Energy Performance Contracting Agreement

Between

The Harrison County Board of Supervisors, Mississippi

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Article 1

AGREEMENT

THIS ENERGY PERFORMANCE CONTRACTING AGREEMENT ("Agreement") is made this <u>6</u> day of <u>June</u> 2016 (the "Effective Contract Date", defined below), by and between McNeil Rhoads, LLC. ("MCNEIL RHOADS") and the party identified below as the CLIENT.

Client

County of Harrison County, MS

1801 23rd Avenue

Gulfport, MS 39502

DESIGNATED CONTACT: Pam Ulrich

PHONE:(228)865-4070

EMAIL: pulrich@harrison.county.ms.us

McNeil Rhoads, LLC

980 N. Bierdeman Road

Pearl, MS 39208

DESIGNATED CONTACT: Chris McNeil

PHONE: 601.398.4836

EMAIL: info@mcneilrhoads.com

Articles and Attachments

This Agreement consists of this document, which includes the following articles and exhibits which are acknowledged by the CLIENT and MCNEIL RHOADS and incorporated into the Agreement by this reference:

Articles

- 1. Agreement
- 2. Defined Terms
- 3. General
- 4. Performance Guarantee
- 5. Work BY MCNEIL RHOADS
- 6. The CLIENT's Responsibilities
- 7. Changes and Delays
- 8. Compensation
- 9. Acceptance
- 10. Insurance and Allocation of Risk
- 11. Hazardous Material Provisions
- 12. Miscellaneous Provisions

<u>Exhibits</u>

Exhibit A	Scope of Work and Services
Exhibit B	Payment Schedule(s)
Exhibit C	Measurement and Verification

This Agreement, when executed by an authorized representative of the CLIENT and authorized representatives of MCNEIL RHOADS, constitutes the entire, complete and exclusive agreement between the Parties relative to the project scope stated in Exhibit A. This Agreement supersedes all prior and contemporaneous negotiations, statements, representations, agreements, letters of intent, awards, or proposals, either written or oral relative to the same, and may be modified only by a written instrument signed by both Parties.

COMPENSATION/TERMS OF PAYMENT:

As full consideration for the performance of the Work and Services set forth in Exhibit A, and for the Measurement & Verification set forth in Exhibit C, the CLIENT shall pay MCNEIL RHOADS in such manner and amounts as agreed to in Exhibit B.

Agreed for	Harrison County Board of Supervisors, MS
(Signature) by:	Sweeter Matter
Print Name and Title:	Beverly Martin, President Board Provident
(Signature) by:	forther ann
Print Name and Title:	John McAdams, Clerk of the Board Clerk of the Board
Agreed for (Signature) by:	McNeil Rhoads, LLC
Print Name and Title:	Chris McNeil, President
(Signature) by:	7 Justy Rhouls
Print Name and Title:	Dusty Rhoads, CEO CEO DUSTY Rhomps
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Article 2

Glossary

The following terms shall for all purposes have the meanings stated herein, unless the context otherwise specifies or requires, or unless otherwise defined in the Agreement:

"Acceptance" means the CLIENT has signed, or is deemed to have signed, a Certificate of Substantial Completion.

"Acceptance Date" means the date on which the CLIENT signs or is deemed to have signed a Certificate of Substantial Completion.

"Annual Measurement & Verification Report" or "M&V Report" means the document prepared by MCNEIL RHOADS and submitted to the CLIENT as part of the Measurement and Verification Program, which identifies the Savings achieved for the applicable Annual Period.

"Annual Period" means a twelve (12) month period beginning on the Guarantee Date or on any anniversary date thereof.

"Annual Realized Savings" means the actual Savings achieved by the CLIENT during an Annual Period, calculated as the sum of the Measured & Verified Savings plus the Stipulated Savings, plus any reconciled Savings overages from prior Annual Periods.

"Applicable Law" means laws, ordinances, codes, rules and regulations applicable to the Work and in effect on the Effective Contract Date.

"Baseline" means the measurements of Site energy usage taken prior to the Effective Contract Date, and the Site operating practices in effect prior to the Effective Contract Date, as set forth in the Measurement & Verification, Exhibit C.

"Baseline Period" means the period of time from which data is provided to MCNEIL RHOADS to derive the Baseline measurements. The Baseline Period is set forth in the Measurement & Verification, Exhibit C.

"BTU" means a British Thermal Unit and is a unit of thermal energy.

"Capital Off-Set Savings" means a sub-category of Operational Savings where Savings will result in a cost effective upgrade to the Site to address one or more of the following issues: potential future increased costs, comfort, code non-compliance, usage requirements, user needs and/or expectations.

"Certificate of Substantial Completion" means the document indicating that the Work, or a designated portion of the Work, is Substantially Complete in accordance with the Agreement.

"CLIENT Representative" means the person identified to MCNEIL RHOADS by the CLIENT as the person authorized to make decisions on behalf of the CLIENT as set forth in Section 6.1(a) hereof.

"Construction Period" means the period between the Effective Contract Date and the first day of the month following the date of Substantial Completion.

"Construction Period Savings" means the actual accumulated Measured & Verified Savings plus the Stipulated Savings achieved from the Effective Contract Date until the Guarantee Date.

"Contracted Baseline" means the post-IIM-implementation Site operating profile based on parameters described in Exhibit C, which the CLIENT shall maintain throughout the Performance Guarantee Period and are relied upon by MCNEIL RHOADS for the calculation of Guaranteed Savings as provided in the Measurement & Verification, Exhibit C. The Contracted Baseline must also include stipulated hours of operation and plug-loads for all Sites, and must include stipulated blended, or non-blended, utility rates.

"Deferred Maintenance" means a sub-category of Operational Savings where Savings result from a reduction of current or potential future repair and maintenance costs due to certain work being performed hereunder where such work had been previously postponed.

"*Deliverables*" shall mean collectively, (a) any Equipment and any Software Product deliverable to CLIENT from MCNEIL RHOADS under or in connection with the Work, and (b) any Work Product Deliverables.

"Effective Contract Date" is the date appearing at the top of this Agreement, unless specifically indicated otherwise.

"Energy Conservation Measure" or "ECM" means the MCNEIL RHOADS' Products and/or other third party equipment, devices, materials and/or software as installed by MCNEIL RHOADS at the Sites, or as repaired or replaced by MCNEIL RHOADS or the CLIENT hereunder, for the purpose of improving the efficiency of utility consumption.

"Equipment" means the installed physical equipment to be provided by MCNEIL RHOADS as described in the Scope of Work and Services, Exhibit A.

"Escalation Rate" means an annual percentage increase to be applied to the previous year's energy savings, operational savings and service pricing, beginning and occurring on dates outlined in the Measurement & Verification, Exhibit C. A different Escalation Rate may be applied to differing Savings calculations and/or payment schedules depending on the percentage agreed upon by the Parties.

"FEMP" means the Federal Energy Management Program managed by the United States Department of Energy.

"FEMP Guidelines" means the FEMP M&V Guidelines v. 3.0 published by FEMP as M&V Guidelines; Measurement and Verification for Federal Energy Management Projects.

"Guarantee Date" means the first day of the month following the date on which the CLIENT executes the final Certificate of Substantial Completion, thus indicating that the Construction Period is complete.

"Guaranteed Annual Savings" are the Guaranteed Measured & Verified Savings plus the Stipulated Savings that MCNEIL RHOADS guarantees will be achieved in an Annual Period of the Performance Guarantee Period.

"Guaranteed Measured & Verified Savings" means the Measured & Verified Savings that MCNEIL RHOADS guarantees will be achieved, as described in the Measurement & Verification, Exhibit C.

"Guaranteed Savings" means the amount of Savings that MCNEIL RHOADS guarantees will be achieved at the Site during the Performance Guarantee Period. as identified in the Measurement & Verification, Exhibit C as subject to the limitation identified in Section 4.8.

"Hazardous Materials" refers to the definition found in Section 11.1.

"Infrastructure Improvement Measures" or "IIMs" means the (i) Instruments, know-how and Intellectual Property, including but not limited to methods and techniques for energy conservation, owned or licensed by MCNEIL RHOADS and employed by MCNEIL RHOADS to perform the Work and Services under this Agreement; and, (ii) the installation of Equipment and Software Products with the intent of generating net savings or efficiencies at or in connection with the operation of the Sites. A IIM may include one or multiple ECMs as well as any non-conservation-related activities, means or methods.

"Instruments" means all know-how, tools and related documentation owned or licensed by MCNEIL RHOADS and used by MCNEIL RHOADS to install or commission Equipment and Software Products for operation at the Site, including but not limited to tools for installing any Software Products in Equipment, performing diagnostics on Equipment as installed in the Site as well as any reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for MCNEIL RHOADS and used by MCNEIL RHOADS to provide an ECM or a IIM. Instruments excludes Work Product Deliverables.

"Intellectual Property Rights" or "Intellectual Property" means all trade secrets, patents and patent applications, trade marks (whether registered or unregistered and including any goodwill acquired in such trade marks), services marks, trade names, internet domain names, copyrights (including rights in computer software), moral rights, database rights, design rights, rights in know-how, rights in inventions (whether patentable or not) including, but not limited to, any and all renewals or extensions thereof, and all other proprietary rights (whether registered or unregistered, and any application for the foregoing), and all other equivalent or similar rights which may subsist anywhere in the world, including, but not limited to, any and all renewals or extensions thereof.

"*IPMVP*" means the International Performance Measurement and Verification Protocol, Volume 1, EVO 10000-1.2007 as prepared by the Efficiency Valuation Organization.

"kW" and "kWh" means kilowatt and kilowatt hour, respectively.

"Material Change" means a measurable deviation in the Contracted Baseline such that there is an adverse impact on the Annual Realized Savings which results or will result in a Savings Shortfall.

"MCNEIL RHOADS Pre-existing Intellectual Property" means any Intellectual Property: (i) that has been conceived or developed by an employee or subcontractor of MCNEIL RHOADS before MCNEIL RHOADS performs any Work or Services under this Agreement; (ii) that is conceived or developed by such employee or subcontractor at any time wholly independently of MCNEIL RHOADS performing the Work under this Agreement; or, (iii) if developed while performing the Work under this Agreement, where the development of Intellectual Property for the benefit of the CLIENT is not expressly identified as a IIM or part of a IIM. MCNEIL RHOADS Pre-existing Property is included in all reports, notes, calculations, data, drawings, estimates, specifications, manuals, documents, all computer programs, codes and computerized materials prepared by or for MCNEIL RHOADS.

"Measured & Verified Savings" means those Savings that can be calculated and ascertained by the methodology set forth in the Measurement & Verification, Exhibit C.

"Measurement and Verification" is the process of ascertaining whether the IIMs are performing at the level necessary to achieve the Guaranteed Savings.

"Measurement & Verification Program" or "MVP" means the Services by MCNEIL RHOADS required to monitor the operation of the IIMs so that MCNEIL RHOADS can provide the Annual M&V Report detailing the Annual Realized Savings and comparing the same to the Annual Guaranteed Savings based upon the calculations

agreed to by the Parties in the Measurement & Verification, Exhibit C. The Services provided under the MVP are described in the Scope of Work and Services, Exhibit A.

"Notice To Proceed" or "NTP" means a written notice from the CLIENT given to MCNEIL RHOADS authorizing MCNEIL RHOADS to commence installation of the Work.

"Operational Savings" means Savings derived from reduced operational expenses, including but not limited to, Deferred Maintenance, or Capital Off-Set Savings. Operational Savings can only be expressed in monetary value and are Stipulated Savings.

"Parties" means the CLIENT and MCNEIL RHOADS.

"Performance Guarantee" means the guarantee that MCNEIL RHOADS makes to the CLIENT which is reconciled and confirmed through the Measurement & Verification process set forth in the Measurement & Verification, Exhibit C.

"Performance Guarantee Period" means the timeframe from the Guarantee Date to the last day of the final Annual Period as described in Table 1.1 of the Measurement & Verification, Exhibit C, or the period from the Guarantee Date until the termination of this Agreement, whichever occurs earlier.

"Permitted Users" means the CLIENT, its employees and agents.

