benefit Realized.

[2] Revised Guaranteed Annual Project Benefit takes into consideration the 11% sewer rate increase, as shown on the chart in Schedule 2A entitled Evansville, IN – Large Meter Benefit Summary – Tested Meters.

[3] This figure already included the increased sewer rate.

Total amount of this Change Order.....	$ 0.00
Total Performance Contract amount as revised by this Change Order.....	$ 0.00
The time for completion is: ☐ increased, ☐ decreased, X unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr) unchanged

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	JOHNSON CONTROLS, INC.
Signature:	Signature:
Printed Name: Jeffrey Dalfield	Printed Name: Michael Popa
Title: President	Title: Area General Mgr

NOTICE TO PROCEED

Johnson Controls, Inc.
1255 N. Senate Avenue
Indianapolis, IN 46202
ATTN: David Peters

Re: Notice to Proceed for Evansville Water & Sewer Utilities ESPC Project

Dear Mr. Peters:

This Notice to Proceed is being issued by the Evansville Water & Sewer Utilities ("Customer") to Johnson Controls, Inc. ("JCI") pursuant to that certain Performance Contract entered into between Customer and JCI for the purpose of notifying JCI to commence work under such contract.

In the event that this Notice to Proceed is delivered by Customer prior to the execution of the Performance Contract by Customer and JCI, Customer understands and expects JCI will incur significant costs and expenses in complying with this Notice to Proceed. In the event the Performance Contract is not executed by the parties, for any reason, Customer agrees to pay JCI for its costs and fees incurred in complying with this Notice to Proceed on a time and material basis. Customer also agrees JCI shall be entitled to a reasonable markup thereon for profit and overhead. Customer agrees to seek approval of undisputed amounts billed by JCI no later than the next meeting of the Evansville Water and Sewer Board (the "EWSB") after Customer receives JCI's payment application and agrees to pay such undisputed amounts as soon as reasonably practicable after approved by the EWSB. JCI will continue to submit payment applications to Customer until the Performance Contract is executed. Once the Performance Contract is executed, JCI will begin submitting its payment applications to Customer in accordance with the terms and conditions set forth therein. Any amounts already paid by Customer will be credited towards the Performance Contract price.

By signing and dating this Notice to Proceed, the parties hereto agree to these terms and represent and warrant they have the authority to execute this Notice to Proceed on behalf of their respective organizations.

EVANSVILLE WATER & SEWER UTILITIES

Signature:_____

Printed Name:_____

Title:_____

Date:_____

ACKNOWLEDGED & AGREED TO:

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

Date:_____

Attachment 2

CHANGE ORDER

Performance Contract dated , 20 between Johnson Controls, Inc. and Customer	Change Order No.		Date (mo/day/yr)
Customer Evansville Water & Sewer Utilities			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Total amount of this Change Order.....	$
Total Performance Contract amount as revised by this Change Order.....	$
The time for completion is: ☐ increased, ☐ decreased, ☐ unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr)

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

EVANSVILLE WATER & SEWER UTILITIES	JOHNSON CONTROLS, INC.
Signature:	Signature:
Printed Name:	Printed Name:
Title:	Title:

CERTIFICATE OF SUBSTANTIAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
1255 N. Senate Avenue
Indianapolis, IN 46202

EVANSVILLE WATER & SEWER UTILITIES ("Customer")
1 NW MARTIN LUTHER KING, JR. BLVD.
EVANSVILLE, IN 47708

PROJECT: Evansville Water & Sewer Utilities Performance Contract dated _____ __, 20__ between JCI and Customer

By executing this Certificate of Substantial Completion, Customer acknowledges the following:

a. The work set forth in the Performance Contract is substantially complete.

b. Customer has received the manuals, warranty information, and training required under the Performance Contract.

c. The following punch list items must be completed by JCI (check as applicable):

☐ punch list attached
☐ punch list complete

d. Upon completion of the punch list items, or if such punch list items are complete, JCI and Customer shall sign the Certificate of Final Completion attached hereto.

Dated , 20 .

EVANSVILLE WATER & SEWER UTILITIES

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

CERTIFICATE OF FINAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
1255 N. Senate Avenue
Indianapolis, IN 46202

EVANSVILLE WATER & SEWER UTILITIES ("Customer")
1 NW MARTIN LUTHER KING, JR. BLVD.
EVANSVILLE, IN 47708

PROJECT: Evansville Water & Sewer Utilities Performance Contract dated _____, 20___ between JCI and Customer

By executing this Certificate of Final Completion, Customer acknowledges the following:

a. The work set forth in the Performance Contract has been reviewed and determined by Customer to be fully complete.

b. Customer accepts the work as complete and hereby releases JCI's obligations under any performance and payment bonds posted for the project as of the date set forth below.

Dated , 20 .