"Savings" means the Parties' intended result from implementing all IIMs. Savings can be derived from reductions in energy or utility consumption, reductions in operating expenses, a changed utility rate classification or a combination thereof. The Savings that are achieved from reduced energy or utility consumption are converted to a dollar figure based upon the calculation in Article 4.1.1 and as detailed in the Measurement & Verification, Exhibit C. When converted to a dollar figure, these Savings become energy cost savings. Operational Savings are only expressed in a dollar figure.

"Savings Shortfall" means the Annual Realized Savings less the Guaranteed Annual Savings for the Annual Period resulting in an amount less than zero.

"Services" means those services to be provided by MCNEIL RHOADS as described in the Scope of Work and Services, Exhibit A.

"Software Product" means any software that is owned or licensed by MCNEIL RHOADS or its affiliates and that is either separately deliverable for use in the Equipment or for use in a computer system owned by the CLIENT or delivered as firmware embedded in the Equipment.

"Site" or "Sites" means the building(s) or structure(s) where Work will be installed or implemented.

"Stipulated Savings" are a sub-category of Guaranteed Savings that do not require post-IIM implementation measurement and verification because they are agreed upon by the Parties based upon representations made to MCNEIL RHOADS by the CLIENT and through the application of generally accepted analytical formulae. As such, Stipulated Savings are agreed upon in advance by the Parties and cannot be changed. When used as a methodology for representing a IIM's energy savings, such methodology is not recognized as a measurement and verification methodology under IPMVP. Therefore, where the IPMVP measurement methodologies are required, a methodology other than Stipulated Savings must be used to calculate energy savings.

"Substantial Completion" or "Substantially Complete" means the Work, or any identifiable portion thereof, is sufficiently complete, in accordance with the provisions of this Agreement relating to the Scope of the Work and Services, Exhibit A, such that the CLIENT will be able to realize from such Work substantially all of the practical benefits intended to be gained therefrom, or otherwise employ the Work or the IIMs for their intended purposes. To the extent that the Work requires multiple Acceptances, the Work's final Substantial Completion date shall determine the Guarantee Date.

"Therm" is a measure of energy equal to 100,000 BTUs.

"Total Guaranteed Savings" means the sum of the Savings that are guaranteed for all Annual Periods during the Performance Guarantee Period (inclusive of the Construction Period, if applicable). The Total Guaranteed Savings are reflected in Tables 1.1 and 1.2 in the Measurement & Verification, Exhibit C.

"Work" means collective labor, Equipment and services comprising the IIMs to be performed by MCNEIL RHOADS, as described in the Scope of Work and Services, Exhibit A.

Article 3

General

- 3.1 The Parties hereto acknowledge and agree that this Agreement has been negotiated at arm's length and among the Parties equally sophisticated and knowledgeable as to the subject matter of this Agreement. Each party has conferred, or has had the opportunity to confer, with their respective legal counsel. Accordingly, in the event any claim is made relating to any conflict, omission, or ambiguity in this Agreement, no presumption, burden of proof, or persuasion shall be implied by virtue of the fact that this Agreement was drafted by or at the request of a particular party or its legal counsel.
- 3.2 The CLIENT hereby engages and MCNEIL RHOADS hereby accepts the engagement to perform and to provide the Work and Services set forth in Exhibit A in accordance with the terms and conditions of this Agreement.
- 3.3 MCNEIL RHOADS shall perform the Work as an independent contractor with exclusive control of the manner and means of performing the Work in accordance with the requirements of this Agreement. MCNEIL RHOADS has no authority to act or make any agreements or representations on behalf of the CLIENT. This Agreement is not intended, and shall not be construed to create, between the CLIENT and MCNEIL RHOADS, the relationship of principal and agent, joint-venturers, copartners or any other such relationship, the existence of which is hereby expressly denied. No employee or agent of MCNEIL RHOADS shall be, or shall be deemed to be, an employee or agent of the CLIENT.
- 3.4 MCNEIL RHOADS represents, warrants and covenants to the CLIENT that:
- (a) It has all requisite corporate power to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of MCNEIL RHOADS's organizational documents, any Applicable Law, or any agreements with third parties;
- (b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence during the term of this Agreement and any extensions thereof;
- (c) This Agreement is the legal, valid and binding obligation of MCNEIL RHOADS, in accordance with its terms, and all requirements have been met and procedures have been followed by MCNEIL RHOADS to ensure the enforceability of the Agreement;
- (d) To MCNEIL RHOADS's best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting MCNEIL RHOADS that affects the validity or enforceability of this Agreement; and,
- (e) It is duly authorized to do business in all locations where the Work and Services are to be performed.
- 3.5 The CLIENT represents, warrants and covenants to MCNEIL RHOADS that:
- (a) It has all requisite corporate power and/or statutory authority to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of the CLIENT's organizational documents, any Applicable Law, or any agreements with third parties;
- (b) It has done and will continue to do all things necessary to preserve and keep in full force and effect its existence during the term of this Agreement and any extensions thereof;
- (c) This Agreement is the legal, valid and binding obligation of the CLIENT, in accordance with its terms, and all requirements have been met and procedures have been followed by the CLIENT to ensure the enforceability of the Agreement;
- (d) To the CLIENT's best knowledge, there is no pending or threatened, suit, action, litigation or proceeding against or affecting the CLIENT that affects the validity or enforceability of this Agreement; and,

(e) The CLIENT has consulted with its legal counsel and is relying on the advice of its counsel concerning all legal issues related to this Agreement, and is not relying on MCNEIL RHOADS in this regard.

Article 4

Performance Guarantee

- 4.1 The Annual Realized Savings generated during each Annual Period will be no less than the Guaranteed Annual Savings as shown in Tables 1.1 and 1.2 of the Measurement & Verification, Exhibit C, subject to the limits in Section 4.8. The measurement and verification calculation methodology for determining the Savings is set forth in the Measurement & Verification, Exhibit C.
- 4.1.1 General. Except as otherwise provided, energy savings will be calculated for each Annual Period as the product of (a) "units of energy saved" (kWh, Therms, GJ, etc.) multiplied by (b) "cost of energy."

(a) Units of energy saved are calculated by 1) assuming the Contracted Baseline has been maintained per Section 4.3 below, and 2) subtracting the then current period measured units of energy consumed from the Baseline units of energy defined in Article 5 of Exhibit C.

(b) Costs of energy are defined in Article 6 of Exhibit C-Utility Rate Structures and Escalation Rates.

- 4.2 Any future Escalation Rates to be applied to utility, energy or other costs are set forth in Exhibit C. MCNEIL RHOADS and the CLIENT agree that the Baseline data set forth in Exhibit C is a full and accurate reflection of the existing Site, equipment, operation, business use and energy usage, and that such Baseline data will be the basis on which all future energy use will be compared in order to determine the Annual Realized Savings.
- 4.3 MCNEIL RHOADS and the CLIENT agree that the Contracted Baseline fully described in Exhibit C will represent the new operating and/or equipment profile of the Site resulting from the IIM implementation. The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT operates and maintains its Sites within the Contracted Baseline parameters, as may be adjusted in accordance with the terms herein, during the entire term of the Performance Guarantee Period.
- 4.4 The CLIENT agrees to notify MCNEIL RHOADS prior to or within thirty (30) days of CLIENT's knowledge of any Material Change.
- 4.5 Parties agree that CLIENT anticipates soliciting plans, designs, specifications and bids for the replacement of existing HVAC system(s) in certain buildings of CLIENT. During design and/or prior to the award of any bid, CLIENT shall provide McNEIL RHOADS with plans and/or specifications for evaluation to identify whether said HVAC replacement project(s) will constitute a Material Change. Withinsixty (60) days of notice of a Material Change, MCNEIL RHOADS's discovery of a Material Change and with prompt notice to CLIENT, MCNEIL RHOADS will require an adjustment to the Measurement & Verification and the Performance Guarantee as a result of the Material Change.
- 4.6 A Performance Guarantee Period savings reconciliation as identified in Section 4.1 will be performed at the end of each Annual Period as follows:

(a) Within ninety (90) days of the Guarantee Date, the Construction Period Savings shall be reconciled and applied to the calculation of the first Annual Period's Annual Realized Savings.

(b) At the conclusion of each Annual Period, MCNEIL RHOADS will calculate the Annual Realized Savings and compare the calculated amount to the applicable Guaranteed Annual Savings amount.

(c) Where the Annual Realized Savings are less than the Guaranteed Annual Savings, a Savings Shortfall shall be recorded for the applicable Annual Period.

(d) A Savings Shortfall shall be paid by MCNEIL RHOADS within sixty (60) days following the CLIENT's acceptance of the reconciliation and once paid MCNEIL RHOADS shall have fulfilled its obligations under the Performance Guarantee for the applicable Annual Period.

4.6.1 As the mutual goal of the Parties is to maximize Savings, if MCNEIL RHOADS can correct a Savings Shortfall through an operational improvement at no expense or material inconvenience to the CLIENT and without future operational expenses, and the CLIENT declines to allow such operational improvement, then any future Savings Shortfall that the improvement would have corrected will be negated by deeming the value of the Savings Shortfall as Savings achieved and adding the amount of same to the Annual Realized Savings calculations for each Annual Period thereafter.

- 4.7 The Performance Guarantee is dependent upon and is subject to the express condition that the CLIENT continues to employ MCNEIL RHOADS to perform the MVP during the entire Performance Guarantee Period. If the CLIENT fails to maintain, breaches, cancels or otherwise causes the termination of the MVP then; (a) The Performance Guarantee shall terminate immediately and be void and of no force or effect; or, (b) Where termination of the Performance Guarantee acts to render the Agreement in violation of Applicable Law, all Guaranteed Savings thereafter shall be determined to have been achieved and MCNEIL RHOADS shall have been deemed to have met its Performance Guarantee obligations under this Agreement for each and every Annual Period thereafter without the obligation to provide the CLIENT, or any third-party as the case may be, with any further Annual Measurement & Verification Reports.
- 4.8 Unless expressly contrary to Applicable Law, the payments and credits based on Savings Shortfalls, if any, are the sole remedy of the CLIENT under this Performance Guarantee. ANY PAYMENTS MADE OR TO BE MADE TO THE CLIENT UNDER THE TERMS OF THIS PERFORMANCE GUARANTEE SHALL NOT EXCEED THE PAYMENTS ACTUALLY MADE BY CLIENT TO EITHER MCNEIL RHOADS AND/OR A THIRD-PARTY (IN THE EVENT THAT THE CLIENT HAS FINANCED THE TRANSACTION) FOR THE AGGREGATE OF: THE PRICE, AS DEFINED IN EXHIBIT B, ARTICLE 1.1; THE MVP PAYMENTS; IF ANY; AND, IF APPLICABLE, THE CLIENT'S COST OF FINANCING THE WORK. The CLIENT's cost of financing the Work is the cost of financing calculated either: (a) On the date that the escrow account is funded in accordance with Exhibit B, Article 1.2; or, (b) On the Effective Contract Date if the escrow requirement is expressly waived by MCNEIL RHOADS.
- 4.9 The CLIENT represents that all existing equipment that is not installed by MCNEIL RHOADS under this Agreement but is deemed necessary to achieve the Performance Guarantee, is in satisfactory working condition. Prior to the beginning of the Performance Guarantee Period, MCNEIL RHOADS will have inspected all such existing equipment and reported any deficiencies to the CLIENT. To the extent that the deficiencies are not remedied by the CLIENT prior to the Guarantee Date, the adverse affect on the ability of the Project to attain the necessary Guaranteed Savings shall be factored into the Annual Measurement & Verification Report and, if necessary, the Performance Guarantee shall be adjusted accordingly.
- 4.10 If the Equipment or the existing equipment is altered or moved by any person (including the CLIENT) other than MCNEIL RHOADS or a person authorized by MCNEIL RHOADS, the CLIENT shall immediately notify MCNEIL RHOADS in writing, and MCNEIL RHOADS reserves the right to perform a reacceptance test on, or if necessary a re-commissioning of, the system at the CLIENT's expense in order to determine if a Material Change has occurred.
- 4.11 MCNEIL RHOADS will have no liability or obligation to continue providing MVP Services or any Guaranteed Savings under the Performance Guarantee in the event that the CLIENT fails to:

(a) Authorize a re-acceptance test or re-commissioning that MCNEIL RHOADS reasonably deems necessary in order to determine if a Material Change has occurred;

(b) Provide access to any Site where Work is to be performed;

(c) Service and maintain all Equipment in accordance with the manufacturers' recommendations in order to prevent a Savings Shortfall; or,

(d) Provide MCNEIL RHOADS with accurate Site operating information as soon as such information becomes reasonably available to the CLIENT, including energy usage and cost, executed preventive maintenance and repair records, building or equipment additions, and occupancy levels during each Annual Period.