EVANSVILLE WATER & SEWER UTILITIES

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

Lighting Details: Attachment 5

ID	PropertyName	Room Data ID	Room Name	Usage Schedule	Room Ex Fixture ID	Room Ex Fixture Watts	Room Ex Fixture Qty	Room Ex Yearly Usage	Ex Kw	Ex Kwh	Room Ret Fixture ID	Room Ret Fixture Watts	Room Ret Fixture Qty	Room Ret Yearly Usage	Sensor	Ret Kw	Ret Kwh	Kw Savings	Kwh Savings
37528	Evansville East Sewage Plant	100	Admin Bldg-Lobby	Admin	8'W4LX4'-34W	116	22	3120	2.552	7962.24	8'W4LX4'-T8-25W	85	22	3120		1.87	5834.4	0.682	2127.84
37529	Evansville East Sewage Plant	100.1	Admin Bldg-Lobby	Admin	4'W2L-34W	66	4	3120	0.264	823.68	4'W2L-T8-25W	43	4	3120		0.172	536.64	0.092	287.04
37530	Evansville East Sewage Plant	100.2	Admin Bldg-Lobby	JAN/Mainteance	4'Direct/Indirect-2L-34W	66	3	1040	0.198	205.92	4'W2L-T8-LO-25W	37	3	1040		0.111	115.44	0.087	90.48
37531	Evansville East Sewage Plant	100.3	STORAGE CLOSET	JAN/Mainteance	2x4-4L-34W	119	1	1040	0.119	123.76	2x4-2L-T8-R-25W	43	1	1040		0.043	44.72	0.076	79.04
37532	Evansville East Sewage Plant	100.4	OFFICE	Admin	8'W4LX4'-34W	116	2	3120	0.232	723.84	8'W4LX4'-T8-25W	85	2	2340	YES	0.17	397.8	0.062	326.04
37536	Evansville East Sewage Plant	100.41	OFFICE	Sensor	WALL SWITCH TOGGLE	0	2	0	0	0	WS-Sensor-DG	0	2	0		0	0	0	0
37533	Evansville East Sewage Plant	100.5	Harry's Ofc	Admin	8'W4LX4'-34W	116	2	3120	0.232	723.84	8'W4LX4'-T8-25W	85	2	2340	YES	0.17	397.8	0.062	326.04
37534	Evansville East Sewage Plant	100.51	Harry's Ofc	Admin	4'W2L-34W	66	2	3120	0.132	411.84	4'W2L-T8-25W	43	2	2340	YES	0.086	201.24	0.046	210.6
37537	Evansville East Sewage Plant	100.52	Harry's Ofc	Sensor	WALL SWITCH TOGGLE	0	2	0	0	0	WS-Sensor-DG	0	2	0		0	0	0	0
37535	Evansville East Sewage Plant	100.6	OFFICE	Admin	4'W2L-34W	66	2	3120	0.132	411.84	4'W2L-T8-25W	43	2	2340	YES	0.086	201.24	0.046	210.6
37538	Evansville East Sewage Plant	100.7	OFFICE	Admin	8'W4LX4'-34W	116	2	3120	0.232	723.84	8'W4LX4'-T8-25W	85	2	2340	YES	0.17	397.8	0.062	326.04
37539	Evansville East Sewage Plant	100.71	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor-DG	0	1	0		0	0	0	0
37540	Evansville East Sewage Plant	100.8	OFFICE	Admin	8'W4LX4'-34W	116	2	3120	0.232	723.84	8'W4LX4'-T8-25W	85	2	2340	YES	0.17	397.8	0.062	326.04
37541	Evansville East Sewage Plant	100.81	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor-DG	0	1	0		0	0	0	0
37542	Evansville East Sewage Plant	100.9	CONF RM	Classroom	8'W4LX4'-34W	116	2	2600	0.232	603.2	8'W4LX4'-T8-25W	85	2	2600		0.17	442	0.062	161.2
37543	Evansville East Sewage Plant	100.91	CONF RM	Classroom	4'W2L-34W	66	2	2600	0.132	343.2	4'W2L-T8-25W	43	2	2600		0.086	223.6	0.046	119.6
37544	Evansville East Sewage Plant	101	Lab	Classroom	8'W4LX4'-34W	116	2	2600	0.232	603.2	8'W4LX4'-T8-25W	85	2	2600		0.17	442	0.062	161.2
37545	Evansville East Sewage Plant	101.1	Lab	Classroom	4'W2L-34W	66	2	2600	0.132	343.2	4'W2L-T8-25W	43	2	2600		0.086	223.6	0.046	119.6
37546	Evansville East Sewage Plant	102	OFFICE	Admin	2x4-4L-34W	119	3	3120	0.357	1113.84	2X4-4L-T8-25W	85	3	2340	YES	0.255	596.7	0.102	517.14
37547	Evansville East Sewage Plant	102.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	2	0	0	0	WS-Sensor-DG	0	2	0		0	0	0	0
37548	Evansville East Sewage Plant	103	WRR	Restroom-24hr	4'Direct/Indirect-2L-34W	66	1	2555	0.066	168.63	4'W2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37549	Evansville East Sewage Plant	104	MRR	Restroom-24hr	4'Direct/Indirect-2L-34W	66	1	2555	0.066	168.63	4'W2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37550	Evansville East Sewage Plant	105	Janitor Closet	JAN/Mainteance	4'T2L-34W	66	1	1040	0.066	68.64	4'T2L-T8-LO-25W	37	1	1040		0.037	38.48	0.029	30.16
37551	Evansville East Sewage Plant	106	HALLWAY	Admin	2X2-2U	78	5	3120	0.39	1216.8	2X2-3L-T8-R	45	5	3120		0.225	702	0.165	514.8
37552	Evansville East Sewage Plant	107	Garage	Admin	8'I4LX4'-34W	119	10	3120	1.19	3712.8	8'I4LX4'-T8-HO-25W	124	10	3120		1.24	3868.8	-0.05	-156
37553	Evansville East Sewage Plant	108	STAIRS	Admin	4'I2L-34W	66	1	3120	0.066	205.92	4'I2L-T8-25W	43	1	3120		0.043	134.16	0.023	71.76
37554	Evansville East Sewage Plant	108.1	STAIRS	Admin	4'Direct/Indirect-2L-34W	66	2	3120	0.132	411.84	4'W2L-T8-25W	43	2	3120		0.086	268.32	0.046	143.52
37555	Evansville East Sewage Plant	109	Admin Bldg-Basement	Admin-Pump Rm	4'I2L-34W	66	35	2555	2.31	5902.05	4'I2L-T8-25W	43	35	2555		1.505	3845.275	0.805	2056.775
37556	Evansville East Sewage Plant	110	Front Stairs	Admin-Pump Rm	4'Direct/Indirect-2L-34W	66	1	2555	0.066	168.63	4'W2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37557	Evansville East Sewage Plant	110.1	Front Stairs	Admin-Pump Rm	2x4-4L-34W	119	1	2555	0.119	304.045	2X4-4L-T8-25W	85	1	2555		0.085	217.175	0.034	86.87
37558	Evansville East Sewage Plant	111	Basement Restrm	Storage Closet	4'I2L-34W	66	2	520	0.132	68.64	4'I2L-T8-25W	43	2	520		0.086	44.72	0.046	23.92
37559	Evansville East Sewage Plant	111.1	Basement Restrm	Storage Closet	4'DAMP2L-34W	66	1	520	0.066	34.32	4'DAMP2L-T8-25W	43	1	520		0.043	22.36	0.023	11.96
37560	Evansville East Sewage Plant	112	Basement Control Rm	Storage Closet	4'T2L-34W	66	9	520	0.594	308.88	4'T2L-T8-25W	43	9	520		0.387	201.24	0.207	107.64
37561	Evansville East Sewage Plant	113	BASEMENT	24 Hour	Exit Red/Emerg	40	2	8760	0.08	700.8	EXIT/EMERG-LED-NEW	2	2	8760		0.004	35.04	0.076	665.76
37562	Evansville East Sewage Plant	113.1	STAIRS	24 Hour	Exit Red/Emerg	40	1	8760	0.04	350.4	EXIT/EMERG-LED-NEW	2	1	8760		0.002	17.52	0.038	332.88
37563	Evansville East Sewage Plant	114	Admin Bldg- Exterior	NIGHT	100W-MH-WALL	125	2	4015	0.25	1003.75	55w-Induction-Wallpack	58	2	4015		0.116	465.74	0.134	538.01
37565	Evansville East Sewage Plant	115.1	Control Rm	Admin-24hr	4'I2l-t8	48	5	5475	0.24	1314	RELAMP-2L-4'T8-25W	46	5	5475		0.23	1259.25	0.01	54.75
37566	Evansville East Sewage Plant	115.2	Main Rm	24 Hour	CF-42Wx2-HighBay-ExplosionProof	84	13	8760	1.092	9565.92	NO RETROFIT	84	13	8760		1.092	9565.92	0	0
37567	Evansville East Sewage Plant	115.3	BASEMENT	24 Hour	CF-42Wx2-HighBay-ExplosionProof	84	9	8760	0.756	6622.56	NO RETROFIT	84	9	8760		0.756	6622.56	0	0
37568	Evansville East Sewage Plant	115.4	Exterior	NIGHT	250W-MH-WALL	288	3	4015	0.864	3468.96	100w-Induction-Wallpack	105	3	4015		0.315	1264.725	0.549	2204.235
37570	Evansville East Sewage Plant	116.1	Generator Rm	Admin-24hr	4'DAMP2L-34W	66	2	5475	0.132	722.7	4'DAMP2L-T8-25W	43	2	5475		0.086	470.85	0.046	251.85
37571	Evansville East Sewage Plant	116.2	Generator Rm	Admin-24hr	100W-INC-PB	100	1	5475	0.1	547.5	CF-23W-SLS	23	1	5475		0.023	125.925	0.077	421.575
37572	Evansville East Sewage Plant	116.3	Generator Rm	Admin-24hr	8'DAMP4LX4'-34W	119	5	5475	0.595	3257.625	8'W4LX4'-T8-25W	85	5	5475		0.425	2326.875	0.17	930.75
37573	Evansville East Sewage Plant	116.4	Generator Rm	Admin-24hr	4'DAMP2L-34W	66	2	5475	0.132	722.7	4'DAMP2L-T8-25W	43	2	5475		0.086	470.85	0.046	251.85
37574	Evansville East Sewage Plant	116.5	HALLWAY	Admin-24hr	2x4-4L-34W	119	3	5475	0.357	1954.575	2X4-4L-T8-25W	85	3	5475		0.255	1396.125	0.102	558.45
37575	Evansville East Sewage Plant	116.6	MRR	Restroom-24hr	2'W2L	45	2	2555	0.09	229.95	2'W2L-T8-LO	28	2	2555		0.056	143.08	0.034	86.87
37576	Evansville East Sewage Plant	116.7	MRR	Restroom-24hr	4'W2L-34W	66	2	2555	0.132	337.26	4'W2L-T8-25W	43	2	2555		0.086	219.73	0.046	117.53
37577	Evansville East Sewage Plant	116.8	WRR	Restroom-24hr	60wx4 Inc Vanity	240	1	2555	0.24	613.2	2'W2L-T8-LO-VANITY-NEW	28	1	2555		0.028	71.54	0.212	541.66
37578	Evansville East Sewage Plant	116.9	STORAGE CLOSET	JAN/Mainteance	2x4-4L-34W	119	1	1040	0.119	123.76	2x4-2L-T8-R-25W	43	1	1040		0.043	44.72	0.076	79.04
37579	Evansville East Sewage Plant	117	BRK RM	Restroom-24hr	Drink Machines	400	1	2555	0.4	1022	Vending Miser	400	1	2555		0.4	1022	0	0
37580	Evansville East Sewage Plant	117.1	BRK RM closet	JAN/Mainteance	2x4-4L-34W	119	1	1040	0.119	123.76	2x4-2L-T8-R-25W	43	1	1040		0.043	44.72	0.076	79.04
37581	Evansville East Sewage Plant	117.2	BRK RM	Restroom-24hr	2x4-4L-34W	119	4	2555	0.476	1216.18	2x4-2L-T8-R-25W	43	4	2555		0.172	439.46	0.304	776.72
37582	Evansville East Sewage Plant	117.3	OFFICE	Admin-24hr	2x4-4L-34W	119	4	5475	0.476	2606.1	2x4-2L-T8-R-25W	43	4	5475		0.172	941.7	0.304	1664.4
37583	Evansville East Sewage Plant	117.4	IT Rm	Admin-24hr	2x4-4L-34W	119	6	5475	0.714	3909.15	2x4-2L-T8-R-25W	43	6	5475		0.258	1412.55	0.456	2496.6
37584	Evansville East Sewage Plant	117.5	OFFICE	Admin-24hr	2x4-4L-34W	119	4	5475	0.476	2606.1	2x4-2L-T8-R-25W	43	4	5475		0.172	941.7	0.304	1664.4
37585	Evansville East Sewage Plant	117.6	OFFICE	Admin-24hr	2x4-4L-34W	119	4	5475	0.476	2606.1	2x4-2L-T8-R-25W	43	4	5475		0.172	941.7	0.304	1664.4
37586	Evansville East Sewage Plant	117.7	BASEMENT	Admin-Pump Rm	8'DAMP4LX4'-34W	119	1	2555	0.119	304.045	8'W4LX4'-T8-25W	85	1	2555		0.085	217.175	0.034	86.87
37587	Evansville East Sewage Plant	117.71	BASEMENT	Admin-Pump Rm	4'DAMP2L-34W	66	6	2555	0.396	1011.78	4'DAMP2L-T8-25W	43	6	2555		0.258	659.19	0.138	352.59
37588	Evansville East Sewage Plant	118	Chlorine Rm			0		0	0	0				0		0	0	0	0
37589	Evansville East Sewage Plant	118.1	Chlorine Rm	Admin-24hr	4'DAMP2L-34W-SinglePin	66	3	5475	0.198	1084.05	4'DAMP2L-T8-HO-25W- Zbracket W/ sockets	60	3	5475		0.18	985.5	0.018	98.55
37590	Evansville East Sewage Plant	118.2	Chlorine Rm	Admin-24hr	8'S2L-95W	207	1	5475	0.207	1133.325	8'S4LX4'-T8-HO-KIT-25W	120	1	5475		0.12	657	0.087	476.325
37591	Evansville East Sewage Plant	118.3	Chlorine Rm	Admin-24hr	100W-MH-WALL	125	4	5475	0.5	2737.5	55w-Induction-Wallpack	58	4	5475		0.232	1270.2	0.268	1467.3
37592	Evansville East Sewage Plant	118.4	Chlorine Rm-Exterior	NIGHT	100W-MH-Flood-WALL	125	1	4015	0.125	501.875	70W-Induction-Flood	74	1	4015		0.074	297.11	0.051	204.765
37593	Evansville East Sewage Plant	119	Digester Bldg #1	Admin-24hr	4'W2L-34w-SinglePin-ExplosionProof	66	6	5475	0.396	2168.1	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	6	5475		0.258	1412.55	0.138	755.55
37594	Evansville East Sewage Plant	119.1	Digester Bldg #1-Basement	Admin-24hr	4'W2L-34w-SinglePin-ExplosionProof	66	5	5475	0.33	1806.75	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	5	5475		0.215	1177.125	0.115	629.625
37595	Evansville East Sewage Plant	119.2	Digester Bldg #1- Exterior	NIGHT	100W-MH-WALL	125	1	4015	0.125	501.875	55w-Induction-Wallpack	58	1	4015		0.058	232.87	0.067	269.005
37596	Evansville East Sewage Plant	120	Digester Bldg #2/3	Admin-24hr	4'W2L-34w-SinglePin-ExplosionProof	66	10	5475	0.66	3613.5	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	10	5475		0.43	2354.25	0.23	1259.25
37597	Evansville East Sewage Plant	120.1	Digester Bldg #2/3-Basement	Admin-24hr	4'W2L-34w-SinglePin-ExplosionProof	66	7	5475	0.462	2529.45	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	7	5475		0.301	1647.975	0.161	881.475
37598	Evansville East Sewage Plant	120.2	Digester Bldg #2/3-Exterior	NIGHT	100W-MH-WALL	125	2	4015	0.25	1003.75	55w-Induction-Wallpack	58	2	4015		0.116	465.74	0.134	538.01
37599	Evansville East Sewage Plant	121	Boiler Rm Bldg	Admin-24hr	4'W2L-34w-SinglePin-ExplosionProof	66	13	5475	0.858	4697.55	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	13	5475		0.559	3060.525	0.299	1637.025
37600	Evansville East Sewage Plant	121.1	Boiler Rm Bldg	Admin-24hr	4'I2L-34W	66	1	5475	0.066	361.35	4'I2L-T8-25W	43	1	5475		0.043	235.425	0.023	125.925
37601	Evansville East Sewage Plant	121.2	Boiler Rm Bldg stairs	Admin-24hr	4'DAMP2L-34W	66	2	5475	0.132	722.7	4'DAMP2L-T8-25W	43	2	5475		0.086	470.85	0.046	251.85
37602	Evansville East Sewage Plant	121.3	Boiler Rm Bldg- Basement	Admin-24hr	4'DAMP2L-34W	66	16	5475	1.056	5781.6	4'DAMP2L-T8-25W	43	16	5475		0.688	3766.8	0.368	2014.8
37603	Evansville East Sewage Plant	121.4	Boiler Rm Bldg- Exterior	NIGHT	100W-MH-WALL	125	3	4015	0.375	1505.625	55w-Induction-Wallpack	58	3	4015		0.174	698.61	0.201	807.015
37604	Evansville East Sewage Plant	122	Mixer Bldg 1	Admin-24hr	4'DAMP2L-T8	48	8	5475	0.384	2102.4	RELAMP-2L-4'T8-25W	46	8	5475		0.368	2014.8	0.016	87.6
37605	Evansville East Sewage Plant	122.1	Mixer Bldg 1- Exterior	NIGHT	150W-MH-Wallpacks	184	2	4015	0.368	1477.52	80w-Induction-Wallpack	84	2	4015		0.168	674.52	0.2	803
37606	Evansville East Sewage Plant	123	Mixer Bldg 2	Admin-24hr	4'DAMP2L-T8	48	8	5475	0.384	2102.4	RELAMP-2L-4'T8-25W	46	8	5475		0.368	2014.8	0.016	87.6
37607	Evansville East Sewage Plant	123.1	Mixer Bldg 2- Exterior	NIGHT	150W-MH-Wallpacks	184	2	4015	0.368	1477.52	80w-Induction-Wallpack	84	2	4015		0.168	674.52	0.2	803
37608	Evansville East Sewage Plant	124	Small Blower Bldg	Admin-24hr	4'DAMP2L-34W-SinglePin	66	4	5475	0.264	1445.4	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	4	5475		0.172	941.7	0.092	503.7

Lighting Details: Attachment 5

37615	Evansville East Sewage Plant		127.1	Main Blower Bldg	Admin-24hr	4'DAMP2L-24W-SinglePin	66	13	5475	0.858	4697.55	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	13	5475		0.559	3060.525	0.299	1637.025
37617	Evansville East Sewage Plant		127.2	Main Blower Bldg	24 Hour	Exit/Emerg-Red-Inc	40	2	8760	0.08	700.8	EXIT/EMERG-LED-NEW	2	2	8760		0.004	35.04	0.076	665.76
37614	Evansville East Sewage Plant		127.3	Main Blower Bldg Exterior	NIGHT	150W-MH-Wallpacks	184	2	4015	0.368	1477.52	80w-Induction-Wallpack	84	2	4015		0.168	674.52	0.2	803
37619	Evansville East Sewage Plant		128	Bldg 70	Admin-24hr	4'DAMP2L-24W-SinglePin	66	8	5475	0.528	2890.8	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	8	5475		0.344	1883.4	0.184	1007.4
37620	Evansville East Sewage Plant		128.1	Bldg 70-Basement	Admin-24hr	4'DAMP2L-24W-SinglePin	66	23	5475	1.518	8311.05	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	23	5475		0.989	5414.775	0.529	2896.275
37621	Evansville East Sewage Plant		129	Tunnel to Blower Rm	Admin-24hr	4'DAMP2L-24W-SinglePin	66	13	5475	0.858	4697.55	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	13	5475		0.559	3060.525	0.299	1637.025
37622	Evansville East Sewage Plant		130	Tunnel from Blower Rm to Digester Bldg (-->)Sign	Admin-24hr	4'DAMP2L-24W-SinglePin	66	16	5475	1.056	5781.6	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	16	5475		0.688	3766.8	0.368	2014.8
37623	Evansville East Sewage Plant		131	Tunnel from Main Entrance to Blower Bldg Sign (<--)	Admin-24hr	4'DAMP2L-24W-SinglePin	66	29	5475	1.914	10479.15	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	29	5475		1.247	6827.325	0.667	3651.825
37624	Evansville East Sewage Plant		132	Tunnel through basement of Digester #4 to #2/3	Admin-24hr	4'DAMP2L-24W-SinglePin	66	3	5475	0.198	1084.05	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	3	5475		0.129	705.275	0.069	377.775
37625	Evansville East Sewage Plant		133	Tunnel from Digester #2/3 to #1	Admin-24hr	4'DAMP2L-24W-SinglePin	66	19	5475	1.254	6865.65	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	19	5475		0.817	4473.075	0.437	2392.575
37626	Evansville East Sewage Plant		134	Tunnell Leading to Bldg 88	Admin-24hr	4'DAMP2L-24W-SinglePin	66	16	5475	1.056	5781.6	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	16	5475		0.688	3766.8	0.368	2014.8
37627	Evansville East Sewage Plant		135	Basement of Bldg 88	Admin-24hr	4'DAMP2L-24W-SinglePin	66	3	5475	0.198	1084.05	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	3	5475		0.129	705.275	0.069	377.775
37628	Evansville East Sewage Plant		136	Blower Rm	Admin-24hr	4'DAMP2L-24W-SinglePin	66	8	5475	0.528	2890.8	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	8	5475		0.344	1883.4	0.184	1007.4
37629	Evansville East Sewage Plant		136.1	Blower Rm	24 Hour	Exit Red/Emerg	40	1	8760	0.04	350.4	EXIT/EMERG-LED-NEW	2	1	8760		0.002	17.52	0.038	332.88
37630	Evansville East Sewage Plant		137	STAIRS	Admin-24hr	150W-MH-Wallpacks	184	2	5475	0.368	2014.8	80w-Induction-Wallpack	84	2	5475		0.168	919.8	0.2	1095
37631	Evansville East Sewage Plant		137.1	STAIRS	Admin-24hr	4'DAMP2L-24W-SinglePin	66	1	5475	0.066	361.35	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	1	5475		0.043	235.425	0.023	125.925
37632	Evansville East Sewage Plant		138	Bldg 88 1st Flr	Admin-24hr	250W-MH-HB	299	7	5475	2.093	11459.175	150w-Induction-HighBay	158	7	5475		1.106	6055.35	0.987	5403.825
37633	Evansville East Sewage Plant		138.1	Bldg 88 1st Flr	24 Hour	Exit Red/Emerg	40	2	8760	0.08	700.8	EXIT/EMERG-LED-NEW	2	2	8760		0.004	35.04	0.076	665.76
37634	Evansville East Sewage Plant		138.2	Bldg 88 1st Flr RR	Restroom-24hr	4'DAMP2L-34W	66	7	2555	0.466	168.63	4'DAMP2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37635	Evansville East Sewage Plant		138.3	Bldg 88 Utility Rm	JAN/Maintenance	4'DAMP2L-34W	66	2	1040	0.132	137.28	4'DAMP2L-T8-25W	43	2	1040		0.086	89.44	0.046	47.84
37636	Evansville East Sewage Plant		138.4	Bldg 88- 2 Rm	Admin-24hr	150W-MH-Wallpacks	184	2	5475	0.368	2014.8	80w-Induction-Wallpack	84	2	5475		0.168	919.8	0.2	1095
37637	Evansville East Sewage Plant		138.4.1	Bldg 88- 2 Rm	24 Hour	Exit Red/Emerg	40	1	8760	0.04	350.4	EXIT/EMERG-LED-NEW	2	1	8760		0.002	17.52	0.038	332.88
37638	Evansville East Sewage Plant		138.5	Bldg 88- Control Rm	Admin-24hr	2x4-4L-34W	119	8	5475	0.952	5212.2	2x4-2L-T8-R-HO-25W	57	8	5475		0.456	2496.6	0.496	2715.6
37639	Evansville East Sewage Plant		138.6	Bldg 88- Staier	Admin-24hr	150W-MH-Wallpacks	184	1	5475	0.184	1007.4	80w-Induction-Wallpack	84	1	5475		0.084	459.9	0.1	547.5
37640	Evansville East Sewage Plant		138.61	Bldg 88- Stairs	Admin-24hr	4T2L-34W	66	1	5475	0.066	361.35	4T2L-T8-25W	43	1	5475		0.043	235.425	0.023	125.925
37641	Evansville East Sewage Plant		138.7	Bldg 88 Garage	Admin-24hr	250W-MH-HB	299	7	5475	2.093	11459.175	150w-Induction-HighBay	158	7	5475		1.106	6055.35	0.987	5403.825
37642	Evansville East Sewage Plant		138.8	Bldg 88- Exterior	NIGHT	150W-MH-Wallpacks	184	8	4015	1.472	5910.08	80w-Induction-Wallpack	84	8	4015		0.672	2698.08	0.8	3212
37643	Evansville East Sewage Plant		138.9	Bldg 88- Sludge Garage	Admin-24hr	250W-MH-HB	299	7	5475	2.093	11459.175	150w-Induction-HighBay	158	7	5475		1.106	6055.35	0.987	5403.825
37644	Evansville East Sewage Plant		139	Bldg 88- Stairs	Admin-24hr	150W-MH-Wallpacks	184	1	5475	0.184	1007.4	80w-Induction-Wallpack	84	1	5475		0.084	459.9	0.1	547.5
37645	Evansville East Sewage Plant		139.1	Bldg 88- 2nd Flr	Admin-24hr	250W-MH-HB	299	7	5475	2.093	11459.175	150w-Induction-HighBay	158	7	5475		1.106	6055.35	0.987	5403.825
37646	Evansville East Sewage Plant		139.2	Bldg 88- 2nd Flr closet	JAN/Maintenance	4'DAMP2L-34W	66	2	1040	0.132	137.28	4'DAMP2L-T8-25W	43	2	1040		0.086	89.44	0.046	47.84
37647	Evansville East Sewage Plant		139.3	Bldg 88- 2nd Flr control rm	Staff Office	250W-MH-WALL	288	2	1300	0.576	748.8	80w-Induction-Wallpack	84	2	1300		0.168	218.4	0.408	530.4
37648	Evansville East Sewage Plant		139.4	Bldg 88- Stairs 2	Admin-24hr	150W-MH-Wallpacks	184	2	5475	0.368	2014.8	80w-Induction-Wallpack	84	2	5475		0.168	919.8	0.2	1095
37649	Evansville East Sewage Plant		140	Parking Lot	NIGHT	250W-HPS-Cobrahead	295	17	4015	5.015	20135.225	150w-Induction-Roadway(cobrahead)	158	17	4015		2.686	10784.29	2.329	9350.935
37650	Evansville East Sewage Plant		140.1	Main Road Entrance	NIGHT	250W-HPS-Cobrahead	295	6	4015	1.77	7106.55	150w-Induction-Roadway(cobrahead)	158	6	4015		0.948	3806.22	0.822	3300.78
37651	Evansville East Sewage Plant		140.2	Area Lighting	NIGHT	1000W MH Flood	1077	24	4015	25.848	103779.72	400w-Induction-SHOX-Flood	420	24	4015		10.08	40471.2	15.768	63308.52
37755	Evansville Waste Water Lab		100	ENTRANCE	Admin	2x4-4L-34W	119	2	3120	0.238	742.56	2x4-2L-T8-R-25W	43	2	3120		0.086	268.32	0.152	474.24
37756	Evansville Waste Water Lab		101	Lab	Admin	2x4-4L-34W	119	34	3120	4.046	12623.52	2x4-2L-T8-R-HO-25W	57	34	3120		1.938	6046.56	2.108	6576.96
37757	Evansville Waste Water Lab		102	OFFICE	Admin	2x4-4L-34W	119	4	3120	0.476	1485.12	2x4-2L-T8-R-25W	43	4	3120		0.172	536.64	0.304	948.48
37758	Evansville Waste Water Lab		103	BRK RM	Admin	2x4-4L-34W	119	4	3120	0.476	1485.12	2x4-2L-T8-R-25W	43	4	3120		0.172	536.64	0.304	948.48
37759	Evansville Waste Water Lab		104	MRR	Restroom2	2x4-4L-34W	119	3	1560	0.357	556.92	2x4-2L-T8-R-25W	43	3	1560		0.129	201.24	0.228	355.68
37760	Evansville Waste Water Lab		105	WRR	Restroom2	2x4-4L-34W	119	2	1560	0.238	371.28	2x4-2L-T8-R-25W	43	2	1560		0.086	134.16	0.152	237.12
37761	Evansville Waste Water Lab		106	Mechanical RM	JAN/Maintenance	8'W4LW4'-34W	116	1	1040	0.116	120.64	8'W4LW4'-T8-25W	85	1	1040		0.085	88.4	0.031	32.24
37762	Evansville Waste Water Lab		107	Store RM	Admin	2x4-4L-34W	119	4	3120	0.476	1485.12	2x4-2L-T8-R-25W	43	4	3120		0.172	536.64	0.304	948.48
37763	Evansville Waste Water Lab		108	Testing Equipement	Admin	200W-INC-PB	200	2	3120	0.4	1248	CF-23W-SLS	28	2	3120		0.056	174.72	0.344	1104.48
37764	Evansville Waste Water Lab		109	Copy Rm	Admin	2x4-4L-34W	119	3	3120	0.357	1113.84	2x4-2L-T8-R-25W	43	3	3120		0.129	402.48	0.228	711.36
37765	Evansville Waste Water Lab		110	HALLWAY	Admin	2X4-2L-34W-EB	66	1	3120	0.066	205.92	2X4-2L-T8-25W	43	1	3120		0.043	134.16	0.023	71.76
37766	Evansville Waste Water Lab		111	OFFICE	Admin	2X4-3L-T8	74	2	3120	0.148	461.76	RELAMP-3L-4'T8-25W	66	2	3120		0.132	411.84	0.016	49.92
37767	Evansville Waste Water Lab		112	Mech Rm	JAN/Maintenance	4'2L-T8	48	4	1040	0.192	199.68	RELAMP-2L-4'T8-25W	48	4	1040		0.184	191.36	0.008	8.32
37768	Evansville Waste Water Lab		112.1	Mech Rm	JAN/Maintenance	2X4-4L-T8	106	7	1040	0.742	771.68	RELAMP-4L-4'T8-25W	86	7	1040		0.602	626.08	0.14	145.6
37769	Evansville Waste Water Lab		113	STORAGE CLOSET	Storage Closet	2X4-3L-T8	74	2	520	0.148	76.96	RELAMP-3L-4'T8-25W	66	2	520		0.132	68.64	0.016	8.32
37770	Evansville Waste Water Lab		114	EXTERIOR ENTRANCE	NIGHT	100W-MH-Pole	125	2	4015	0.25	1003.75	No RETROFIT	125	2	4015		0.25	1003.75	0	0
37654	Evansville Water & Sewer Operations		100	Entrance	Admin	EXIT LED	3	1	3120	0.003	9.36	NO RETROFIT	0	1	3120		0	0	0.003	9.36
37655	Evansville Water & Sewer Operations		100.1	Entrance	Admin	CF-18W-Can	18	4	3120	0.072	224.64	NO RETROFIT	18	4	3120		0.072	224.64	0	0
37656	Evansville Water & Sewer Operations		100.1	Entrance	Admin	2X4-2L-34W	66	1	3120	0.066	205.92	2X4-2L-T8-25W	43	1	3120		0.043	134.16	0.023	71.76
37657	Evansville Water & Sewer Operations		101	HALLWAY	Admin	2X2-2LU	78	3	3120	0.234	730.08	2X2-3L-T8-R	45	3	3120		0.135	421.2	0.099	308.88
37658	Evansville Water & Sewer Operations		102	OFFICE	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	3120		0.086	268.32	0.046	143.52
37659	Evansville Water & Sewer Operations		103	CONF RM	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	3120		0.086	268.32	0.046	143.52
37660	Evansville Water & Sewer Operations		104	Open Ofc	Admin	2X4-2L-34W	66	11	3120	0.726	2265.12	2X4-2L-T8-25W	43	11	3120		0.473	1475.76	0.253	789.36
37661	Evansville Water & Sewer Operations		104.1	Open Ofc	Admin	EXIT RED 25WX2	50	1	3120	0.05	156	Exit LED New	2	1	3120		0.002	6.24	0.028	87.36
37662	Evansville Water & Sewer Operations		104.12	Open Ofc	24 Hour	EXIT LED	3	1	8760	0.006	52.56	NO RETROFIT	3	1	8760		0.006	52.56	0	0
37663	Evansville Water & Sewer Operations		105	Outer walkway	Admin	1X4-2L-34W	66	6	3120	0.396	1235.52	1X4-2L-T8-25W	43	6	3120		0.258	804.96	0.138	430.56
37664	Evansville Water & Sewer Operations		106	MRR	Restroom2	1X4-2L-34W-Surface	66	1	1560	0.066	102.96	1X4-2L-T8-25W	43	1	1560		0.043	67.08	0.023	35.88
37665	Evansville Water & Sewer Operations		106.1	MRR	Restroom2	3'Vanity2L-T12	69	1	1560	0.069	107.64	3'Vanity2L-T8-LO	40	1	1560		0.04	62.4	0.029	45.24
37666	Evansville Water & Sewer Operations		107	WRR	Restroom2	1X4-2L-34W-Surface	66	1	1560	0.066	102.96	1X4-2L-T8-25W	43	1	1560		0.043	67.08	0.023	35.88
37667	Evansville Water & Sewer Operations		107.1	WRR	Restroom2	3'Vanity2L-T12	69	1	1560	0.069	107.64	3'Vanity2L-T8-LO	40	1	1560		0.04	62.4	0.029	45.24
37668	Evansville Water & Sewer Operations		108	BRK RM	Admin	2X4-2L-34W	66	9	3120	0.198	617.76	2X4-2L-T8-25W	43	9	3120		0.129	402.48	0.069	215.28
37669	Evansville Water & Sewer Operations		109	Back Ofc	Admin	2X4-2L-34W	66	6	3120	0.396	1235.52	2X4-2L-T8-25W	43	6	3120		0.258	804.96	0.138	430.56
37670	Evansville Water & Sewer Operations		109.1	Back Ofc	Admin	EXIT LED	3	1	3120	0.003	9.36	NO RETROFIT	3	1	3120		0.003	9.36	0	0
37671	Evansville Water & Sewer Operations		110	STORAGE CLOSET	Storage Closet	2X2-2LU	78	1	520	0.078	40.56	2X2-3L-T8-R	45	1	520		0.045	23.4	0.033	17.16
37672	Evansville Water & Sewer Operations		111	OFFICE	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	2340	YES	0.086	201.24	0.046	230.6
37673	Evansville Water & Sewer Operations		111.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	900	0	0	WS-Sensor	0	1	0		0	0	0	0
37674	Evansville Water & Sewer Operations		112	OFFICE	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	2340	YES	0.086	201.24	0.046	230.6
37675	Evansville Water & Sewer Operations		112.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	900	0	0	WS-Sensor	0	1	0		0	0	0	0
37676	Evansville Water & Sewer Operations		113	Side Entrance	Admin	2X2-2LU	78	2	3120	0.156	486.72	2X2-3L-T8-R	45	2	3120		0.09	280.8	0.066	205.92
37677	Evansville Water & Sewer Operations		114	STORAGE CLOSET	Storage Closet	2X2-2LU	78	1	520	0.078	40.56	2X2-3L-T8-R	45	1	520		0.045	23.4	0.033	17.16
37678	Evansville Water & Sewer Operations		115	HALLWAY	Admin	2X2-2LU	78	4	3120	0.312	973.44	2X2-3L-T8-R	45	4	3120		0.18	561.6	0.132	411.84
37687	Evansville Water & Sewer Operations		115.1	HALLWAY	24 Hour	EXIT/EMERG-LED-NEW	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0