- 4.12 Unless expressly contrary to Applicable Law, should the CLIENT decide to discontinue the MVP before the end of the Performance Guarantee Period, the CLIENT will give MCNEIL RHOADS thirty (30) days prior written notice and in such notice indicate that the CLIENT has selected one of the following:
 - (a) The CLIENT will re-invest the avoided cost of cancellation of the MVP into Site improvements and services that improve the overall Site's performance and which improvements and services are implemented by MCNEIL RHOADS; or,

(b) The CLIENT will pay to MCNEIL RHOADS a prorated amount of the remaining value left in the MVP Annual Period, as a liquidated damage and not as a penalty, to compensate MCNEIL RHOADS for MCNEIL RHOADS's up-front costs and expenses in preparing to perform the MVP as contracted for the Annual Period. This prorated amount shall be calculated as a percentage of the total MVP cost for the applicable Annual Period, as identified in Exhibit B, based on the number of days from the Guarantee Date to the date of cancellation divided by the number of days in the applicable Annual Period.

4.13 Unless expressly contrary to Applicable Law, any disputes concerning the calculation of the Annual Realized Savings or changes to the Contracted Baseline that are not resolved by negotiation between the Parties within thirty (30) days of the notice of the dispute, will be resolved by a third-party professional engineering firm which is reasonably acceptable to both MCNEIL RHOADS and the CLIENT. The determination of such firm will be final and binding upon CLIENT and MCNEIL RHOADS. MCNEIL RHOADS and the CLIENT will each be responsible for half of the fees of such firm.

Article 5

Work by MCNEIL RHOADS

- 5.1 MCNEIL RHOADS will perform the Work expressly described in this Agreement and in any work release documents or change orders that are issued under this Agreement and signed by both Parties. The Work performed by MCNEIL RHOADS shall be conducted in a workmanlike manner.
- 5.2 MCNEIL RHOADS shall perform the Work during agreed upon hours, Monday through Friday inclusive, excluding holidays, unless otherwise agreed herein. The CLIENT shall make the Site available so Work may proceed in an efficient manner. MCNEIL RHOADS agrees that all Work performed under this Agreement, including that of subcontractors, shall be coordinated with CLIENT and approved by the County Administrator prior to commencement thereof. All work shall be conducted in such a manner so as to keep interference with CLIENT's daily operations to a minimum.
- 5.3 MCNEIL RHOADS is not required to conduct safety, reacceptance or other tests, install new devices or equipment or make modifications to any Equipment unless expressly made a part of the Work identified in the Scope of Work and Services, Exhibit A. Any CLIENT request to change the scope or the nature of the Work or Services must be in the form of a mutually agreed change order, effective only when executed by the Parties.
- 5.4 All Work Product Deliverables shall become the CLIENT's property upon receipt by CLIENT. MCNEIL RHOADS may retain file copies of such Work Product Deliverables. If any Instruments are provided to the CLIENT under this Agreement, any such Instruments shall remain MCNEIL RHOADS property, including the Intellectual Property conceived or developed by MCNEIL RHOADS in the Instruments. All MCNEIL RHOADS Pre-existing Intellectual Property that may be included in the Deliverables provided to the CLIENT under this Agreement shall also remain MCNEIL RHOADS's property including the MCNEIL RHOADS Pre-existing Intellectual Property included in the Work Product Deliverables. All Work Product Deliverables and any Instruments provided to the CLIENT are for Permitted Users' use and only for the purposes disclosed to MCNEIL RHOADS. MCNEIL RHOADS hereby grants the CLIENT a royalty-free (once payments due under this Agreement are paid to MCNEIL RHOADS), non-transferable, perpetual, nonexclusive license to use any MCNEIL RHOADS Pre-existing Intellectual Property solely as incorporated into the Deliverables and MCNEIL RHOADS' Intellectual Property as incorporated into any Instruments provided to the CLIENT under this Agreement. Under such license, and following agreement to be bound to such separate confidentiality provisions that may exist between the Parties, Permitted Users shall have a right to:

- (a) Use, in object code form only, the Software Products included in the Deliverables ("Software Deliverables");
- (b) Make and retain archival and emergency copies of such Software Deliverables (subject to any confidentiality provisions) except if the Software Deliverable is embedded in the Equipment; and,
- (c) Use all such Deliverables and such Instruments, provided however, the Deliverables and Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be limited to the particular project and location for which the Deliverables are provided. All Deliverables provided to the CLIENT are for Permitted Users' use only for the purposes disclosed to MCNEIL RHOADS, and the CLIENT shall not transfer them to others or use them or permit them to be used for any extension of the Work or any other project or purpose, without MCNEIL RHOADS's express written consent.
- 5.4.1 Any reuse of such Deliverables or such Instruments for other projects or locations without the written consent of MCNEIL RHOADS, or use by any party other than Permitted Users will be at Permitted Users' risk and without liability to MCNEIL RHOADS; and, the CLIENT shall, to the extent permitted by law, indemnify, defend and hold MCNEIL RHOADS harmless from any claims, losses or damages arising therefrom.
- 5.4.2 In consideration of such license, CLIENT agrees not to reverse engineer any Equipment or Software Product to reconstruct or discover any source code, object code, firmware, underlying ideas, or algorithms of such Equipment or Software Product even to the extent such restriction is allowable under Applicable Law.
- 5.4.3 Nothing contained in this Agreement shall be interpreted or construed to convey to the CLIENT the pre-existing Intellectual Property rights of any third party incorporated into the Deliverables. CLIENT agrees to take delivery of any Software Deliverables subject to any applicable MCNEIL RHOADS or third party end-user license agreement accompanying such Software Deliverable.
- 5.5 MCNEIL RHOADS shall be responsible for any portion of the Work performed by any subcontractor of MCNEIL RHOADS. All subcontracts/bids are subject to approval, in writing, by the County Administrator prior to the award of any subcontract/bid for work or equipment and MCNEIL RHOADS shall obtain approval thereof. All requests for approval of subcontracts/bids made to CLIENT by MCNEIL RHOADS shall obtain include a copy of the subcontract/bid together with the cost involved and plans and specifications where necessary. MCNEIL RHOADS shall endeavor to use local contractors, merchants and suppliers where possible in the performance of this Agreement. Amendments or Change Orders to any subcontract shall be approved by CLIENT. MCNEIL RHOADS shall not have any responsibility, duty or authority to direct, supervise or oversee any contractor of the CLIENT or their work or to provide the means, methods or sequence of their work or to stop their work. MCNEIL RHOADS's work and/or presence at the Site shall not
- 5.6 MCNEIL RHOADS warrants that:

relieve others of their responsibility to the CLIENT or to others.

(a) Labor for all Work, excluding MVP, is warranted to be free from defects in workmanship for one year after the Work is performed.

(b) MVP Services are warranted to be free from defects in workmanship for ninety (90) days after the Services are performed.

(c) Any and all assignable warranties available from any manufacturer, supplier, or subcontractor of the installed Equipment shall be assigned to the CLIENT, without recourse.

5.7 Warranty Limitation:

(a) The limited warranties set forth in Section 5.6 will be void as to, and shall not apply to, any Equipment (i) repaired, altered or improperly installed by any person other than MCNEIL RHOADS, its AGENTS or its authorized representative; (ii) which the CLIENT or a third party subjects to unreasonable or improper use or storage, uses beyond rated conditions, operates other than per MCNEIL RHOADS's or the manufacturer's instructions, or otherwise subjects to improper maintenance, negligence or accident; or (iii)

damaged because of any use of the Equipment after the CLIENT has, or should have had, knowledge of any defect in the Equipment. However, MCNEIL RHOADS assigns to the CLIENT, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Equipment.

(b) Any claim under the limited warranty granted above must be made in writing to MCNEIL RHOADS within thirty (30) days after discovery of the claimed defect unless discovered directly by MCNEIL RHOADS. Such limited warranty only extends to the CLIENT and not to any subsequent owner of the Equipment. The CLIENT's sole and exclusive remedy for any Equipment or Services not conforming with this limited warranty is limited to, at MCNEIL RHOADS's option: (i) repair or replacement of defective components of covered Equipment; (ii) re-performance of the defective portion of the Services; or (iii) to the extent previously paid and itemized, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Equipment or Services.

(c) MCNEIL RHOADS shall not be required to repair or replace more than the component(s) of the Equipment or the portion of the Work and Services actually found to be defective. Repaired or replaced Equipment or Services will be warranted hereunder only for the remaining portion of the original warranty period.

5.8 Reserved.

5.9 MCNEIL RHOADS will not be responsible for the maintenance, repair or replacement of, or Services necessitated by reason of:

(a) Non-maintainable, non-replaceable or obsolete parts of the Equipment, including but not limited to: ductwork, shell and tubes, heat exchangers, coils, unit cabinets, casings, refractory material, electrical wiring, water and pneumatic piping, structural supports, cooling tower fill, slats and basins, etc., unless covered by the warranty provisions herein or otherwise specifically stated herein; or

(b) The CLIENT's or a third-party's negligence, abuse, misuse, improper or inadequate repairs or modifications, improper operation, lack of operator maintenance or skill, corrosion, erosion, improper or inadequate water treatment, electrolytic action, chemical action, failure to comply with manufacturer's operating and environmental requirements, Acts of God, or other reasons beyond MCNEIL RHOADS's control. Unless expressly agreed in writing, MCNEIL RHOADS is not responsible for the removal or reinstallation of replacement valves, dampers, or waterflow and tamper switches with respect to pipes and ductwork, including vent or drain system. MCNEIL RHOADS ASSUMES NO RESPONSIBILITY FOR ANY SERVICE PERFORMED ON ANY EQUIPMENT OTHER THAN THAT PERFORMED BY MCNEIL RHOADS, ITS AGENTS OR ITS AUTHORIZED REPRESENTATIVES.

Article 6

The CLIENT's Responsibilities

6.1 The CLIENT, without cost to MCNEIL RHOADS, shall:

(a) Designate a contact person with authority to make decisions for the CLIENT regarding the Work and provide MCNEIL RHOADS with information sufficient to contact such person in an emergency;

(b) Coordinate the work of contractors under CLIENT's sole control so as not to disrupt the Work and Services proceeding in an efficient manner;

(c) Subject to the terms of Section 5.2 herein, provide or arrange for 24 hour, 7 day per week access and make all reasonable provisions for MCNEIL RHOADS to enter any Site where Work is to be performed so that Work may proceed in an efficient manner;

(d) Permit MCNEIL RHOADS to control and/or operate all building controls, systems, apparatus, equipment and machinery necessary to perform the Work;

(e) Furnish MCNEIL RHOADS with blueprints, surveys, legal descriptions, waste management plans and all other available information pertinent to the Work and any Site where the Work is to be performed as may be reasonably requested by MCNEIL RHOADS. Such plans and blueprints, along with an executed copy of

this Agreement, with its Exhibits, shall be kept and maintained in CLIENT's files for a period of fifteen (15) years from the Effective Contract Date;

(f) Furnish MCNEIL RHOADS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work, except for those MCNEIL RHOADS has expressly agreed in writing to obtain;

(g) In accordance with Article 11 hereof, promptly notify MCNEIL RHOADS of all known or suspected Hazardous Materials at the Site, of any contamination of the Site by Oil or Hazardous Material, and of any other conditions requiring special care or which may reasonably be expected to affect the Work, and provide MCNEIL RHOADS with any available documents describing the quantity, nature, location and extent of such materials, contamination or conditions;

(h) Comply with Applicable Law and provide any notices required to be given to any government authorities in connection with the Work, except such notices MCNEIL RHOADS has expressly agreed in writing to give;

(i) Provide MCNEIL RHOADS with legally required materials and information (including but not limited to Material Safety Data Sheets) related to all Hazardous Materials located at any Site where the Work is to be performed;

(j) Furnish MCNEIL RHOADS with any contingency plans, safety programs and other policies, plans or programs related to any Site where the Work is to be performed;

(k) Operate, service and maintain all Equipment according to the manufacturer's recommendations including those set forth in the manufacturer's operating manuals or instructions, as well as all requirements of Applicable Law or of authorities having jurisdiction. The CLIENT shall furnish all needed servicing and parts for said IIMs, which parts shall become part of the IIMs. Such Equipment shall be operated only in the specified operating environment, which shall be supplied by the CLIENT, including without limitation: (1) suitable electrical service, including clean, stable, properly conditioned power, to all Equipment; (2) telephone lines, capacity and connectivity as required by such Equipment; and (3) heat, light, air conditioning or other environmental controls, and other utilities in accordance with the specifications for the Equipment;

(1) Promptly notify MCNEIL RHOADS of any unusual operating conditions, hours of usage, system malfunctions, installed equipment or building alterations that may affect the Equipment or energy usage or any Services; and,

(m) If applicable, provide and pay for a dedicated voice grade dial-up phone line, or a mutually agreed communication method, and install a terminal block, or an equivalent communication mechanism, in a mutually agreed upon location. All on-line service Equipment (excluding the phone line) will remain the property of MCNEIL RHOADS unless otherwise stated herein.

- 6.2 Unless contrary to Applicable Law, the CLIENT acknowledges that the technical and pricing information contained in this Agreement is confidential and proprietary to MCNEIL RHOADS and agrees not to disclose it or otherwise make it available to others without MCNEIL RHOADS's express written consent.
- 6.3 The CLIENT acknowledges that it is now and shall at all times remain in control of the Site. Except as expressly provided herein, MCNEIL RHOADS shall not be responsible for the adequacy of the health or safety programs or precautions related to the CLIENT's activities or operations, the CLIENT's other contractor(s), the work of any other person or entity, or Site conditions. MCNEIL RHOADS shall not be responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of the CLIENT or others at the Site. So as not to discourage MCNEIL RHOADS from voluntarily addressing health or safety issues while at the Site, in the event MCNEIL RHOADS does address such issues by making observations, reports, suggestions or otherwise, the CLIENT shall not hold, or attempt to hold, MCNEIL RHOADS liable or responsible on account thereof.

Article 7

Changes and Delays

- 7.1 As the Work is performed, Applicable Law or conditions may change, or circumstances outside MCNEIL RHOADS's reasonable control may develop, which would require MCNEIL RHOADS to expend additional costs, effort or time to complete the Work, in which case MCNEIL RHOADS will notify the CLIENT and an equitable adjustment will be made to MCNEIL RHOADS's compensation and the time for performance. In the event such changes require the Work to be suspended or terminated, MCNEIL RHOADS shall be compensated for Work previously performed and for costs reasonably incurred in connection with the suspension or termination.
- 7.2 Either party may request additions, deletions, modifications or changes to the Work. Any such requests shall only become effective upon execution of a written agreement by authorized representatives of both Parties.
- 7.3 MCNEIL RHOADS may substitute alternative parts, goods or equipment in the performance of the Work upon obtaining written authorization of the CLIENT, who after review of the proposed changes in cost and/or plans and specifications, approves said substitution.
- 7.4 MCNEIL RHOADS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not restricted to acts or omissions by the CLIENT or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of such delay or failure, the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period and the compensation shall be equitably adjusted to compensate for additional costs MCNEIL RHOADS incurs due to such delay. If any such delay exceeds sixty (60) days, MCNEIL RHOADS may terminate this Agreement upon fourteen (14) days notice to the CLIENT and the CLIENT shall promptly pay MCNEIL RHOADS for the allocable portion of the Work completed, for any costs and expenses of termination, and for any loss or damage incurred with respect to materials, equipment, tools and machinery, including reasonable overhead and profit.

Article 8

Compensation

- 8.1 The aggregate amount paid by CLIENT provides for and is solely in consideration of the Scope of Work and Services described in Exhibit A, and is detailed in Exhibit B.
- 8.2 MCNEIL RHOADS will invoice the CLIENT in accordance with the schedules set forth in Exhibit B. Unless otherwise agreed in writing, invoices are due and payable no later than forty-five (45) days after receipt thereof by CLIENT. In the event of a bona fide dispute, CLIENT shall pay only the amount not disputed.
- 8.3 MCNEIL RHOADS may suspend or terminate the Work or Services at any time if payment is not received when due. In such event, MCNEIL RHOADS shall be entitled to compensation for the Work or Services previously performed and for costs reasonably incurred in connection with the suspension or termination.
- 8.4 On amounts not paid within forty-five (45) days of invoice date, the CLIENT shall be liable to MCNEIL RHOADS, in addition to the amount of the invoice, for interest at a rate of one and one-half percent (1 ½%) per month or portion thereof on the unpaid balance from the expiration of such forty-five (45) day period until such time as MCNEIL RHOADS is paid. The CLIENT shall reimburse MCNEIL RHOADS for MCNEIL RHOADS's costs and expenses (including reasonable attorney and witness fees) incurred for collection under this Agreement.
- 8.5 Except to the extent expressly agreed herein, MCNEIL RHOADS's fees do not include any taxes, excises, fees, duties or other government charges related to the Work or Services. The CLIENT shall pay such amounts or reimburse MCNEIL RHOADS for any such amounts MCNEIL RHOADS pays to the extent such charges are lawfully due and payable by CLIENT and have been paid or incurred by MCNEIL RHOADS in

furtherance thereof. If the CLIENT claims that the Work or Services is subject to a tax exemption or direct payment permit, it shall provide MCNEIL RHOADS with a valid exemption certificate or permit and, unless specifically prohibited by law, shall indemnify, defend and hold MCNEIL RHOADS harmless from any taxes, costs and penalties arising out of the use or acceptance of same.

8.6 All other work or services requested by the CLIENT, including but not limited to the following, shall be separately billed or surcharged on a time and materials basis:

(a) Emergency services, if inspection does not reveal any deficiency covered by the Scope of Work and Services, Exhibit A;

(b) Work and/or services performed at times other than during MCNEIL RHOADS's normal working hours, unless otherwise agreed to in Exhibit A; or

(c) Work and/or services performed on equipment not covered by the Scope of Work and Services, Exh. A.

Article 9

Acceptance

- 9.1 When MCNEIL RHOADS believes that all, or an independent, definable phase or portion, of the Work is Substantially Complete, MCNEIL RHOADS will submit a Certificate of Substantial Completion to the CLIENT which shall be subject to the following:
 - (a) If the CLIENT concurs that the described portion of the Work as performed is Substantially Complete, the CLIENT will accept that Work by signing the Certificate of Substantial Completion and returning it to MCNEIL RHOADS;
 - (b) If the CLIENT does not concur that the Work is Substantially Complete, then the CLIENT shall notify MCNEIL RHOADS within thirty (30) business days of any discrepancies;
 - (c) To the extent MCNEIL RHOADS does not dispute the discrepancies raised by the CLIENT, MCNEIL RHOADS shall correct the Work to conform to the description of the Work set forth herein, and resubmit the Certificate of Substantial Completion to the CLIENT;
 - (d) If MCNEIL RHOADS disagrees with the discrepancies raised by the CLIENT, MCNEIL RHOADS shall notify the CLIENT of a dispute and such dispute shall be resolved in accordance with Section 9.3 herein;
 - (e) If the CLIENT Representative does not deliver written notice to MCNEIL RHOADS within thirty (30) business days of receiving the Certificate of Substantial Completion, in the mutual interests of the Project proceeding in a timely manner, the CLIENT will be deemed to have agreed to, signed and returned the Certificate of Substantial Completion.
- 9.2 To the extent that this Project requires multiple Certificates of Substantial Completion, the final Certificate of Substantial Completion shall determine the date on which the Construction Period is completed.
- 9.3 Any disputes concerning the Substantial Completion of the Work will be resolved by submitting the issue to a third party professional engineering firm and which is reasonably acceptable to both MCNEIL RHOADS and the CLIENT. The determination of this firm with respect to completion or Substantial Completion will be final and binding upon the Parties. MCNEIL RHOADS and the CLIENT shall share equally the costs or fees for such firm in connection with such dispute resolution process.

Article 10

Insurance and Allocation of Risk

10.1 MCNEIL RHOADS shall maintain, at MCNEIL RHOADS's expense, the following insurances while performing the Work and shall add the CLIENT as an "Additional Insured" to each policy that is referenced in subsections (c) through and including (c) hereof:

(a) Workers' Compensation at the statutory amounts and limits as prescribed by Applicable Law.

(b) Employer's Liability insurance (and, where applicable, Stop Gap extended protection endorsement) limits of liability shall be:

- \$500,000 per occurrence
- \$500,000 Each Employee

(c) MCNEIL RIIOADS shall carry, in the Occurrence Coverage Form, Comprehensive General Liability or Commercial General Liability, insurance covering MCNEIL RHOADS's operations and providing insurance for bodily injury and property damage with limits of liability stated below and including coverage for:

- Products and Completed Operations
- Contractual Liability insuring the obligations assumed by MCNEIL RHOADS in this Agreement
- Broad Form Property Damage (including Completed Operations)
- Explosion, Collapse and Underground Hazards
- Personal Injury Liability:
 - Limits of liability shall be \$1,000,000 per occurrence/aggregate

(d) MCNEIL RHOADS shall carry Automobile Liability Insurance in the Occurrence Coverage Form covering all owned, hired and non-owned automobiles and trucks used by or on behalf of MCNEIL RHOADS providing insurance for bodily injury liability and property damage liability for the limits of:

• \$1,000,000 per occurrence/aggregate

(e) MCNEIL RHOADS shall carry Excess Liability Insurance in the Occurrence Coverage Form with limits of:

• \$2,000,000 per occurrence/aggregate

10.2 The CLIENT will either maintain at its own expense, or self-insure for the equivalent risks, property insurance written on a builder's "all-risk" or equivalent policy form in an amount no less than the Price identified in Exhibit B, Article 1.1, plus the value of subsequent modifications and cost of materials supplied or installed by others, on a replacement cost basis without optional deductibles. Such property insurance shall be maintained, unless otherwise provided in the Contract Documents or otherwise agreed in writing by MCNEIL RHOADS, until final payment has been made to MCNEIL RHOADS or no person or entity other than the CLIENT has an insurable interest in the property, whichever is later. The policy form shall include without limitation, insurance against the perils of fire (with extended coverage) and physical loss or damage including, without duplication of coverage, theft, vandalism, malicious mischief, collapse, earthquake, flood, windstorm, falsework, testing and start-up, rebuilding and debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for MCNEIL RHOADS's services and expenses required as result of such insured loss. If the insurance requires deductibles or retentions, the CLIENT shall pay costs not covered because of such deductibles or retentions. This insurance shall cover portions of the Work off the Site, and also portions of the Work in transit. Partial occupancy or use shall not commence unless the insurance company providing this insurance has consented to such partial occupancy or use by endorsement for otherwise. The CLIENT shall purchase and maintain boiler and machinery insurance which shall specifically cover such insured objects during installation and until Acceptance by the CLIENT. The insurance required by this section shall include the interests of the CLIENT, MCNEIL RHOADS, subcontractor and sub-subcontractor in the Work. MCNEIL RHOADS shall be included as an additional insured on each such insurance coverage. The CLIENT and MCNEIL RHOADS waive all rights against each other and any of their subcontractors, sub-subcontractors, agents and employees for damages caused by fire or other causes of loss to the extent covered by the insurance required by this

section and for any other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by the CLIENT as fiduciary. A waiver of subrogation shall be effective as to a person or entity even though that person or entity would otherwise have duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged. Insurance certificates shall be furnished upon request.