Lighting Details: Attachment 5

ID	PropertyName	Room_Data_ID	Room_Name	Hour Schedule	Room_Fixture_ID	Room_Ex_Fixture_Watts	Room_Ex_Fixture_Qty	Room_Ex_Energy_Usage	Room_Ex_Energy_Dx_Kw	Room_Ex_Energy_Cost	Room_Ret_Fixture_ID	Room_Ret_Fixture_Watts	Room_Ret_Fixture_Qty	Room_Ret_Energy_Usage	Sensor	Room_Ex_Energy_Kw	Room_Ret_Energy_Kw	Kw_Savings	Kw_Savings
37688	Evansville Water & Sewer Operations	200	2ND FLR	24 Hour	EXIT LED	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0
37689	Evansville Water & Sewer Operations	201	STAIRS	24 Hour	150W-MH-Wallpacks	184	1	8760	0.184	1611.84	80w-Induction-Wallpack	80	1	8760		0.08	700.8	0.104	911.04
37690	Evansville Water & Sewer Operations	201.1	STAIRS	24 Hour	1X4-2L-34W	66	1	8760	0.066	578.16	1X4-2L-T8-25W	43	1	8760		0.043	376.68	0.023	201.48
37691	Evansville Water & Sewer Operations	201.2	STAIRS	24 Hour	2X2-2LU	78	1	8760	0.078	683.28	2X2-3L-T8-R	45	1	8760		0.045	394.2	0.033	289.08
37692	Evansville Water & Sewer Operations	201.3	STAIRS	24 Hour	EXIT LED	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0
37693	Evansville Water & Sewer Operations	202	Receptionist	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	3120		0.086	268.32	0.046	143.52
37694	Evansville Water & Sewer Operations	203	OFFICE	Admin	2X4-2L-34W	66	2	3120	0.132	411.84	2X4-2L-T8-25W	43	2	2340	YES	0.086	201.24	0.046	210.6
37695	Evansville Water & Sewer Operations	203.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor	0	1	0		0	0	0	0
37696	Evansville Water & Sewer Operations	204	OFFICE	Admin	2X4-2L-34W	66	1	3120	0.066	205.92	2X4-2L-T8-25W	43	1	3120		0.043	134.16	0.023	71.76
37697	Evansville Water & Sewer Operations	204.1	OFFICE	Admin	2X2-2LU	78	6	3120	0.468	1460.16	2X2-3L-T8-R	45	6	3120		0.27	842.4	0.198	617.76
37698	Evansville Water & Sewer Operations	205	Mechanical Closet	JAN/Maintenance	2X2-2LU	78	2	1040	0.156	162.24	2X2-3L-T8-R	45	2	1040		0.09	93.6	0.066	68.64
37699	Evansville Water & Sewer Operations	206	Open Area	Admin	2X4-2L-34W	66	18	3120	1.188	3706.56	2X4-2L-T8-25W	43	18	3120		0.774	2414.88	0.414	1291.68
37700	Evansville Water & Sewer Operations	206.1	Open Area	24 Hour	EXIT/EMERG-LED-NEW	8	2	8760	0.016	92.56	NO RETROFIT	3	2	8760		0.006	52.56	0	0
37701	Evansville Water & Sewer Operations	207	Side Hall	Admin	2X2-2LU	78	6	3120	0.312	973.44	2X2-3L-T8-R	45	4	3120		0.18	561.6	0.132	411.84
37702	Evansville Water & Sewer Operations	208	OFFICE	Admin	2X4-2L-34W	66	3	3120	0.198	617.76	2X4-2L-T8-25W	43	3	3120		0.129	402.48	0.069	215.28
37703	Evansville Water & Sewer Operations	209	HALLWAY	24 Hour	EXIT/EMERG-LED-NEW	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0
37704	Evansville Water & Sewer Operations	210	Closet	Storage Closet	CF-18W-Can	18	1	520	0.018	9.36	NO RETROFIT	18	1	520		0.018	9.36	0	0
37705	Evansville Water & Sewer Operations	211	Mechanical	JAN/Maintenance	2X4-2L-34W	66	2	1040	0.132	137.28	2X4-2L-T8-25W	43	2	1040		0.086	89.44	0.046	47.84
37706	Evansville Water & Sewer Operations	212	MRR	Restroom2	1X4-2L-34W-Surface	66	1	1560	0.066	102.96	1X4-2L-T8-25W	43	1	1560		0.043	67.08	0.023	35.88
37707	Evansville Water & Sewer Operations	212.1	MRR	Restroom2	3'Vanity2L-T22	69	1	1560	0.069	107.64	3'Vanity2L-T8-LO	40	1	1560		0.04	62.4	0.029	45.24
37708	Evansville Water & Sewer Operations	213	WRR	Restroom2	1X4-2L-34W-Surface	66	1	1560	0.066	102.96	1X4-2L-T8-25W	43	1	1560		0.043	67.08	0.023	35.88
37709	Evansville Water & Sewer Operations	213.1	WRR	Restroom2	3'Vanity2L-T22	69	1	1560	0.069	107.64	3'Vanity2L-T8-LO	40	1	1560		0.04	62.4	0.029	45.24
37710	Evansville Water & Sewer Operations	214	CONF RM	Admin	2X4-2L-34W	66	3	3120	0.198	617.76	2X4-2L-T8-25W	43	3	3120		0.129	402.48	0.069	215.28
37711	Evansville Water & Sewer Operations	215	Print RM	Admin	2X4-2L-34W	66	6	3120	0.396	1235.52	2X4-2L-T8-25W	43	6	3120		0.258	804.96	0.138	430.56
37712	Evansville Water & Sewer Operations	216	OFFICE	Admin	2X4-2L-34W	66	3	3120	0.198	617.76	2X4-2L-T8-25W	43	3	2340	YES	0.129	301.86	0.069	315.9
37713	Evansville Water & Sewer Operations	216.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor	0	1	0		0	0	0	0
37714	Evansville Water & Sewer Operations	217	OFFICE	Admin	2X4-2L-34W	66	3	3120	0.198	617.76	2X4-2L-T8-25W	43	3	2340	YES	0.129	301.86	0.069	315.9
37715	Evansville Water & Sewer Operations	217.1	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor	0	1	0		0	0	0	0
37716	Evansville Water & Sewer Operations	218	OFFICE	Admin	2X2-2LU	78	5	3120	0.39	1216.8	2X2-3L-T8-R	45	5	3120		0.225	702	0.165	514.8
37717	Evansville Water & Sewer Operations	219	Stairs 2	24 Hour	100W-MH-WALL	125	1	8760	0.125	1095	80w-Induction-Wallpack	80	1	8760		0.08	700.8	0.045	394.2
37718	Evansville Water & Sewer Operations	219.1	Stairs 2	24 Hour	CF-18W-Can	18	1	8760	0.018	157.68	NO RETROFIT	18	1	8760		0.018	157.68	0	0
37719	Evansville Water & Sewer Operations	219.2	Stairs 2	24 Hour	EXIT LED	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0
37720	Evansville Water & Sewer Operations	220	Training Rm	Admin	2X4-2L-34W	66	12	3120	0.792	2471.04	2X4-2L-T8-25W	43	12	3120		0.516	1609.92	0.276	861.12
37721	Evansville Water & Sewer Operations	220.1	Training Rm	Admin	1X4-2L-34W	66	5	3120	0.33	1029.6	1X4-2L-T8-25W	43	5	3120		0.215	670.8	0.115	358.8
37722	Evansville Water & Sewer Operations	221	Mop Rm	JAN/Maintenance	4'W2L-34W	66	2	1040	0.132	137.28	4'W2L-T8-25W	43	2	1040		0.086	89.44	0.046	47.84
37723	Evansville Water & Sewer Operations	300	Warehouse	24 Hour	400W MH	448	16	8760	7.168	62791.68	200w-Induction-HighBay	210	16	8760		3.36	29433.6	3.808	33358.08
37724	Evansville Water & Sewer Operations	300.1	Warehouse	24 Hour	EXIT LED	3	4	8760	0.012	105.12	NO RETROFIT	3	4	8760		0.012	105.12	0	0
37725	Evansville Water & Sewer Operations	301	OFFICE	Admin	4'S2L-34W	66	1	3120	0.066	205.92	4'S2L-T8-25W	43	1	3120		0.043	134.16	0.023	71.76
37726	Evansville Water & Sewer Operations	302	Parts Rm	Admin	8'S2L-60W	149	1	3120	0.149	464.88	8'S4LX4'-T8-KIT-25W	85	1	3120		0.085	265.2	0.064	199.68
37727	Evansville Water & Sewer Operations	302.1	Parts Rm	Admin	4'S2L-34W	66	4	3120	0.264	823.68	4'S2L-T8-25W	43	4	3120		0.172	536.64	0.092	287.04
37728	Evansville Water & Sewer Operations	303	Above Parts Rm	24 Hour	150W-INC-PEND-DOME	150	1	8760	0.15	1314	40W-Induction-SBL	40	1	8760		0.04	350.4	0.11	963.6
37729	Evansville Water & Sewer Operations	304	BRK RM	Admin	2X4-2L-34W	66	8	3120	0.528	1647.36	2X4-2L-T8-25W	43	8	3120		0.344	1073.28	0.184	574.08
37730	Evansville Water & Sewer Operations	304.1	BRK RM	Admin	Drink Machines	400	2	3120	0.8	2496	Vending Miser	400	2	3120		0.8	2496	0	0
37731	Evansville Water & Sewer Operations	305	MRR	Restroom2	8'DAMP4LX4'-34W	119	6	1560	0.714	1113.84	8'S4LX4'-T8-25W	85	6	1560		0.51	795.6	0.204	318.24
37732	Evansville Water & Sewer Operations	305.1	MRR	Restroom2	3'Vanity2L-T22	69	2	1560	0.138	215.28	3'Vanity2L-T8-LO	40	2	1560		0.08	124.8	0.058	90.48
37733	Evansville Water & Sewer Operations	305.2	MRR Shower	Restroom2	CF-18Wx2-Can	26	2	1560	0.052	81.12	NO RETROFIT	26	2	1560		0.052	81.12	0	0
37734	Evansville Water & Sewer Operations	305.3	MRR	Restroom2	4'DAMP2L-34W	66	1	1560	0.066	102.96	4'DAMP2L-T8-25W	43	1	1560		0.043	67.08	0.023	35.88
37735	Evansville Water & Sewer Operations	306	WRR	Restroom2	4'DAMP2L-34W	66	2	1560	0.132	205.92	4'DAMP2L-T8-25W	43	2	1560		0.086	134.16	0.046	71.76
37736	Evansville Water & Sewer Operations	306.1	WRR	Restroom2	3'Vanity2L-T22	69	1	1560	0.069	107.64	3'Vanity2L-T8-LO	40	1	1560		0.04	62.4	0.029	45.24
37737	Evansville Water & Sewer Operations	306.2	WRR	Restroom2	CF-13Wx2-Can	26	1	1560	0.026	40.56	NO RETROFIT	26	1	1560		0.026	40.56	0	0
37738	Evansville Water & Sewer Operations	307	Testing Rm	Admin	8'DAMP4LX4'-34W	119	7	3120	0.833	2598.96	8'S4LX4'-T8-25W	85	7	3120		0.595	1856.4	0.238	742.56
37739	Evansville Water & Sewer Operations	308	Exterior	Night	400W-MH-SHBX FLOOD	448	12	4015	5.376	21584.64	200w-Induction-SHBX-Flood	210	12	4015		2.52	10117.8	2.856	11466.84
37740	Evansville Water & Sewer Operations	400	Small Storage Bldg	JAN/Maintenance	400W MH	448	1	520	0.448	465.92	200w-Induction-HighBay	210	1	1040		0.21	218.4	0.238	247.52
37741	Evansville Water & Sewer Operations	400.1	Small Storage Bldg	JAN/Maintenance	500W-INC-Overlit	500	2	1040	1	1040	70W-Induction-Flood	74	2	1040		0.148	153.92	0.852	886.08
37742	Evansville Water & Sewer Operations	400.2	Small Storage Bldg-Exterior	JAN/Maintenance	400W MH SHBX FLOOD	448	6	1040	2.688	2795.52	200w-Induction-SHBX-Flood	210	6	1040		1.26	1310.4	1.428	1485.12
37743	Evansville Water & Sewer Operations	500	Stock Bldg	Storage Bldgs	4'2L-T8	48	39	1300	1.872	2433.6	R3LAMP-2L-4'T8-25W	48	39	1300		1.794	2332.2	0.078	101.4
37744	Evansville Water & Sewer Operations	501	OFFICE	Storage Bldgs	8'4LX4'-T8	106	1	1300	0.106	137.8	8'S4LX4'-T8-25W	85	1	1300		0.085	110.5	0.021	27.3
37745	Evansville Water & Sewer Operations	502	Mech Rm	Storage Bldgs	4'2L-T8	48	1	1300	0.048	62.4	R2LAMP-2L-4'T8-25W	46	1	1300		0.046	59.8	0.002	2.6
37746	Evansville Water & Sewer Operations	503	Exterior	Night	100W-MH-WALL	125	1	4015	0.125	501.875	80w-Induction-Wallpack	80	1	4015		0.08	321.2	0.045	180.675
37747	Evansville Water & Sewer Operations	503.1	Exterior	Night	75W-PAR38	75	3	4015	0.225	903.375	80w-Induction-Wallpack	80	3	4015		0.24	963.6	-0.015	-60.225
37748	Evansville Water & Sewer Operations	600	Big Storage Bldg	Admin	8'2L-60W	149	17	3120	2.533	7902.96	8'S4LX4'-T8-R-KIT-25W	109	17	3120		1.853	5781.36	0.68	2121.6
37749	Evansville Water & Sewer Operations	600.1	Big Storage Bldg	24 Hour	EXIT LED	3	4	8760	0.012	105.12	NO RETROFIT	3	4	8760		0.012	105.12	0	0
37750	Evansville Water & Sewer Operations	601	Brk Room	Admin	8'2L-60W	149	1	3120	0.149	464.88	8'S4LX4'-T8-R-KIT-25W	85	1	3120		0.085	265.2	0.064	199.68
37751	Evansville Water & Sewer Operations	602	MRR	Restroom2	60-A-RR-FAN	60	1	1560	0.06	93.6	CF-13W	13	1	1560		0.013	20.28	0.047	73.32
37752	Evansville Water & Sewer Operations	603	WRR	Restroom2	60-A-RR-FAN	60	1	1560	0.06	93.6	CF-13W	13	1	1560		0.013	20.28	0.047	73.32
37753	Evansville Water & Sewer Operations	604	STORAGE CLOSET	Storage Closet	4'S2L-34W	66	2	520	0.066	34.32	4'S2L-T8-25W	43	2	520		0.043	22.36	0.023	11.96
37754	Evansville Water & Sewer Operations	605	EXTERIOR	Night	150W-MH-Wallpacks	184	21	4015	0.368	1477.32	100w-Induction-Wallpack	105	21	4015		0.21	843.15	0.158	634.37
37524	Evansville Water Treatment	100	South FlushOut Bldg	Admin-Pump Rm	90WPAR38	90	8	2555	0.72	1839.6	CF-29W-SLS	29	8	2555		0.184	470.12	0.536	1369.48
37325	Evansville Water Treatment	101	South Clarifiers-Exterior	NIGHT	250W-HPS-Cobrahead	295	4	4015	1.18	4737.7	150w-Induction-Roadway(cobrahead)	158	4	4015		0.692	2537.48	0.548	2200.22
37326	Evansville Water Treatment	101.1	South Clarifiers-Exterior	NIGHT	250W-MH-SHBX FLOOD	288	4	4015	1.152	4625.28	150w-Induction-SHBX-Flood	158	4	4015		0.632	2537.48	0.52	2087.8
37327	Evansville Water Treatment	101.2	South Clarifiers-Exterior	NIGHT	400W MH SHBX FLOOD	448	1	4015	0.448	1798.72	200w-Induction-SHBX-Flood	210	1	4015		0.21	843.15	0.238	955.57
37328	Evansville Water Treatment	102	Road-Exterior	NIGHT	175W-MH-Pole-Deco	208	8	4015	1.664	6680.96	NO RETROFIT	208	8	4015		1.664	6680.96	0	0
37329	Evansville Water Treatment	103	Parking Lot	NIGHT	250W-HPS-Cobrahead	295	15	4015	0.295	1184.425	150w-Induction-Roadway(cobrahead)	158	15	4015		0.158	634.37	0.137	550.055
37330	Evansville Water Treatment	104	Generator Bldg-Exterior	NIGHT	100W-MH-WALL	125	1	4015	0.125	501.875	55w-Induction-Wallpack	58	1	4015		0.058	232.87	0.067	268.005
37331	Evansville Water Treatment	104.1	Generator Bldg-Exterior	NIGHT	250W-MH-WALL	288	3	4015	0.288	1156.32	105w-Induction-Wallpack	105	3	4015		0.105	421.575	0.183	734.745
37332	Evansville Water Treatment	105	Switch Bldg-Exterior	NIGHT	100W-MH-WALL	125	1	4015	0.125	501.875	55w-Induction-Wallpack	58	1	4015		0.058	232.87	0.067	268.005
37333	Evansville Water Treatment	106	High Service Bldg #3-Exterior	NIGHT	100W-MH-WALL	125	5	4015	0.625	2509.375	55w-Induction-Wallpack	58	5	4015		0.29	1164.35	0.335	1345.025
37334	Evansville Water Treatment	106.1	High Service Bldg #3	Admin-Pump Rm	150W HPS Highbay	174	10	2555	1.74	4445.7	100w-Induction-HighBay	105	10	2555		1.05	2682.75	0.69	1762.95
37336	Evansville Water Treatment	106.2	High Service Bldg #3	24 Hour	EXIT LED	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0

Lighting Details: Attachment 5

ID	Company Name	Room Data ID	Room Name	Usage Schedule	Room Fixture ID	Room Fixture Watts	Room Fixture Qty	Room Fixture kWh	Room Fixture kW	Room Fixture Name	Planned Fixture Watts	Planned Fixture Qty	Planned Fixture kWh	Planned Fixture kW	Annual kWh	Annual kW	kWh Savings	kW Savings
37343	Evansville Water Treatment	109.1	Sodium Dioxide Bldg	Admin-Pump Rm	4'T2L-34W	68	4	2555	0.264	674.52	43	4	2555		0.172	439.46	0.092	235.06
37344	Evansville Water Treatment	110	Bridge to Low Service Bldg	NIGHT	250W-HPS-Cobrahead	295	1	4015	0.295	1184.425	186	1	4015		0.158	634.37	0.137	550.055
37345	Evansville Water Treatment	110.1	Low Service Bldg-Exterior	NIGHT	150W-HPS-WallPack	169	5	4015	0.94	3774.1	84	5	4015		0.42	1686.3	0.52	2087.8
37346	Evansville Water Treatment	110.2	Low Service Bldg	Admin-Pump Rm	150W HPS HighBay	174	8	2555	1.392	3556.56	105	8	2555		0.84	2146.2	0.552	1410.36
37347	Evansville Water Treatment	110.3	Low Service Bldg-Basement	Admin-Pump Rm	4'T2L-34W	68	5	2555	0.33	843.15	43	5	2555		0.215	549.325	0.115	293.825
37348	Evansville Water Treatment	111	Boiler Rm Bldg	Admin	750W-MH-HighBay	813	3	3120	2.436	7600.32	420	3	3120		1.26	3931.2	1.176	3669.12
37349	Evansville Water Treatment	111.1	Boiler Rm Bldg-lower level	Admin-Pump Rm	4'T2L-34W	68	2	2555	0.132	337.26	43	2	2555		0.086	219.73	0.046	117.53
37350	Evansville Water Treatment	111.12	Boiler Rm Bldg-lower level	Admin-Pump Rm	8'T4LX4'-34W	119	4	2555	0.476	1216.18	85	4	2555		0.34	868.7	0.136	347.48
37351	Evansville Water Treatment	111.13	Boiler Rm Bldg-lower level	Storage Closet	50W-Inc-Sconce	100	8	520	0.8	416	29	8	520		0.184	95.68	0.616	320.32
37352	Evansville Water Treatment	111.14	Boiler Rm Bldg-lower level	Storage Closet	100W-INC-PB	100	5	520	0.5	260	23	5	520		0.115	59.8	0.385	200.2
37353	Evansville Water Treatment	112	Maintenance Shop	Admin	8'T4LX4'-34W	119	1	3120	0.119	371.28	85	1	3120		0.085	265.2	0.034	106.08
37354	Evansville Water Treatment	112.1	Maintenance Shop	Admin	8'T2L-75W	196	4	3120	0.602	1971.84	85	4	3120		0.34	1060.8	0.262	911.04
37355	Evansville Water Treatment	112.2	Parts Rm	JAN/Maintenance	100W-INC-PB	100	2	1040	0.2	208	23	2	1040		0.046	47.84	0.154	160.16
37356	Evansville Water Treatment	112.3	OFFICE	Admin	2x4-4L-34W	119	2	3120	0.357	1113.84	57	2	3120		0.171	533.52	0.186	580.32
37357	Evansville Water Treatment	112.4	STORAGE CLOSET	Storage Closet	4'S2L-34W	68	1	520	0.068	34.32	43	1	520		0.043	22.36	0.025	11.96
37358	Evansville Water Treatment	112.41	STORAGE CLOSET	Storage Closet	100W-INC-PB	100	1	520	0.1	52	23	1	520		0.023	11.96	0.077	40.04
37359	Evansville Water Treatment	112.5	Lockers	Storage Closet	100W-INC-PB	100	3	520	0.3	156	23	3	520		0.069	35.88	0.231	120.12
37360	Evansville Water Treatment	112.6	Exits	24 Hour	EXIT LED	3	1	8760	0.003	26.28	3	1	8760		0.003	26.28	0	0
37361	Evansville Water Treatment	112.7	BRK RM	Admin	8'T2L-75W	196	1	3120	0.196	492.96	85	1	3120		0.085	265.2	0.073	227.76
37362	Evansville Water Treatment	112.71	BRK RM	Admin	4'W4L-34W	119	1	3120	0.119	371.28	85	1	3120		0.085	265.2	0.034	106.08
37363	Evansville Water Treatment	113	ALUM Rm	Admin	4'DAMP2L-T8	48	22	3120	1.056	3294.72	RELAMP-2L-4'T8-25W	46	22	3120		1.012	3157.44	0.044	137.28
37364	Evansville Water Treatment	114	Maintenance Garage	Admin	4'T2L-34W	68	13	3120	0.858	2676.96	4'T2L-T8-25W	43	13	3120		0.559	1744.08	0.299	932.88
37365	Evansville Water Treatment	114.1	Maintenance Garage-Exterior	NIGHT	100W-MH-WALL	125	1	4015	0.125	501.875	58	1	4015		0.058	232.87	0.067	269.005
37366	Evansville Water Treatment	115	Chlorine Bldg	Admin	4'DAMP2L-40W	86	24	3120	2.064	3756.48	43	14	3120		0.602	1878.24	0.602	1878.24
37367	Evansville Water Treatment	115.1	Chlorine Bldg	Admin	300W-INC-PEND-DOME	320	6	3120	0.6	1872	23	6	3120		0.138	430.56	0.462	1441.44
37368	Evansville Water Treatment	115.3	Chlorine Bldg-Exterior	NIGHT	70W-MH-WALL	91	1	4015	0.091	365.365	58	1	4015		0.058	232.87	0.033	132.495
37369	Evansville Water Treatment	116	South Filter Bldg	Admin-Pump Rm	4'DAMP2L-84W	86	8	2555	0.396	1011.78	43	6	2555		0.258	659.19	0.138	352.59
37370	Evansville Water Treatment	116.1	South Filter Bldg	24 Hour	EXIT LED	3	3	8760	0.009	78.84	3	3	8760		0.009	78.84	0	0
37371	Evansville Water Treatment	116.2	South Filter Bldg	Admin-Pump Rm	4'DAMP2L-34W	86	15	2555	0.99	2529.45	4'DAMP2L-T8-25W	43	15	2555		0.645	1647.975	0.345	881.475
37372	Evansville Water Treatment	116.3	South Filter Bldg	Admin-Pump Rm	60WPAR38	60	7	2555	0.42	1073.1	CF-13w-Par38	16	7	2555		0.112	286.16	0.308	786.94
37373	Evansville Water Treatment	116.4	South Filter Bldg	Admin-Pump Rm	500W-INC-Quartz	500	1	2555	0.5	1277.5	70W-Induction-Flood	74	1	2555		0.074	189.07	0.426	1088.43
37374	Evansville Water Treatment	116.5	South Filter Bldg-Basement	Admin-Pump Rm	4'DAMP2L-84W-SinglePin	86	80	2555	3.96	10117.8	4'DAMP2L-T8-25W- Zbracket w/ sockets	42	80	2555		2.58	6591.9	1.38	3525.9
37375	Evansville Water Treatment	116.51	South Filter Bldg-Basement	Admin-Pump Rm	4'S2L-34W	43	1	2555	0.043	109.865	4'S2L-T8-25W	22	1	2555		0.022	56.21	0.021	53.655
37376	Evansville Water Treatment	116.6	South Filter Bldg-Exterior	NIGHT	100W-MH-WALL	125	4	4015	0.5	2007.5	58W-Induction-Wallpack	58	4	4015		0.232	931.48	0.268	1076.02
37377	Evansville Water Treatment	117	Main Head House- WRR	Restroom2	4'T2L-34W	68	1	1560	0.068	102.96	4'T2L-T8-25W	43	1	1560		0.043	67.08	0.025	35.88
37378	Evansville Water Treatment	117.1	Main Head House- MRR	Restroom2	4'T2L-34W	68	1	1560	0.068	102.96	4'T2L-T8-25W	43	1	1560		0.043	67.08	0.025	35.88
37379	Evansville Water Treatment	117.2	Main Head House- Locker Rm	Restroom2	8'T2L-75W	196	2	1560	0.392	592.96	8'T4LX4'-T8-R-KIT-25W	85	2	1560		0.17	265.2	0.146	227.76
37380	Evansville Water Treatment	117.21	Main Head House- Locker Rm	Restroom2	100W-INC-PB	100	1	1560	0.1	156	CF-23W-SLS	23	1	1560		0.023	35.88	0.077	120.12
37381	Evansville Water Treatment	117.3	Main Head House- Office	Admin	2x4-4L-34W	119	2	3120	0.238	742.56	2X4-4L-T8-LO-25W	74	2	3120		0.148	461.76	0.09	280.8
37382	Evansville Water Treatment	117.4	Main Head House- IT Rm	Admin	2x4-4L-34W	119	1	3120	0.119	371.28	2X4-4L-T8-LO-25W	74	1	3120		0.074	230.88	0.045	140.4
37383	Evansville Water Treatment	117.5	Main Head House- Main Ofc	Admin	2x4-4L-34W	119	3	3120	0.357	1113.84	2X4-4L-T8-LO-25W	74	3	3120		0.222	692.64	0.135	421.2
37384	Evansville Water Treatment	117.51	Main Head House- Main Ofc	Admin	2X2-2LU	78	1	3120	0.078	243.36	2X2-2L-T8-R	49	1	3120		0.045	140.4	0.033	102.96
37385	Evansville Water Treatment	117.6	Main Head House- Ofc	Admin	2x4-4L-34W	119	3	3120	0.357	1113.84	2X4-4L-T8-LO-25W	74	3	3120		0.222	692.64	0.135	421.2
37386	Evansville Water Treatment	117.7	Main Head House- Ofc	Admin	2x4-4L-34W	119	2	3120	0.238	742.56	2X4-4L-T8-LO-25W	74	2	3120		0.148	461.76	0.09	280.8
37387	Evansville Water Treatment	117.8	Main Head House- Lab	Admin	2x4-4L-34W	119	9	3120	1.071	3341.52	2X4-4L-T8-LO-25W	74	9	3120		0.666	2077.92	0.405	1263.6
37388	Evansville Water Treatment	117.81	Main Head House- Lab closet	Admin	4'W3L-34W	150	1	3120	0.15	405.6	4'W3L-T8-LO-25W	55	1	3120		0.055	171.6	0.075	234
37389	Evansville Water Treatment	117.9	Main Head House- Supply Ofc	JAN/Maintenance	2x4-4L-34W	119	2	1040	0.238	247.52	2X4-4L-T8-LO-25W	74	2	1040		0.148	153.92	0.09	93.6
37390	Evansville Water Treatment	117.91	Main Head House- Hallway	Admin	4'W2L-34W	68	8	3120	0.396	1235.52	4'W2L-T8-25W	43	6	3120		0.258	804.96	0.138	430.56
37391	Evansville Water Treatment	117.92	Main Head House- Basement storage	JAN/Maintenance	100W-INC-PB	100	5	1040	0.5	520	CF-23W-SLS	23	5	1040		0.115	119.6	0.385	400.4
37392	Evansville Water Treatment	118	Hallway to Dock	Admin	CF-25WSLS-Surface	25	4	3120	0.1	312	NO RETROFIT	25	4	3120		0.1	312	0	0
37653	Evansville Water Treatment	118.1	Hallway to Dock	24 Hour	Drink Machines	400	1	8760	0.4	3504	Vending Miser	400	1	5256		0.4	2102.4	0	1401.6
37393	Evansville Water Treatment	118.1	Dock Area	Admin	4'T2L-34W	68	4	3120	0.264	823.68	4'T2L-T8-25W	43	4	3120		0.172	536.64	0.092	287.04
37394	Evansville Water Treatment	118.12	Dock Area	Admin	100W-INC-PB	100	5	3120	0.5	1560	CF-23W-SLS	23	5	3120		0.115	358.8	0.385	1201.2
37395	Evansville Water Treatment	118.2	Fluoride Rm	Admin	4'DAMP2L-T8	48	20	3120	0.48	1497.6	RELAMP-2L-4'T8-25W	46	20	3120		0.46	1435.2	0.02	62.4
37396	Evansville Water Treatment	118.3	Compressor Rm	JAN/Maintenance	4'S2L-34W	68	2	1040	0.066	68.64	4'S2L-T8-25W	43	1	1040		0.043	44.72	0.023	23.92
37397	Evansville Water Treatment	118.31	Compressor Rm	JAN/Maintenance	4'S1L-34W	43	1	1040	0.043	44.72	4'S1L-T8-25W	22	1	1040		0.022	22.88	0.021	21.84
37398	Evansville Water Treatment	119	North Filter Bldg	Admin-Pump Rm	150W HPS HighBay	174	19	2555	1.306	3446.83	100W-Induction-HighBay	105	19	2555		1.995	5097.225	1.311	3349.605
37399	Evansville Water Treatment	119.1	North Filter Bldg- Hall	Admin-Pump Rm	4'W2L-34W	68	2	2555	0.132	337.26	4'W2L-T8-25W	43	2	2555		0.086	219.73	0.046	117.53
37400	Evansville Water Treatment	119.12	North Filter Bldg- Hall	Admin-Pump Rm	CF-25WSLS-Surface	25	4	2555	0.05	127.75	NO RETROFIT	25	4	2555		0.05	127.75	0	0
37401	Evansville Water Treatment	119.2	North Filter Bldg- Basement	Admin-Pump Rm	4'T2L-34W	68	13	2555	0.858	2192.19	4'T2L-T8-25W	43	13	2555		0.559	1428.245	0.299	763.945
37402	Evansville Water Treatment	120	Dock Extension Hallway	Admin-Pump Rm	4'T2L-34W	68	1	2555	0.066	168.63	4'T2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37403	Evansville Water Treatment	120.1	Dock Extension Hallway	Admin-Pump Rm	4'DAMP2L-34W	86	1	2555	0.066	168.63	4'DAMP2L-T8-25W	43	1	2555		0.043	109.865	0.023	58.765
37404	Evansville Water Treatment	120.2	Dock Extension Storage	Storage Closet	4'T2L-34W	68	1	520	0.066	34.32	4'T2L-T8-25W	43	1	520		0.043	22.36	0.023	11.96
37405	Evansville Water Treatment	120.3	Dock Extension Storage	Storage Closet	60WPAR38	60	1	520	0.06	31.2	CF-16w-Par38	16	1	520		0.016	8.32	0.044	22.88
37406	Evansville Water Treatment	121	Clear Wells	JAN/Maintenance	4'W2L-34W	68	1	1040	0.066	68.64	4'W2L-T8-25W	43	1	1040		0.043	44.72	0.023	23.92
37407	Evansville Water Treatment	121.1	Small Clear Well	Storage Closet	65WPar38x2-Well-Canisters	180	2	520	0.36	187.2	CF-23W-SLS R38X2	46	2	520		0.092	47.84	0.268	139.36
37408	Evansville Water Treatment	121.25	Small Clear Well	Storage Closet	100W-INC-PB	100	1	520	0.1	52	CF-23W-SLS	23	1	520		0.023	11.96	0.077	40.04
37409	Evansville Water Treatment	122	Control Rm	Admin	2x4-2L-T8-PB	48	7	3120	0.336	1048.32	RELAMP-2L-4'T8-25W	46	7	3120		0.322	1004.64	0.014	43.68
37410	Evansville Water Treatment	122.1	Control Rm closet	JAN/Maintenance	4'DAMP2L-T8	48	2	1040	0.096	99.84	RELAMP-2L-4'T8-25W	46	2	1040		0.092	95.68	0.004	4.16
37411	Evansville Water Treatment	122.2	Control Rm Records rm	JAN/Maintenance	2x4-2L-T8-PB	48	4	1040	0.192	199.68	RELAMP-2L-4'T8-25W	46	4	1040		0.184	191.36	0.008	8.32
37412	Evansville Water Treatment	123	HALLWAY	JAN/Maintenance	CF-25WSLS-Surface	25	4	1040	0.1	104	NO RETROFIT	25	4	1040		0.1	104	0	0
37413	Evansville Water Treatment	124	BRK Rm	Admin	4'T2L-34W	68	3	3120	0.132	411.84	4'T2L-T8-25W	43	2	3120		0.086	268.32	0.046	143.52
37414	Evansville Water Treatment	125	Diesel Rm	Admin	400W MH HighBay	458	4	3120	1.688	5385.56	2x4-4L-T8-R-HO-NEW-25W	194	4	3120		1.104	3444.48	1.384	4941.08
37415	Evansville Water Treatment	125.1	Record Rm	Storage Closet	100W-INC-PB	100	2	520	0.2	104	CF-23W-SLS	23	2	520		0.046	23.92	0.154	80.08
37416	Evansville Water Treatment	125.2	Upstairs Training	Admin-Pump Rm	2X4-4L-T8	106	8	2555	0.848	2166.64	RELAMP-4L-4'T8-25W	86	8	2555		0.688	1757.84	0.16	408.8
37417	Evansville Water Treatment	125.21	Upstairs Training Kitchen	Admin-Pump Rm	2X4-4L-T8	106	2	2555	0.212	541.66	RELAMP-4L-4'T8-25W	86	2	2555		0.172	439.46	0.04	102.2
37418	Evansville Water Treatment	125.3	STAIRS	Admin-Pump Rm	Circleline-32W	32	2	2555	0.064	163.52	NO RETROFIT	32	2	2555		0.064	163.52	0	0
37419	Evansville Water Treatment	126	Phelps Bldg-Filter Beds	Admin-Pump Rm	4'DAMP2L-34W-SinglePin	86	23	2555	1.518	3878.49	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	23	2555		0.989	2526.895	0.529	1351.595
37420	Evansville Water Treatment	126.1	Phelps Bldg-Filter Beds	JAN/Maintenance	90WPAR38-Flood	90	8	1040	0.72	748.8	CF-23W-SLS R38	23	8	1040		0.184	191.36	0.536	557.44