- 10.3 Title and risk of loss of materials and equipment furnished by MCNEIL RHOADS shall pass to the CLIENT upon their delivery to the Site, and the CLIENT shall be responsible for protecting them against theft and damage.
- 10.4 MCNEIL RHOADS will indemnify the CLIENT from and against losses, claims, expenses and damages (including reasonable attorney's fees) for personal injury or physical damage to property (collectively "Damages"). Such indemnification shall be solely to the extent the Damages are caused by or arise directly from MCNEIL RHOADS or its employees', consultants' or agents' negligent acts or omissions or willful misconduct in connection with MCNEIL RHOADS's performance of the Work or Services. MCNEIL RHOADS's obligations under this indemnity shall not extend to Damages arising out of or in any way attributable to the negligence of the CLIENT or its agents, contractors or employees. MCNEIL RHOADS reserves the right to control the defense and settlement of any claim for which MCNEIL RHOADS has an obligation to indemnify hereunder.
- 10.5 As to Patents and Copyrights:

(a) MCNEIL RHOADS will, at its own expense, defend or at its option settle any suit or proceeding brought against the CLIENT in so far as it is based on an allegation that any Work (including parts thereof), or use thereof for its intended purpose, constitutes an infringement of any United States patent or copyright, if MCNEIL RHOADS is promptly provided notice and given authority, information, and assistance in a timely manner for the defense of said suit or proceeding. MCNEIL RHOADS will pay the damages and costs awarded in any suit or proceeding so defended. MCNEIL RHOADS will not be responsible for any settlement of such suit or proceeding made without its prior written consent. In case the Work, or any part thereof, as a result of any suit or proceeding so defended is held to constitute infringement or its use by the CLIENT is enjoined, MCNEIL RHOADS will, at its option and its own expense, either: (i) procure for the CLIENT the right to continue using said Work; (ii) replace it with substantially equivalent non-infringing Work; or (iii) modify the Work so it becomes non-infringing.

(b) MCNEIL RHOADS will have no duty or obligation to the CLIENT under Section 10.5(a) to the extent that the Work is: (i) supplied according to the CLIENT's design or instructions, wherein compliance therewith has caused MCNEIL RHOADS to deviate from its normal course of performance; (ii) modified by the CLIENT or its contractors after delivery; or, (iii) combined by the CLIENT or its contractors with items not furnished hereunder, and by reason of said design, instruction, modification, or combination, a suit is brought against the CLIENT. If by reason of such design, instruction, modification or combination, a suit or proceeding is brought against MCNEIL RHOADS, unless expressly prohibited by law, the CLIENT shall protect MCNEIL RHOADS in the same manner and to the same extent that MCNEIL RHOADS has agreed to protect the CLIENT under the provisions of Section 10.5(a) above.

(c) THIS SECTION 10.5 IS AN EXCLUSIVE STATEMENT OF ALL THE DUTIES OF THE PARTIES RELATING TO PATENTS AND COPYRIGHTS, AND DIRECT OR CONTRIBUTORY PATENT OR COPYRIGHT AND OF ALL THE REMEDIES OF THE CLIENT RELATING TO ANY CLAIMS, SUITS, OR PROCEEDINGS INVOLVING PATENTS AND COPYRIGHTS. Compliance with Section 10.5 as provided herein shall constitute fulfillment of all liabilities of the Parties under the Agreement with respect to the intellectual property indemnification.

10.6 The Parties acknowledge that the price for which MCNEIL RHOADS has agreed to perform the Work and obligations under this Agreement was calculated based upon the foregoing allocations of risk, and that each Party has expressly relied on and would not have entered into this Agreement but for such allocations of risk.

Article 11

Hazardous Materials Provisions

- 11.1 The Work does not include directly or indirectly performing or arranging for the detection, testing, handling, storage, removal, treatment, transportation, disposal, monitoring, abatement or remediation of any contamination of any Site at which Work is performed and any soil or groundwater at the Site by petroleum or petrolcum products (collectively called "Oil"), asbestos, PCBs or hazardous, toxic, radioactive or infectious substances, including any substances regulated under RCRA, CERCLA or any other Applicable Law (collectively called "Hazardous Materials"), including without limitation: ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, and refrigerant. Except as expressly disclosed pursuant to Section 11.2, the CLIENT represents and warrants that, to the best of its knowledge following due inquiry, there are no Hazardous Materials or Oil present where the Work is to be performed. MCNEIL RHOADS will notify the CLIENT immediately if it discovers or reasonably suspects the presence of any previously undisclosed Oil or Hazardous Material. All Services have been priced and agreed to by MCNEIL RHOADS in reliance on the CLIENT's representations as set forth in this Article. The discovery or reasonable suspicion of Hazardous Materials or hazardous conditions at a Site where MCNEIL RHOADS is to perform Work, or of contamination of the Site by Oil or Hazardous Materials not previously disclosed pursuant to Section 11.2, shall entitle MCNEIL RHOADS to suspend the Work immediately, subject to mutual agreement of terms and conditions applicable to any further Work, or to terminate the Work and to be paid for Work previously performed.
- 11.2 The CLIENT warrants that, prior to the execution of the Agreement, it notified MCNEIL RHOADS in writing of any and all Oil or Hazardous Materials, to the best of its knowledge following due inquiry, known to be present, potentially present or likely to become present at the Site and provided a copy of any Site safety policies and information, including but not limited to lock-out and tag procedures, chemical hygiene plan, material safety data sheets, and other items covered or required to be disclosed or maintained by Applicable Law.
- 11.3 Regardless of whether a Hazardous Material was disclosed pursuant to Section 11.2, the CLIENT shall be solely responsible for properly testing, abating, encapsulating, removing, disposing, remedying or neutralizing such Hazardous Materials, and for the costs thereof. Even if an appropriate change order has been entered into pursuant to Section 11.1, MCNEIL RHOADS shall have the right to stop the Work until the Site is free from Oil or Hazardous Materials. In such event, MCNEIL RHOADS will receive an equitable extension of time to complete the Work, and compensation for delays caused by Oil or Hazardous Materials remediation. In no event shall MCNEIL RHOADS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. The CLIENT shall sign any required waste manifests in conformance with all government regulations, listing the CLIENT as the generator of the waste. If someone other than the CLIENT is the generator of the waste, the CLIENT shall arrange for such other person to sign such manifests.
- 11.4 Except where expressly prohibited by Applicable Law, the CLIENT shall indemnify, defend and hold MCNEIL RHOADS harmless from and against any damages, losses, costs, liabilities or expenses (including attorneys' fees) arising out of any Oil or Hazardous Materials or from the CLIENT's breach of, or failure to perform its obligations under this Article.
- 11.5 For purposes of this Article 11, in the context of the phrase "to the best of its knowledge following due inquiry"; "knowledge" means actual awareness of the facts by the CLIENT's directors, officers, employees or agents, or the presence of relevant information contained in the CLIENT's books or records; and, "due inquiry" means inquiry of those persons under the CLIENT's control who should have knowledge of the subject matter of such inquiry.

Article 12

Miscellaneous Provisions

- 12.1 Notices between the Parties shall be in writing and shall be hand-delivered or sent by certified mail, express courier, or acknowledged telefax properly addressed to the appropriate party. Any such notice shall be deemed to have been received when delivered in-person or when sent by telefax, or five (5) business days subsequent to deposit in the U.S. mails, or one (1) day after deposit with express courier.
- 12.2 MCNEIL RHOADS shall not assign or transfer any rights or obligations under this Agreement without the prior written consent of the CLIENT. Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the CLIENT and MCNEIL RHOADS without the express written consent of both Parties.
- 12.3 This Agreement shall be governed by and construed in accordance with the laws of the State of Mississippi.
- 12.4 This Agreement and all provisions of this Agreement allocating responsibility or liability between the Parties shall survive the completion of the Work, the Services, and the termination of this Agreement.
- 12.5 Unless contrary to Applicable Law and with the exception of disputes arising under Article 4 or Article 9, all disputes not resolved by negotiation between the Parties shall be resolved in accordance with the Commercial Rules of the American Arbitration Association in effect at that time, except as modified herein. All disputes shall be decided by a single arbitrator. A decision shall be rendered by the arbitrator no later than nine months after the demand for arbitration is filed, and the arbitrator shall state in writing the factual and legal basis for the award. No discovery shall be permitted. The arbitrator shall issue a scheduling order that shall not be modified except by the mutual agreement of the Parties. The arbitrator shall have no authority to award, and shall not award, attorneys' fces. Judgment may be entered upon the award in the highest state or federal court having jurisdiction over the matter.
- 12.6 MCNEIL RHOADS's performance of the Work and Services is expressly conditioned on the Parties assenting to all of the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted by a Party to the other Party relating to the Work or Services, even if signed by the Parties, unless the written statement expressly indicates that such terms supersede the terms of this Agreement
- 12.7 Any provision of this Agreement found to be invalid, unlawful or unenforceable by a court of law shall be ineffective to the extent of such invalidity, and deemed severed here from, without invalidating the remainder of this Agreement. All other provisions hereof shall remain in full force and effect.
- 12.8 The waiver by a party of any breach by the other party of any term, covenant or condition hereof shall not operate as a waiver of any subsequent breach hereof. No waiver shall operate or be effective unless made in writing and executed by the party to be bound thereby.
- 12.9 MCNEIL RHOADS shall procure and provide to CLIENT evidence of a performance and payment bond in an amount sufficient to cover the price as specified in Article 1.1 of Exhibit B prior to the commencement of work under this Agreement. The performance and payment bond will solely apply to the Work performed during the Construction Period and to the required statutory lien filing period thereafter. The performance and payment bond will not apply to any of the obligations included in the Measurement & Verification, Exhibit C, or to the MVP services warranty included in section 5.6(b). Furthermore, the CLIENT's funding source may be named as "Co-Obligce" on the performance bond if so requested by the CLIENT.
- 12.10 This Agreement and CLIENT's obligations hereunder are contingent upon CLIENT's receipt of financing acceptable to the CLIENT and approved by the Board of Supervisors of Harrison County. Notwithstanding any provision of this Agreement to the contrary, CLIENT shall not be responsible for any payment or other obligation to MCNEIL RHOADS unless and until financing is finalized. In the event financing is insufficient to cover amounts due or other obligations of CLIENT hereunder to MCNEIL RHOADS, CLIENT shall not be responsible therefore.

- 12.11 MCNEIL RHOADS shall be responsible for the disposal of PCB contaminated light ballasts. Disposal shall be conducted in such a manner so as to be in compliance with all applicable federal, state and local laws and regulations. To the extent that any liability is assessed to Harrison County as a result of McNeil Rhoads disposal of PCB contaminated light ballasts, McNeil Rhoads shall indemnify and hold Harrison County harmless from any and all such liabilities.
- 12.12 In the event that the Work qualifies for Sec. 179D accelerated tax deductions and in accordance to IRS Notice 2008-40, CLIENT agrees to allocate any eligible deductions to MCNEIL RHOADS.
- 12.13 The continuation of this contract is contingent upon the appropriation of funds to fulfill the requirements of the contract by the Legislature or other budgeting authority. If the Legislature or other budgeting authority fails to appropriate sufficient monies to provide for the continuation of the contract, the contract shall terminate on the last day of the fiscal year for which appropriations were made. The termination shall be without penalty or expense to the entity of any kind whatsoever, except as to the portions of payments for which funds were appropriated.



Article 1: Scope of Work

1.1 *Description*: Except as otherwise expressly provided herein, MCNEIL RHOADS shall provide each and every item of cost and expense necessary to implement the IIMs at the Sites identified in the following table, and as further described in Section 1.2, below.

Facility/Site Name	Lighting Upgrades	EMCS
Adult Detention Facility - Main Jail	X	
Adult Detention Facility - Sherriff Support Services Complex	×	
Civic Center - D'Iberville	X	X
Civic Center - West Harrison	X	Х
Civic Center - Woolmarket	X	Х
Community Center - Good Deeds	X	
Community Center - Isaiah Fredericks	X	
Community Center - Success	X	-
Courthouse - Biloxi	X	X
Courthouse - Gulfport	Х	Х
Fairgrounds - Arena	X	
Fairgrounds - Office & Meeting Rms	Х	
Family Services (Gulfport) - Admin Offices (Bldg A)	X	×
Family Services (Gulfport) - Children's Shelter	x	
Family Services (Gulfport) - Counseling Offices (Bidg B)	x	Х .
Family Services (Gulfport) - Family Court Center (Bldg C)	x	Х
Family Services (Gulfport) - Modulars	X	
Fire Station - Lizana #1	X	
Fire Station - West Wortham #2	X	
Fire Station - County Farm Rd #3	x	
Fire Station - County Farm #4	X	
Fire Station - Canal Road #5	Χ	
Fire Station - Delisle #6	Х	,
Fire Station - West Harrison #7	Х	
Fire Station - Saucler #8	X	
Fire Station - Success #9	Х	
Fire Station - Bethel Road #10	Х	
Fire Station - North Woolmarket #11	X	
Fire Station - East Harrison #12	X	
Fire Station - Cuevas #13	X	

Table 1.1a – Facility Scope Matrix



Facility/Site Name	Lighting Upgrades	EMCS
Fire Station - Henderson Point #14	X	
Health Department - Biloxi		Х
Health Department - Gulfport	X	X
Human Services - Biloxi	X	Х
Human Services - Gulfport	X	X
Hurricane Shelter - County Farm		X
Hurricane Shelter - Lobouy	· · · · · · · · · · · · · · · · · · ·	X
Hurricane Shelter - Saucier		Х
Justice Court - Biloxi	Х	
Justice Court - Gulfport	X	Х
Library - Gulfport Downtown		Х
Library - Gulfport Orange Grove		Х
Maintenance (Lorraine Rd) - Dist. #4 Road and Mosquito	x	
Maintenance (Lorraine Rd) - Recycling Center	Х	
Maintenance (Lorraine Rd) - Storage Shed	X	
Maintenance (Lorraine Rd) - VO-TECH	X	
Multi-purpose Bldg - D'Iberville	X	
Office - Code/Eng & Fire	X	X
Office - County Office Building	X	Х
Office - Election Commission	X	
Senior Center - D'Iberville	X	.X
Senior Center - Frances Fredericks	X	
Senior Center - Lyman	X	X
Senior Center - Saucier	X	Х
Senior Center - Woolmarket	X .	Х
Work Center (D'Iberville)	Х	
Work Center (Long Beach) - Garage	X	
Work Center (Long Beach) - Office	X	
Work Center (Lorraine Rd) - County Garage	х	
Work Center (Lorraine Rd) - Penal Institute & Sheriffs Dispatch	x	
Work Center (Lorraine Rd) - Wellness Clinic	X	
Work Center (Lyman) - Garage	X	······
Work Center (Lyman) - Office	X	
Work Center (Sand Beach) - Maintenance	X	
Work Center (Sand Beach) - Office	X	Х
Work Center (Woolmarket)	X	

Table 1.1b – Facility List

.



Facility/Site Name	Street	City	ZIP	Area (ft ²
Adult Detention Facility - Main Jail	13050 Seaway Rd	Gulfport	39503	207,900
Adult Detention Facility - Sherriff Support Services Complex	10451 Larkin Smith Dr.	Gulfport	39503	7,690
Civic Center - D'Iberville	10395 Automall Parkway	D'Iberville	39540	9,600
Civic Center - West Harrison	4470 Espy Ave	Long Beach	39571	15,800
Civic Center - Woolmarket	16395 Old Woolmarket Rd	Biloxi	39532	10,800
Community Center - Good Deeds	15101 Madison Ave	Gulfport	39501	15,420
Community Center - Isaiah Fredericks	3312 1/2 Martin Luther King Jr. Blvd.	Gulfport	39501	13,152
Community Center - Success	12361 School Rd	Saucier	39574	2,200
Courthouse - Biloxi	730 Dr. Martin Luther King Jr. Blvd	Biloxi	39530	36,200
Courthouse - Gulfport	1801 23rd Ave.	Gulfport	39501	120,300
Fairgrounds - Arena	15321 County Farm Rd	Gulfport	39503	55,620
Fairgrounds - Office & Meeting Rms	15321 County Farm Rd	Gulfport	39503	4,098
Family Services (Gulfport) - Admin Offices (Bldg A)	47 B Maples St.	Gulfport	39507	6,600
Family Services (Gulfport) - Children's Shelter	47 D Maples St.	Gulfport	39507	3,800
Family Services (Gulfport) - Counseling Offices (Bldg B)	47 Maples St.	Gulfport	39507	1,920
Family Services (Gulfport) - Family Court Center (bldg C)	47 A Maples St.	Gulfport	39507	5,837
Family Services (Gulfport) - Modulars	47 Maples St.	Gulfport	39507	5,400
Fire Station - Lizana #1	16445 S. Lizana School Rd	Gulfport	395 03	4,500
Fire Station - West Wortham #2	20161 West Wortham Rd	Saucier	39574	4,550
Fire Station - County Farm Rd #3	13243 County Farm Rd	Gulfport	39503	3,600
Fire Station - County Farm #4	10126 County Farm Rd	Gulfport	39503	4,500
Fire Station - Canal Road #5	13424 Canal Road	Gulfport	39503	4,550
Fire Station - Delisle #6	25242 Cuevas-Delisle Rd	Pass Christian	39571	4,550
Fire Station - West Harrison #7	10071 Vidalia Rd	Pass Christian	39571	3,600
Fire Station - Saucier #8	23560 Old Still Rd	Saucier	39574	6,200
Fire Station - Success #9	12342 School Rd	Saucier	39574	4,500
Fire Station - Bethel Road #10	5025 Bethel Rd	Saucier	39574	4,550
Fire Station - North Woolmarket #11	16520 Switzer Park Rd	Biloxi	39532	3,600
Fire Station - East Harrison #12	15519 Hwy 15	Biloxi	39532	4,500
Fire Station - Cuevas #13	22338 Fire Station Rd (5192 Menge Ave)	Pass Christian	39571	4,500

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	Ctract	City	710	A man 1542
Facility/Site Name	Street	City Pass	ZIP	Area (ft ²)
Fire Station - Henderson Point #14	211 Livingston Dr.	Christian	39571	3,780
Health Department - Biloxi	761 Esters Blvd	Biloxi	39530	9,800
Health Department - Gulfport	1102 43rd Ave	Gulfport	39501	27,500
Human Services - Biloxi	461 Parker Street	Biloxi	39530	10,000
Human Services - Gulfport	10260 Larkin Smith Drive	Gulfport	39503	43,000
Hurricane Shelter - County Farm	15035 County Farm Rd	Gulfport	39503	15,193
Hurricane Shelter - Lobouy	9509 Lobouy Rd	Pass Christian	39571	15,193
Hurricane Shelter - Saucier	23771 Saucier Lizana Rd	Saucier	39574	15,193
Justice Court - Biloxi	190 Lameuse St.	Biloxi	39530	7, 0 00
Justice Court - Gulfport	1709 24th Ave.	Gulfport	39501	15,441
Library - Gulfport Downtown	1708 25th Ave.	Gulfport	39501	10,428
Library - Gulfport Orange Grove	12135 Old Hwy. 49	Gulfport	39503	35,957
Maintenance (Lorraine Rd) - Dist #4 Road and Mosquito	10076 Lorraine Rd	Gulfport	39501	15,260
Maintenance (Lorraine Rd) - Recycling Center	10076 Lorraine Rd	Gulfport	39501	1,890
Maintenance (Lorraine Rd) - Storage Shed	10076 Lorraine Rd	Gulfport	39501	5,363
Maintenance (Lorraine Rd) - VO- TECH	10076 Lorraine Rd	Gulfport	39501	10,890
Multi-purpose Bidg - D'Iberville	10399 Automall Parkway	D'Iberville	39532	6,000
Office - Code/Eng & Fire	15309 Community Rd	Gulfport	39503	10,000
Office - County Office Building	2315-1317 17th St	Gulfport	39501	7,400
Office - Election Commission	2620 24th Ave	Gulfport	39501	15,961
Senior Center - D'Iberville	10450 Lamey Bridge Rd	D'Iberville	39540	11,300
Senior Center - Frances Fredericks	3313 Martin Luther King Jr. Blvd.	Gulfport	39501	9,645
Senior Center - Lyman	14592 County Farm Rd	Gulfport	39503	8,100
Senior Center - Saucier	24014 Church Ave	Saucier	39574	5,700
Senior Center - Woolmarket	16380 Old Woolmarket Rd	Biloxi	39532	10,335
Work Center (D'Iberville)	10085 1st Ave W	D'Iberville	39540	10,040
Work Center (Long Beach) - Garage	605 1/2 North Seal Ave	Long Beach	39560	3,200
Work Center (Long Beach) - Office	605 North Seal Ave	Long Beach	39560	2,100
Work Center (Lorraine Rd) - County Garage	10046 Lorraine Rd	Gulfport	39503	10,000
Work Center (Lorraine Rd) - Penal Institute & Sheriffs Dispatch	10046 Lorraine Rd	Gulfport	39503	19,800



Facility/Site Name	Street	City	ZIP	Area (ft ²)
Work Center (Lorraine Rd) - Wellness Clinic	10046 Lorraine Rd	Gulfport	39503	1,581
Work Center (Lyman) - Garage	15001 A County Farm Rd	Gulfport	39503	12,300
Work Center (Lyman) - Office	15001 B County Farm Rd	Gulfport	39503	3,500
Work Center (Sand Beach) - Maintenance	842 1/2 Commerce St	Gulfport	39507	3,600
Work Center (Sand Beach) - Office	842 Commerce St	Gulfport	39507	9,400
Work Center (Woolmarket)	16395 Old Woolmarket Rd	Biloxi	39532	15,200

997,087

- 1.2 Specific Elements: The Work shall include the following:
- 1.2.1 Lighting Upgrades MCNEIL RHOADS will furnish and install upgrades at each Site as described in Attachment 1 Lighting Upgrades Scope.
- 1.2.2 Energy Management and Control System (EMCS) MCNEIL RHOADS will furnish and install upgrades at each Site as described in Attachment 2 EMCS Scope.
- 1.3 Technical Specifications, Drawings, and Exhibits: The Work shall be performed in accordance with the following specifications, drawings and other attachments hereto, which are specifically incorporated herein and made part hereof: Not Applicable
- 1.4 CLIENT'S Responsibilities (in addition to those in Article 6 of the Agreement):
- 1.4.1 Respond to samples or documents submitted by MCNEIL RHOADS for review and approval within fifteen (15) business days.
- 1.4.2 Designate CLIENT Representative who will act as the single point of contact with respect to matters under this Agreement and will become familiar with the progress and quality of the Work.
- 1.4.3 Furnish those blueprints, surveys, legal descriptions of the site, and other information regarding the Site as MCNEIL RHOADS may reasonably request in order to complete the Work.
- 1.4.4 Operate Equipment according to the manufacturer's recommendations.
- 1.4.5 Notify MCNEIL RHOADS in writing of any policies (e.g., safety) of the Site that affects the Work.



Article 2: Work Implementation Period

2.1 MCNEIL RHOADS shall commence the Work 60 calendar days from the Notice to Proceed, and shall perform the Work diligently and shall complete the Work no later than 548 calendar days from the day of commencement.

Article 3: Scope of Services-Measurement & Verification Program

- 3.1 MVP Services shall be performed during the Performance Guarantee Period unless terminated by CLIENT in accordance with Article 4 of the Agreement.
- 3.2 MCNEIL RHOADS will provide the following Services and Deliverables:
 - One annual inspection of the Sites and IIMs.
 - One Annual Measurement & Verification Report for all IIMs, including a reconciliation of Savings.
- 3.3 The MVP shall commence on Guarantee Date. The Annual Measurement & Verification Report will be provided within 60 calendar days of the annual anniversary of the Guarantee Date.

By signing below, this Exhibit A is attached to and made a part of the Agreement between MCNEIL RHOADS and the CLIENT.

Harrison County Board of Supervisors, MS
Level Mastin
Beverly Martin, President Board-President
Juthistations
John McAdams, Clerk of the Board Clork of the Board
McNeil Rhoads, LLC
Con .
Chris McNeil, President
Chris McNeil, President Funto Rhub (tO

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

MCNEIL RHOADS will install energy efficient lighting upgrades at the facilities listed below. A total of forty-six (46) Sites at approximately sixty (60) facilities are included in the Scope of Work.

- Summary of Fixtures Installed (approximate)
 - o 1,150 New Fixtures
 - o 9,396 Retrofitted Fixtures
 - o 129 Existing Fixtures Excluded (Do Not Do)
 - o 639 Sensors

FIXTURE LENS STATEMENT

The lighting upgrade included in the scope of work is designed to maximize the energy efficiency of the lighting systems, while delivering adequate lighting levels throughout the facilities. The purpose of the upgrade is not founded in aesthetic considerations; therefore, the replacement or installation of new fixture lenses will only take place when the fixture retrofit is required to provide sufficient light levels. Older or damaged lenses that the CLIENT desires to be replaced can be addressed as extra work to this Agreement for retrofitted fixtures.