Lighting Details: Attachment 5

Property ID	Property Name	Room/Area ID	Room Name	Usage Schedule	Room Fixture ID	Room Fixture Watts	Room Fixture Qty	Room Fixture Usage	Room Fixture kW	Room Fixture kWh	Room Retrofit Fixture ID	Room Retrofit Fixture Watts	Room Retrofit Fixture Qty	Room Retrofit Fixture Usage	Room Retrofit Fixture kW	Room Retrofit Fixture kWh	kW Savings	kWh Savings
37424	Evansville Water Treatment	129	Service Tunnel	JAN/Maintenance	4'DAMP2L-34W-SinglePin	66	14	1040	0.924	960.96	4'DAMP2L-T8-25W- Zbracket w/ sockets	43	14	1040	0.602	626.08	0.322	334.88
37425	Evansville Water Treatment	129.1	Service Tunnel	Storage Closet	100W-INC-PB	100	10	520	1	520	CF-23W-SLS	23	10	520	0.23	119.6	0.77	400.4
37426	Evansville Water Treatment	130	New Beds Bldg	Admin-Pump Rm	4'DAMP2L-T8	48	68	2555	0.264	8030.52	RBAMP-2L-4'T8-25W	46	68	2555	3.128	7992.04	0.136	347.48
37427	Evansville Water Treatment	130.1	New Beds Bldg-Stairs	JAN/Maintenance	4'W2L-34W	66	3	1040	0.198	205.92	4'W2L-T8-25W	43	3	1040	0.129	134.16	0.069	71.76
37428	Evansville Water Treatment	130.2	New Beds Bldg-Basement	JAN/Maintenance	4'DAMP2L-34W	66	22	1040	1.452	1510.08	4'DAMP2L-T8-25W	43	22	1040	0.946	983.84	0.506	526.24
37429	Evansville Water Treatment	130.3	New Beds Bldg- Exterior	NIGHT	100W-MH-Surface	125	1	4015	0.125	501.875	55w-Induction-Canopy	58	1	4015	0.058	232.87	0.067	269.005
37430	Evansville Water Treatment	131	Chemical Bldg	Admin-Pump Rm	4'DAMP2L-34W	66	30	2555	1.98	5058.9	4'DAMP2L-T8-25W	43	30	2555	1.29	3295.95	0.69	1762.95
37431	Evansville Water Treatment	131.1	Chemical Bldg- Exterior	NIGHT	70W-MH-WALL	91	1	4015	0.091	365.365	55w-Induction-Wallpack	58	1	4015	0.058	232.87	0.033	132.495
37432	Evansville Water Treatment	132	Carbon Facility	Admin-Pump Rm	150W HPS HighBay	174	2	2555	0.174	444.57	100w-Induction-HighBay	105	2	2555	0.105	268.275	0.069	176.295
37433	Evansville Water Treatment	132.1	Carbon Facility	Admin-Pump Rm	4'DAMP2L-34W	66	5	2555	0.33	843.15	4'DAMP2L-T8-25W	43	5	2555	0.215	549.325	0.115	293.825
37434	Evansville Water Treatment	132.2	Carbon Facility	Admin-Pump Rm	100W-INC-PB	100	1	2555	0.1	255.5	CF-23W-SLS	23	1	2555	0.023	58.765	0.077	196.735
37435	Evansville Water Treatment	132.3	Carbon Facility-Exterior	NIGHT	100W-MH-WALL	125	1	4015	0.125	501.875	55w-Induction-Wallpack	58	1	4015	0.058	232.87	0.067	268.005
37436	Evansville West Sewage Plant	100	Main Admin Bldg- Control Rm	Admin-24hr	2x4-4L-34W	119	6	5475	0.714	3909.15	2x4-2L-T8-R-25W	43	6	5475	0.258	1412.55	0.456	2496.6
37437	Evansville West Sewage Plant	100.1	ENTRANCE	Admin-24hr	100W-INC-RED-SQR	100	5	5475	0.5	2737.5	CF-23W-SLS	23	5	5475	0.115	629.625	0.385	2107.875
37438	Evansville West Sewage Plant	100.12	ENTRANCE	24 Hour	EXIT RED 15WX2	30	1	8760	0.03	262.8	Exit LED New	2	1	8760	0.002	17.52	0.028	245.28
37439	Evansville West Sewage Plant	100.2	OFFICE	Admin	4'W2L-34W	66	6	3120	0.396	1235.52	4'W2L-T8-25W	43	6	3120	0.258	804.96	0.138	430.56
37440	Evansville West Sewage Plant	100.21	OFFICE CLOSET	JAN/Maintenance	100WDC-INC-DRUM	200	1	1040	0.2	208	CF-13WX2	26	1	1040	0.026	27.04	0.174	180.96
37441	Evansville West Sewage Plant	100.3	HALLWAY	Admin-24hr	100W-INC-RED-SQR	100	4	5475	0.4	2190	CF-23W-SLS	23	4	5475	0.092	503.7	0.308	1686.3
37442	Evansville West Sewage Plant	100.31	HALLWAY	Admin-24hr	4'W2L-34W	66	5	5475	0.33	1806.75	4'W2L-T8-25W	43	5	5475	0.215	1177.125	0.115	629.625
37443	Evansville West Sewage Plant	100.4	Mop Closet	Admin-24hr	CF-25W-SLS	25	1	5475	0.025	136.875	NO RETRO FIT	15	1	5475	0.015	82.125	0.01	54.75
37444	Evansville West Sewage Plant	100.5	STORAGE CLOSET	JAN/Maintenance	4'W4L-34W	219	1	1040	0.219	227.76	4'W-4L-T8-25W	85	1	1040	0.085	88.4	0.134	139.36
37445	Evansville West Sewage Plant	100.6	WRR	Restroom-24hr	100W-INC-PB	100	1	2555	0.1	255.5	CF-23W-SLS	23	1	2555	0.023	58.765	0.077	196.735
37446	Evansville West Sewage Plant	100.7	RR	Restroom-24hr	100W-INC-RED-SQR	100	1	2555	0.1	255.5	CF-23W-SLS	23	1	2555	0.023	58.765	0.077	196.735
37447	Evansville West Sewage Plant	100.71	RR	Restroom-24hr	4'W2L-34W	66	3	2555	0.198	505.89	CF-23W-SLS	23	3	2555	0.069	176.295	0.129	329.595
37448	Evansville West Sewage Plant	100.72	RR	Restroom-24hr	2'2L Vanity T32	45	1	2555	0.045	114.975	2'W2L-T8-LO-VANITY-NEW	26	1	2555	0.026	71.54	0.019	43.435
37449	Evansville West Sewage Plant	100.73	RR Shower	Storage Closet	100W-INC-CAN	100	1	520	0.1	52	CF-23W-SLS	23	1	520	0.023	11.96	0.077	40.04
37450	Evansville West Sewage Plant	100.8	Side Entrance	Admin-24hr	CF-13W-SLS	13	3	5475	0.039	213.525	NO RETROFIT	13	3	5475	0.039	213.525	0	0
37451	Evansville West Sewage Plant	100.81	Side Entrance	24 Hour	EXIT/EMERG-LED-NEW	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760	0.003	26.28	0	0
37452	Evansville West Sewage Plant	100.9	Engine Rm	Admin-Pump Rm	4'DAMP2L-T8	48	8	2555	0.432	1103.76	RELAMP-2L-4'T8-25W	46	8	2555	0.414	1057.77	0.018	45.99
37453	Evansville West Sewage Plant	100.91	Chlorine Rm	Admin-Pump Rm	4'T2L-34W	66	4	2555	0.264	674.52	4'T2L-T8-25W	43	4	2555	0.172	439.46	0.092	235.06
37454	Evansville West Sewage Plant	100.92	Garage	Admin-24hr	8'T2L-75W	158	3	5475	0.474	2595.15	8'T4LX4'-T8-R-KIT-25W	85	3	5475	0.255	1396.125	0.219	1199.025
37455	Evansville West Sewage Plant	100.93	Garage	Admin-24hr	4'DAMP4LX4'-34W	119	2	5475	0.238	1303.05	8'T4LX4'-T8-R-NEW-25W	85	2	5475	0.17	930.75	0.068	372.3
37452	Evansville West Sewage Plant	100.94	Garage	24 Hour	Drink Machines	400	1	8760	0.4	3504	Vending Miser	400	1	5256	0.4	2102.4	0	1401.6
37456	Evansville West Sewage Plant	101	Main Engine Rm	Admin-24hr	200W MH SHBX FLOOD	218	10	5475	2.18	11935.5	100w-Induction-SHBX-Flood	210	10	5475	2.1	11497.5	0.08	438
37457	Evansville West Sewage Rm-Stairs	101.1	Main Engine Rm	Admin-24hr	150W-MH-Wallpacks	184	1	5475	0.184	1007.4	80w-Induction-Wallpack	84	1	5475	0.084	459.9	0.1	547.5
37458	Evansville West Sewage Rm-Basement	101.2	Main Engine Rm-Basement	Admin-24hr	4'DAMP2L-34W	66	6	5475	0.396	2168.1	4'DAMP2L-T8-25W	43	6	5475	0.258	1412.55	0.138	755.55
37459	Evansville West Sewage Rm-Basement	101.3	Main Engine Rm-Basement	Admin-24hr	100W-INC-PB	100	5	5475	0.5	2737.5	CF-23W-SLS	23	5	5475	0.115	629.625	0.385	2107.875
37460	Evansville West Sewage Rm-Basement	101.4	Main Engine Rm-Basement	Admin-24hr	8'T2L-75W	158	4	5475	0.632	3460.2	8'T4LX4'-T8-R-KIT-25W	85	4	5475	0.34	1861.5	0.292	1598.7
37461	Evansville West Sewage Rm-Basement	101.5	Main Engine Rm-Basement	Admin-24hr	4'T2L-34W	66	1	5475	0.066	361.35	4'T2L-T8-25W	43	1	5475	0.043	235.425	0.023	125.925