SENSORS

These sensors will be installed at MCNEIL RHOADS' discretion. The installation count may vary based on individual usage patterns and/or electrical circuitry variances.

FIXTURE COUNTS

The following tables describe the Lighting Scope of Work in depth. Fixture Counts and Quantities are approximate and may vary based actual conditions in each Facility at time of Implementation. The Final Quantities will be updated and provided in the As-built Project Documentation.

Fixtures			
Existing	Retrofit	Count	
100W Incandescent	New 4' 232L 2F25T8 Wrap	15	
100W Incandescent	New 8' 432L 4F25T8 Wrap	10	
100W Incandescent	New 4' 232L 2F25T8 Wire Guard	4	
100W Incandescent	New 2' 232L 2F17T8 Vanity	15	
100W Incandescent	New 1x1 LED Canopy Light - 22W	12	
100W Incandescent Jelly Jar	New LED Mini Wallpack (18W)	5	
100W Metal Halide	Ballast Bypass and LED Corn Cob	16	
100W Metal Halide	New 1x1 LED Canopy Light - 22W	24	
100W Metal Halide	New Small LED Flood (37W)	9	
100W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass /New Socket	55	
1500W Metal Halide Flood	HO LED Sports Lighter	15	
1500W Metal Halide Highbay	New 2 X 6T5 FHB Vapor Tight (2 Fixtures, side by side)	65	
1500W Metal Halide Highbay	New 6T5 FHB Vapor Tight	13	
150W Quartz Halogen	New Small LED Flood (37W)	12	

Table 1 – Lighting Retrofits Summary

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

175W Metal Halide	New 4T5 Wallpack	8
175W Metal Halide	New 2T5 Wallpack	107
175W Metal Halide	New LED Medium Flood	175
18" 1T12 Existing	18" 232L 1F15T8 LB	2
2' 2T12 Existing	2' 232L 2F17T8 LB	13
250W High Pressure Sodium	New LED Shoebox - 105W	55
250W Metal Halide Gooseneck	New LED Large WW Flood (101W)	53
2x2 2FT40 PL	New 2x2 232L 2F17T8 Recessed Troffer	40
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	184
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	67
2x2 3PL Recessed	2x2 232L 2F25T8 w/M4 Reflector	10
2x32W CFL	New 1x1 LED Canopy Light - 22W	5
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	612
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	654
2x4 2T8 Recessed	2x4 LED Panel	4
2x4 3T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	492
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	894
2x4 3T8 Recessed	2T8 232H 2F25T8 w/ M4 Reflector	34
2x4 3T8 Recessed	2x4 LED Panel	10
2x4 3T8 Recessed Parabolic Lens	2x4 232L 2F25T8 w/M4 Reflector	244
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	1,265
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	1,078
2x4 4T8 Recessed	-2x4-232H 2F25T8 w/M4 Reflector	271
2x75W Incandescent	New 1x1 LED Canopy Light - 22W	2
4' 1T12 Lamp and Ballast	4' 232L 1F25T8 Lamp and Ballast	. 9
4' 2T12 Existing	New 4' 232L 2F25T8 Vapor Tight	9
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	896
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wrap	11
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	16
4' 2T12 Vanity	New 4' 232L 2F25T8 Vanity	. 6
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	611
4' 2T8 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	13
4' 3T12 Lamp and Ballast	4' 332L 3F25T8 Lamp and (2) Ballast	384
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	40
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	177
4' 4T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	1
4' 4T8 Lamp and Ballast	4' 432L 4F2ST8 Lamp and Ballast	265
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	14

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Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

400W Metal Halide	2x4 LED Panel	42
400W Metal Halide	New FHB 2x332H 6F25T8 Highbay w/ Wire Cage	90
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	37
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	52
400W Metal Halide	New 8' 432L 4F25T8 Vapor Tight	4
400W Metal Halide	New 4T5 Wallpack	4
400W Metal Halide	New LED Large WW Flood (101W)	26
40W G24 Globe	8W LED Globe	130
40W Incandescent	7W LED A19 Lamp	63
4x42W CFL Parking Fixture	New LED Parking Fixture	2
60W Incandescent	12W LED A19 Lamp	9
65W Incandescent BR30	12W LED BR30	80
70W Metal Halide	New LED Mini Wallpack (18W)	7
70W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	6
75W Halogen par 30	12W LED Par 30	64
75W Halogen par 30 Long Neck	14W LED Par 30 Long Neck	. 1
75W Halogen Par 38	17W LED Par 38	21
75W Incandescent	12W LED A19 Lamp	350
75W Incandescent	New 4' 232L 2F25T8 Vanity	4
8' 2T12 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	41
. 8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	80
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan, & TG	12
8' 2T12 Non-Retrofittable	New 8' 432L 4F25T8 Wrap	2
8' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	2
8' 2T12 Non-Retrofittable	New 8' 432L 4F25T8 Wire Guard	3
8' 2T12 Non-Retrofittable	New 8' 432N 4F25T8 Wire Guard	35
8' 2T8	New 4' 232L 2F25T8 Vapor Tight	2
8' 2T8 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	38
8' 2T8 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	4
8' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	9
90W Halogen Par 38	19W LED Par 38	20
Candelabra E12 25W	5W LED Candelabra E12	33
Do Not Do Fixture	Do Not Do Fixture	129
Exit Incandescent	New LED Exit	55
N/A	Install Emergency Ballast for Security	77
Non-Retrofittable 2T8 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	5
Non-Retrofittable 3T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	7

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

Non-Retrofittable 3T8 Recessed 2x4 Troffer	New 2x4 232H 2F25T8 Recessed Troffer	
Non-Retrofittable 4T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	5
Non-Retrofittable 4T8 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	2
Non-Retrofittable 2' 1T12 Vanity	New 2' 232L 2F17T8 Vanity	6
T12 Circuline	New 1x1 LED Canopy Light - 22W	101
	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	307
N/A	Hallway Occupancy Sensor - Wireless	160
N/A	Individual Fixture Sensor	14
N/A	New VendMiser	28
N/A	No Sensor	1
N/A	Passive Infrared Wall Switch, Single Switching	8
N/A	Wall Mount Occupancy Sensor - Wireless	4
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	.72
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	42
Replace Existing Photo	oceli New Photo Celi	3
	Summary	
		Coun
New Fixtures		1,150
Retrofit Fixtures		9,39
Do Not Do Fixtures		129
	Sensors	639

Adult Detention Facility - Mai	n Jail, Sherriff Support Services Complex	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 1x1 LED Canopy Light - 22W	12
1500W Metal Halide Flood	HO LED Sports Lighter	12
250W High Pressure Sodium	New LED Shoebox - 105W	44
250W Metal Halide Gooseneck	New LED Large WW Flood (101W)	38
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	17
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	480
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	385
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	106
4' 2T12 Existing	New 4' 232L 2F25T8 Vapor Tight	3
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	574
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wrap	9
4' 2T12 Vanity	New 4' 232L 2F25T8 Vanity	3
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	73
4' 3T12 Lamp and Ballast	4' 332L 3F25T8 Lamp and (2) Ballast	384
400W Metal Halide	New LED Large WW Flood (101W)	26
75W Halogen Par 38	17W LED Par 38	21
75W Incandescent	12W LED A19 Lamp	39
8' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	2
Exit Incandescent	New LED Exit	21
Non-Retrofittable 4T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	1
Non-Retrofittable 2' 1T12 Vanity	New 2' 232L 2F17T8 Vanity	2
T12 Circuline	New 1x1 LED Canopy Light - 22W	100
	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
New Fixtures		261
Retrofit Fixtures		2,091
Do Not Do Fixtures		0
Sei	nsors	0

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

Civic C	enter - D'Iberville			
Fixtures				
Existing	Retrofit	Count		
175W Metal Halide	New LED Medium Flood	1		
2x4 4T8 Recessed	2x4 232L 2F2518 w/M4 Reflector	52		
2x4 4T8 Recessed	2x4 232H 2F25T8 w/M4 Reflector	105		
65W Incandescent BR30	12W LED BR30	80		
70W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	4		
75W Halogen par 30	12W LED Par 30	4		
75W Incandescent	12W LED A19 Lamp	3		
	Sensors			
Existing	Retrofit	Count		
N/A	New VendMiser	2		
N/A	Passive Infrared Wall Switch, Single Switching	1		
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	7		
	Summary			
		Count		
New Fixtures		1		
Retrofit Fixtures		248		
Do Not Do Fixtures		0		
Sensors		10		

Exhibit A Attachment 1 – Lighting Upgrades Scope. Harrison County, MS

Civ	ic Center - West Harrison			
Fixtures				
Existing	Retrofit	Count		
175W Metal Halide	New LED Medium Flood	14		
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	157		
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	4		
75W Halogen par 30	12W LED Par 30	20		
	Sensors			
Existing	Retrofit	Count		
N/A	New VendMiser	2		
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	4		
	Summary			
		Count		
New Fixtures		14		
Retrofit Fixtures		181		
Do Not Do Fixtures		0		
Sensors		6		

Civic Center - Wo	olmarket, Senior Center - Woolmarket			
Fixtures				
Existing	Retrofit	Coun		
175W Metal Halide	New LED Medium Flood	8		
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	5		
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	46		
2x4 3T8 Recessed	2T8 232H 2F25T8 w/ M4 Reflector	6		
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	59		
2x4 4T8 Recessed	2x4 232H 2F25T8 w/M4 Reflector	160		
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	3		
75W Incandescent	12W LED A19 Lamp	4		
Do Not Do Fixture	Do Not Do Fixture	16		
	Sensors			
Existing	Retrofit	Coun		
N/A	New VendMiser	9		
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	17		
	Summary			
		Cour		
New Fixtures		8		
Retrofit Fixtures		283		
Do Not Do Fixtures		16		
Sensors		26		

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

.

Commu	nity Center - Good Deeds	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New LED Medium Flood	14
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	. 36
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	100
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
40W G24 Globe	8W LED Globe	48
40W Incandescent	7W LED A19 Lamp	1
75W Halogen par 30	12W LED Par 30	12
75W Halogen par 30 Long Neck	14W LED Par 30 Long Neck	1
Exit Incandescent	New LED Exit	2
· · · · · · · · · · · · · · · · · · ·	Sensors	
Existing	Retrofit	Count
N/A ′	Passive Infrared Wall Switch, Single Switching	7
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	5
	Summary	
· · · · · · · · · · · · · · · · · · ·		Coun
New Fixtures		16
Retrofit Fixtures		199
Do Not Do Fixtures		0
	Sensors	

Community Center - Isalah Fredericks Fixtures		
Existing	Retrofit	Count
1500W Metal Halide Flood	HO LED Sports Lighter	3
175W Metal Halide	New LED Medium Flood	7
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	98
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
4' 2T12 Vanity	New 4' 232L 2F25T8 Vanity	1
75W Incandescent	12W LED A19 Lamp	4
8' 2T8 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	14
	Sensors	
Existing	Retrofit	Coun
N/A	New VendMiser	4
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	2
	Summary	•
		Coun
	New Fixtures	8
Retrofit Fixtures		120
Do Not Do Fixtures		0
Sensors		6

Com	munity Center - Success	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New LED Medium Flood	5
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	30
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
400W Metal Halide	New 8' 432L 4F25T8 Vapor Tight	4
Do Not Do Fixture	Do Not Do Fixture	2
	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
N	lew Fixtures	9
Retrofit Fixtures		31
Dot	lot Do Fixtures	2
	Sensors	0

9

(Courthouse - Biloxi	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 2' 232L 2F17T8 Vanity	1
100W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	6
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	12
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	3
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	55
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	203
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	47
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	44
2x75W Incandescent	New 1x1 LED Canopy Light - 22W	2
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	34
60W Incandescent	12W LED A19 Lamp	2
75W Incandescent	12W LED A19 Lamp	59
Non-Retrofittable 2T8 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	1
Non-Retrofittable 3T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	7
Non-Retrofittable 3T8 Recessed 2x4 Troffer	New 2x4 232H 2F25T8 Recessed Troffer	14
· · · · · · · · · · · · · · · · · · ·	Sensors	·
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	33
N/A	Hallway Occupancy Sensor - Wireless	14
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	4
	Summary	1
		Count
Ne	w Fixtures	25
Ret	rofit Fixtures	465
Do N	ot Do Fixtures	0
	Sensors	51