37462	Evansville West Sewage Rm-Basement	101.6	Main Engine Rm-Basement	Admin-24hr	100W-INC-PB	100	7	5475	0.7	3832.5	CF-23W-SLS	23	7	5475	0.161	881.475	0.539	2951.025
37463	Evansville West Sewage Rm-Basement	101.7	Main Engine Rm-Basement	Admin-24hr	150W-MH-Wallpacks	184	6	5475	1.104	6044.4	80w-Induction-Wallpack	84	6	5475	0.504	2758.8	0.6	3285
37464	Evansville West Sewage Plant	101.8	Main Engine Rm-Exterior	NIGHT	150W-MH-Wallpacks	184	4	4015	0.736	2955.04	80w-Induction-Wallpack	84	4	4015	0.336	1349.04	0.4	1606
37465	Evansville West Sewage Plant	101.81	Main Engine Rm-Exterior	NIGHT	250W-MH-SHBX FLOOD	288	2	4015	0.576	2312.64	150w-Induction-SHBX-Flood	156	2	4015	0.312	1252.68	0.24	1043.8
37466	Evansville West Sewage Plant	101.82	Main Engine Rm-Exterior	NIGHT	100W-INC-PB	100	1	4015	0.1	401.5	CF-23W-SLS	23	1	4015	0.023	92.345	0.077	309.155
37467	Evansville West Sewage Plant	102	Equipment Storage	Admin-24hr	8'T2L-75W	158	4	5475	0.632	3460.2	8'T4LX4'-T8-HO-KIT-25W	124	4	5475	0.496	2715.6	0.136	744.6
37468	Evansville West Sewage Plant	103	Chlorine Storage	JAN/Maintenance	100W-INC-PEND-DOME	100	6	1040	0.6	624	CF-23W-SLS	23	6	1040	0.138	143.52	0.462	480.48
37469	Evansville West Sewage Plant	103.1	Chlorine Storage-Exterior	NIGHT	70W-MH-WALL	91	1	4015	0.091	365.365	55w-Induction-Wallpack	58	1	4015	0.058	232.87	0.033	132.495
37470	Evansville West Sewage Plant	104	Primary Sludge Pump	Storage Closet	65R30	65	2	520	0.13	67.6	CF-15R30	15	2	520	0.03	15.64	0.099	51.96
37471	Evansville West Sewage Plant	105	Influent Blower Rm	Storage Closet	4'T2L-34W	66	3	520	0.198	102.96	4'T2L-T8-25W	43	3	520	0.129	67.08	0.069	35.88
37472	Evansville West Sewage Plant	106	Plant Water Station	JAN/Maintenance	4'DAMP2L-T8	48	8	1040	0.384	399.36	RELAMP-2L-4'T8-25W	46	8	1040	0.368	382.72	0.016	16.64
37473	Evansville West Sewage Plant	107	Digester Boiler Rm	Admin-24hr	4'T2L-34W	66	21	5475	1.386	7588.95	4'T2L-T8-25W	43	21	5475	0.903	4943.925	0.483	2644.425
37474	Evansville West Sewage Plant	107.1	Digester Boiler Rm-Basement	Admin-Pump Rm	4'W2L-34W-SinglePin-ExplosionProof	66	22	2555	1.452	3709.86	4'W2L-T8-25W- Zbracket w/ sockets	43	22	2555	0.946	2417.03	0.506	1292.83
37475	Evansville West Sewage Plant	107.2	Digester Boiler Rm-Exterior	NIGHT	150W-MH-Wallpacks	184	1	4015	0.184	738.76	80w-Induction-Wallpack	84	1	4015	0.084	337.26	0.1	401.5
37476	Evansville West Sewage Plant	108	GBT Bldg	Admin-24hr	4'DAMP2L-34W	66	33	5475	2.178	11924.55	4'DAMP2L-T8-25W	43	33	5475	1.418	7760.925	0.759	4155.625
37477	Evansville West Sewage Plant	108.1	GBT Bldg	Admin-24hr	4'T2L-34W	66	9	5475	0.594	3252.15	4'T2L-T8-25W	43	9	5475	0.387	2118.825	0.207	1133.325
37478	Evansville West Sewage Plant	108.2	GBT Bldg-Stairs	Admin-24hr	4'W2L-34W	66	2	5475	0.132	722.7	4'W2L-T8-25W	43	2	5475	0.086	470.85	0.046	251.85
37479	Evansville West Sewage Plant	108.3	GBT Bldg-Basement	Admin-24hr	4'DAMP2L-34W	66	11	5475	0.726	3974.85	4'DAMP2L-T8-25W	43	11	5475	0.473	2589.675	0.253	1385.175
37480	Evansville West Sewage Plant	108.31	GBT Bldg-Basement	Admin-24hr	8'DAMP4LX4'-34W	119	4	5475	0.476	2606.1	8'T4LX4'-T8-25W	85	4	5475	0.34	1861.5	0.136	744.6
37481	Evansville West Sewage Plant	108.32	GBT Bldg-Basement	Admin-24hr	4'T2L-34W	66	5	5475	0.396	2168.1	4'T2L-T8-25W	43	5	5475	0.258	1412.55	0.138	755.55
37482	Evansville West Sewage Plant	108.33	GBT Bldg-Exterior	NIGHT	150W-MH-Wallpacks	184	6	4015	1.104	4432.56	80w-Induction-Wallpack	84	6	4015	0.504	2023.56	0.6	2409
37483	Evansville West Sewage Plant	109	Aeration Blower Bldg	Admin-24hr	4'T2L-34W	66	13	5475	0.858	4697.55	4'T2L-T8-25W	43	13	5475	0.559	3060.525	0.299	1637.025
37484	Evansville West Sewage Plant	109.1	Aeration Blower Bldg	Admin-24hr	8'T4LX4'-34W	119	6	5475	0.714	3909.15	8'T4LX4'-T8-25W	85	6	5475	0.51	2792.25	0.204	1116.9
37485	Evansville West Sewage Plant	109.2	Aeration Blower Bldg-Exterior	NIGHT	150W-MH-Wallpacks	184	2	4015	0.368	1477.52	80w-Induction-Wallpack	84	2	4015	0.168	674.52	0.2	803
37486	Evansville West Sewage Plant	110	Secondary Bldg	Admin-24hr	4'W2L-34W	66	1	5475	0.066	361.35	4'W2L-T8-25W	43	1	5475	0.043	235.425	0.023	125.925
37487	Evansville West Sewage Plant	110.1	Secondary Bldg	Admin-24hr	100W-INC-PEND-DOME	100	7	5475	0.7	3832.5	CF-23W-SLS	23	7	5475	0.161	881.475	0.539	2951.025
37488	Evansville West Sewage Plant	111	Tunnel from Secondary to Aeration	Admin-24hr	100W-INC-JellyJAR	100	21	5475	2.1	11497.5	CF-23W-SLS	23	21	5475	0.483	2644.425	1.617	8853.075
37489	Evansville West Sewage Plant	112	Tunnel from Aeration to Admin	Admin-24hr	100W-INC-JellyJAR	100	26	5475	2.6	14235	CF-23W-SLS	23	26	5475	0.598	3274.05	2.002	10960.95
37490	Evansville West Sewage Plant	113	Tunnel from Admin to Digestors	Admin-24hr	100W-INC-JellyJAR	100	3	5475	0.3	1642.5	CF-23W-SLS	23	3	5475	0.069	377.775	0.231	1264.725
37491	Evansville West Sewage Plant	113.1	Tunnel from Admin to Digestors	Admin-24hr	4'DAMP2L-34W	66	6	5475	0.396	2168.1	4'DAMP2L-T8-25W	43	6	5475	0.258	1412.55	0.138	755.55
37492	Evansville West Sewage Plant	114	Tunnel from Admin to GBT Bldg	Admin-24hr	4'DAMP2L-34W	66	5	5475	0.33	1806.75	4'DAMP2L-T8-25W	43	5	5475	0.215	1177.125	0.115	629.625
37493	Evansville West Sewage Plant	114.1	Tunnel from Admin to GBT Bldg	Admin-24hr	4'DAMP2L-34W	66	2	5475	0.132	722.7	4'DAMP2L-T8-25W	43	2	5475	0.086	470.85	0.046	251.85
37494	Evansville West Sewage Plant	115	Primary Tunnel	Admin-24hr	4'DAMP2L-34W	66	6	5475	0.396	2168.1	4'DAMP2L-T8-25W	43	6	5475	0.258	1412.55	0.138	755.55
37494	Evansville West Sewage Plant	115.1	Primary Tunnel	Admin-24hr	100W-INC-JellyJAR	100	4	5475	0.4	2190	CF-23W-SLS	23	4	5475	0.092	503.7	0.308	1686.3
37496	Evansville West Sewage Plant	116	Dechlorination Bldg	Admin-24hr	4'DAMP2L-T8	48	12	5475	0.576	3153.6	RELAMP-2L-4'T8-25W	46	12	5475	0.552	3022.2	0.024	131.4
37497	Evansville West Sewage Plant	116.1	Dechlorination Bldg-Exterior	NIGHT	250W-MH-WALL	288	4	4015	1.152	4622.28	100w-Induction-Wallpack	105	4	4015	0.42	1686.3	0.732	2935.98
37498	Evansville West Sewage Plant	117	Maintenance Garage	Admin-24hr	4'T2L-34W	66	20	5475	1.32	7227	4'T2L-T8-HO-KIT-TG-25W	60	20	5475	1.2	6570	0.12	657
37499	Evansville West Sewage Plant	118	BAF Bldg-Pump Rm	Admin-24hr	250W-MH-Canopy	288	20	5475	5.76	31536	150w-Induction-Canopy	258	20	5475	5.16	17301	2.6	14235
37500	Evansville West Sewage Plant	118.1	BAF Bldg-Pump Rm	Admin-24hr	4'DAMP2L-T8	48	21	5475	1.008	5518.8	RELAMP-2L-4'T8-25W	46	21	5475	0.966	5288.85	0.042	229.95

Lighting Details: Attachment 5

ID	Property Name	Room Data ID	Room Name	Usage Schedule	Room Ex Fixture ID	Room Ex Fixture Watts	Room Ex Fixture Qty	Room Ex Yearly Usage	Ex Kw	Ex Kwhr	Room Ret Fixture ID	Room Ret Fixture Watts	Room Ret Fixture Qty	Room Ret Yearly Usage	Sensor	Ret Kw	Ret Kwhr	Kw Savings	Kwhr Savings
37504	Evansville West Sewage Plant	121	2ND FLR Foyer	Admin-24hr	2X4-3L-T8	74	3	5475	0.222	1215.45	RELAMP-3L-4'T8-25W	66	3	5475		0.198	1084.05	0.024	131.4
37505	Evansville West Sewage Plant	121.1	Open Office	Admin-24hr	2X4-3L-T8	74	6	5475	0.444	2430.9	RELAMP-3L-4'T8-25W	66	6	5475		0.396	2168.1	0.048	262.8
37506	Evansville West Sewage Plant	121.2	Lab	Admin	2X4-3L-T8	74	3	3120	0.222	692.64	RELAMP-3L-4'T8-25W	66	3	3120		0.198	617.76	0.024	74.88
37507	Evansville West Sewage Plant	121.3	OFFICE	Admin	2X4-3L-T8	74	2	3120	0.148	461.76	RELAMP-3L-4'T8-25W	66	2	2340	YES	0.132	308.88	0.016	152.88
37508	Evansville West Sewage Plant	121.31	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor	0	1	0		0	0	0	0
37509	Evansville West Sewage Plant	121.4	BRK RM	Admin	2X4-3L-T8	74	1	3120	0.074	230.88	RELAMP-3L-4'T8-25W	66	1	3120		0.066	205.92	0.008	24.96
37510	Evansville West Sewage Plant	121.5	OFFICE	Admin	2X4-3L-T8	74	2	3120	0.148	461.76	RELAMP-3L-4'T8-25W	66	2	2340	YES	0.132	308.88	0.016	152.88
37511	Evansville West Sewage Plant	121.51	OFFICE	Sensor	WALL SWITCH TOGGLE	0	1	0	0	0	WS-Sensor	0	1	0		0	0	0	0
37512	Evansville West Sewage Plant	121.6	Control Rm	Admin-24hr	4'T8X4'-T8	74	12	5475	0.888	4861.8	RELAMP-3L-4'T8-25W	66	12	5475		0.792	4336.2	0.096	525.6
37513	Evansville West Sewage Plant	121.7	Blower Rm	Admin-Pump Rm	8'IND6Lx4'-T8	170	10	2555	1.7	4343.5	RELAMP-6L-4'T8-25W	128	10	2555		1.28	3270.4	0.42	1073.1
37514	Evansville West Sewage Plant	121.71	Blower Rm	24 Hour	EXIT LED	3	1	8760	0.003	26.28	NO RETROFIT	3	1	8760		0.003	26.28	0	0
37515	Evansville West Sewage Plant	121.8	STAIRS	24 Hour	4'DAMP2L-T8	48	6	8760	0.288	2522.88	RELAMP-2L-4'T8-25W	46	6	8760		0.276	2417.76	0.012	105.12
37516	Evansville West Sewage Plant	122	Ground Level	Admin-24hr	4'DAMP2L-T8	48	17	5475	0.816	4467.6	RELAMP-2L-4'T8-25W	46	17	5475		0.782	4281.45	0.034	186.15
37517	Evansville West Sewage Plant	122.1	Ground Level	Admin-24hr	8'DAMP4LX4'-T8	106	5	5475	0.53	2901.75	RELAMP-4L-4'T8-25W	86	5	5475		0.43	2354.25	0.1	547.5
37518	Evansville West Sewage Plant	123	Exterior	NIGHT	250W-MH-WALL	288	13	4015	3.744	15032.16	100w-Induction-Wallpack	105	13	4015		1.365	5480.475	2.379	9551.685
37519	Evansville West Sewage Plant	124	Rooftop	NIGHT	150W-MH-Flood	184	6	4015	1.104	4432.56	80W-Induction-Flood	84	6	4015		0.504	2023.56	0.6	2409
37520	Evansville West Sewage Plant	124.1	Rooftop	NIGHT	250W-MH SHBX FLOOD	288	3	4015	0.864	3468.96	150w-Induction-SHBX-Flood	158	3	4015		0.474	1903.11	0.39	1565.85
37521	Evansville West Sewage Plant	124.2	Rooftop Bldg	JAN/Mainteance	4'DAMP2L-T8	48	3	1040	0.144	149.76	RELAMP-2L-4'T8-25W	46	3	1040		0.138	143.52	0.006	6.24
37522	Evansville West Sewage Plant	124.3	Rooftop	NIGHT	150W-MH-Wallpacks	184	1	4015	0.184	738.76	80w-Induction-Wallpack	84	1	4015		0.084	337.26	0.1	401.5
37523	Evansville West Sewage Plant	124.4	Rooftop	NIGHT	150W-MH-Flood	184	1	4015	0.184	738.76	80w-Induction-SHBX-Flood	84	1	4015		0.084	337.26	0.1	401.5
37524	Evansville West Sewage Plant	125	Parking Lot Poles	NIGHT	1000W MH Flood	1077	10	4015	10.77	43241.55	400w-Induction-SHBX-Flood	420	10	4015		4.2	16863	6.57	26378.55
37525	Evansville West Sewage Plant	125.1	Parking Lot Poles	NIGHT	250W-HPS-Cobrahead	295	5	4015	1.475	5922.125	150w-Induction-Roadway(cobrahead)	158	5	4015		0.79	3171.85	0.685	2750.275
37526	Evansville West Sewage Plant	125.2	Parking Lot Poles	NIGHT	400W MH	448	12	4015	5.376	21584.64	200w-Induction-SHBX-Flood	210	12	4015		2.52	10117.8	2.856	11466.84
37527	Evansville West Sewage Plant	125.3	Parking Lot Poles	NIGHT	150W-MH-Flood	184	1	4015	0.184	738.76	80w-Induction-SHBX-Flood	84	1	4015		0.084	337.26	0.1	401.5
Total							2216		267.98	1,066,446			2216			148.168	586,101	119.82	480,345