Exhibit A Attachment	1 – Lighting Upgrades Scope
Harrison County, MS	

Co	ourthouse - Gulfport	
	Fixtures	
Existing	Retrofit	Count
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	4
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	36
2x2 3PL Recessed	2x2 232L 2F25T8 w/M4 Reflector	10
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	513
2x4 2T8 Recessed	2x4 LED Panel	4
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	536
2x4 3T8 Recessed	2T8 232H 2F25T8 w/ M4 Reflector	28
2x4 3T8 Recessed	2x4 LED Panel	10
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	285
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	74
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	67
4' 2T8 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	13
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	1
400W Metal Halide	2x4 LED Panel	42
60W Incandescent	12W LED A19 Lamp	7
75W Halogen par 30	12W LED Par 30	12
8' 2T12 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	23
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	29
8' 2T8 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	14
Candelabra E12 25W	5W LED Candelabra E12	8
Do Not Do Fixture	Do Not Do Fixture	4
Exit Incandescent	New LED Exit	8
Non-Retrofittable 2T8 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	. 4
	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	144
N/A	Hallway Occupancy Sensor - Wireless	52
	Summary	
		Count
New Fixtures		21
Retrofit Fixtures		1,707
Do Ne	ot Do Fixtures	4
	Sensors	196

Fairground	s - Arena, Office & Meeting Rms Fixtures	··· -
Existing	Retrofit	Count
100W Incandescent	New 8' 432L 4F25T8 Wrap	10
100W Metal Halide	New 1x1 LED Canopy Light - 22W	5
1500W Metal Halide Highbay	New 2 X 6T5 FHB Vapor Tight (2 Fixtures, side by side)	65
1500W Metal Halide Highbay	New 6T5 FHB Vapor Tight	13
175W Metal Halide	New LED Medium Flood	15
250W Metal Halide Gooseneck	New LED Large WW Flood (101W)	10
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	4
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wrap	1
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	8
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	14
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	2
40W Incandescent	7W LED A19 Lamp	1
75W Incandescent	12W LED A19 Lamp	3
8' 2T12 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	4
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
, <u>, , , , , , , , , , , , , , , , , , </u>	Summary	
· · · · · · · · · · · · · · · · · · ·		Coun
New Fixtures		119
Retrofit Fixtures		38
Do Not Do Fixtures		0
· · · · · · · · · · · · · · · · · · ·	Sensors	0

· · · · · · · · · · · · · · · · · · ·	Fixtures	
Existing	Retrofit	Coun
2' 2T12 Existing	2' 232L 2F17T8 LB	5
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	53
2x4 3T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	18
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	55
4' 1T12 Lamp and Ballast	4' 232L 1F25T8 Lamp and Ballast	9
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	99
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	8
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	3
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	88
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	4
40W G24 Globe	8W LED Globe	4
40W Incandescent	7W LED A19 Lamp	9
75W Halogen par 30	12W LED Par 30	15
75W Incandescent	12W LED A19 Lamp	99
75W Incandescent	New 4' 232L 2F25T8 Vanity	4
8' 2T12 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	2
8' 2T8 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	4
Do Not Do Fixture	Do Not Do Fixture	3
Non-Retrofittable 2' 1T12 Vanity	New 2' 2321, 2F17T8 Vanity	4
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	21
N/A	Hallway Occupancy Sensor - Wireless	3
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	3
	Summary	
		Cour
4	Vew Fixtures	8
Re	etrofit Fixtures	475
Do Not Do Fixtures		- 3
	Sensors	27

Fi	re Station - Lizana #1	
	Fixtures	
Existing	Retrofit	Count
100W Metal Halide	New Small LED Flood (37W)	9
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	3
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	22
400W Metal Halide	New 4T5 Wallpack	4
40W G24 Globe	8W LED Globe	12
40W Incandescent	7W LED A19 Lamp	2
Do Not Do Fixture	Do Not Do Fixture	6
	Sensors	
Existing	Retrofit	Соил
N/A	N/A	0
	Summary	
		Coun
N	ew Fixtures	13
Retrofit Fixtures		39
Do N	lot Do Fixtures	6
	Sensors	0

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Fire	Station - West Wortham #2	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	10
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	14
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	7
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	5
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	1
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	6
40W Incandescent	7W LED A19 Lamp	3
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	2
	Sensors	
Existing	Retrofit	Coun
Replace Existing Photocell	New Photo Cell	1
	Summary	
		Coun
	New Fixtures	16
<u>ج</u>	Retrofit Fixtures	36
Do	Not Do Fixtures	0
	Sensors	1

Fire	Station - County Farm Rd #3	
	Fixtures	
Existing	Retrofit	Coun
175W Metal Halide	New 2T5 Wallpack	8
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	22
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	12
40W Incandescent	7W LED A19 Lamp	3
Exit Incandescent	New LED Exit	2
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	•
		Coun
New Fixtures		22
Retrofit Fixtures		29
Do Not Do Fixtures		0
······································	Sensors	

Fir	e Station - County Farm #4	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	10
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	12
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	16
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	5
40W G24 Globe	8W LED Globe	11
40W Incandescent	7W LED A19 Lamp	3
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
	New Fixtures	
	Retrofit Fixtures	
Do	o Not Do Fixtures	0
	Sensors	0

Fi	re Station - Canal Road #5	
• #/	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	8
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	19
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	5
40W G24 Globe	8W LED Globe	6
40W Incandescent	7W LED A19 Lamp	3
75W Halogen par 30	12W LED Par 30	1
	Sensors	· · · · · ·
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
· · · · · · · · · · · · · · · · · · ·		Count
New Fixtures		13
Retrofit Fixtures		29
Do Not Do Fixtures		0
	Sensors	0

.

	Fire Station - Delisle #6	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	10
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	12
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	16
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	5
40W G24 Globe	8W LED Globe	11
40W Incandescent	7W LED A19 Lamp	3
	Sensors	
Existing	Retrofit	Coun
Replace Existing Photocell	New Photo Cell	1
<u> </u>	Summary	
		Coun
	New Fixtures	15
Retrofit Fixtures		42
Do Not Do Fixtures		0
	Sensors	1

Exhibit A Attachment 1 – Lighting Upgrades Scope	;
Harrison County, MS	

Fire	Station - West Harrison #7	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	12
18" 1T12 Existing	18" 232L 1F15T8 LB	2
2' 2T12 Existing	2' 232L 2F17T8 LB	1
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	11
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	3
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	5
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	1
40W Incandescent	7W LED A19 Lamp	2
8' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	9
Exit Incandescent	New LED Exit	6
N/A	Install Emergency Ballast for Security	1
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
New Fixtures		18
Retrofit Fixtures		35
Dol	Not Do Fixtures	0
· ·	Sensors	· 0

	Fire Station - Saucier #8	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	7
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	5
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	8
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	2
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	1
40W G24 Globe	8W LED Globe	9
40W Incandescent	7W LED A19 Lamp	3
Do Not Do Fíxture	Do Not Do Fixture	5
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
	New Fixtures	7_
Retrofit Fixtures		29
D	o Not Do Fixtures	5
	Sensors	0

	Fire Station - Success #9	
······································	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	8
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	2
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	14
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	3
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	11
40W Incandescent	7W LED A19 Lamp	3
	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
	New Fixtures	19
Retrofit Fixtures		24
Do Not Do Fixtures		0
	Sensors	0

Fir	e Station - Bethel Road #10	
· · · · · · · · · · · · · · · · · · ·	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	8
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	16
4' 4T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	3
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	5
40W G24 Globe	8W LED Globe	6
40W Incandescent	7W LED A19 Lamp	1
75W Incandescent	12W LED A19 Lamp	3
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
New Fixtures		13
Retrofit Fixtures		30
Do Not Do Fixtures		0
	Sensors	0

Fire S	tation - North Woolmarket #11	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	8
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	22
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	12
40W Incandescent	7W LED A19 Lamp	3
Exit Incandescent	New LED Exit	2
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Соил
New Fixtures		22
Retrofit Fixtures		29
Do Not Do Fixtures		0
	Sensors	0

Fire	Station - East Harrison #12	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	10
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	16
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	11
40W G24 Globe	8W LED Globe	11
40W Incandescent	7W LED A19 Lamp	3
	Sensors	••••
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
New Fixtures		21
Retrofit Fixtures		31
Do Not Do Fixtures		0
	Sensors	0

f	Fire Station - Cuevas #13	
· · · · · · · · · · · · · · · · ·	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	5
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	19
400W Metal Halide	New FHB 654HO 6T5 Highbay w/ Wire Cage	5
40W G24 Globe	8W LED Globe	12
40W Incandescent	7W LED A19 Lamp	3
75W Incandescent	12W LED A19 Lamp	2
· · · · · · · · · · · · · · · · · · ·	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
	New Fixtures	10
Retrofit Fixtures		36
D	o Not Do Fixtures	0
	Sensors	0

	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New 2T5 Wallpack	3
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	6
75W Incandescent	12W LED A19 Lamp	38
	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
New Fixtures		3
Retrofit Fixtures		44
Do Not Do Fixtures		0
	Sensors	0

Exhibit A Attachment 1 - Lighting Upgrades Scop	е
Harrison County, MS	

Hea	Ith Department - Gulfport	
	Fixtures	
Existing	Retrofit	Count
100W Metal Halide	Ballast Bypass and LED Corn Cob	16
150W Quartz Halogen	New Small LED Flood (37W)	4
250W High Pressure Sodium	New LED Shoebox - 105W	11
2x2 2FT40 PL	New 2x2 232L 2F17T8 Recessed Troffer	40
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	1
2x32W CFL	New 1x1 LED Canopy Light - 22W	5
2x4 3T8 Recessed Parabolic Lens	2x4 232L 2F25T8 w/M4 Reflector	202
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wrap	1
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	193
90W Halogen Par 38	19W LED Par 38	20
Do Not Do Fixture	Do Not Do Fixture	60
N/A	Install Emergency Ballast for Security	20
· · · · · · · · · · · · · · · · · · ·	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	32
N/A	Hallway Occupancy Sensor - Wireless	22
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	10
	Summary	· I
		Count
New Fixtures		61
Retrofit Fixtures		452
Do	Not Do Fixtures	60
Sensors 6-		64

	Human Services - Biloxi	
,,,,	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New LED Medium Flood	10
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	4
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	160
T12 Circuline	New 1x1 LED Canopy Light - 22W	1
	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	10
N/A	Hallway Occupancy Sensor - Wireless	10
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	3
	Summary	L
		Count
New Fixtures		11
	Retrofit Fixtures	164
	Do Not Do Fixtures	0
	Sensors	23

Hum	an Services - Gulfport	
	Fixtures	
Existing	Retrofit	Count
100W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	30
175W Metal Halide	New LED Medium Flood	28
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	94
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	11
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	5
2x4 3T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	468
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	16
2x4 3T8 Recessed Parabolic Lens	2x4 232L 2F25T8 w/M4 Reflector	42
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	11
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	3 5
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	12
75W Incandescent	12W LED A19 Lamp	3
Exit Incandescent	New LED Exit	4
N/A	Install Emergency Ballast for Security	24
·	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	31
N/A	Haliway Occupancy Sensor - Wireless	46
	Summary	
		Count
New Fixtures		32
Retrofit Fixtures		751
Do Not Do Fixtures		0
Sensors		77

	Justice Court - Biloxi	
	Fixtures	
Existing	Retrofit	Count
100W Metal Halide	New 1x1 LED Canopy Light - 22W	5
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	6
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	46
	Sensors	
Existing	Retrofit	Count
	Ceiling Mount Occupancy Sensor - Wireless	3
	Summary	
	······································	Count
	New Fixtures	5
Retrofit Fixtures		52
	Do Not Do Fixtures	0
	Sensors	3

j	ustice Court - Gulfport	
	Fixtures	
Existing	Retrofit	Coun
100W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	10
175W Metal Halide	New LED Medium Flood	3
Do Not Do Fixture	Do Not Do Fixture	3
	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
	Summary	
		Coun
New Fixtures		3
Retrofit Fixtures		10
Do Nol Do Fixtures		3
Sensors		0

Exhibit A Attachment 1 – Lighting Upgrades Scop	е
Harrison County, MS	

	Fixtures	
Existing	Retrofit	Coun
100W Incandescent	New 2' 232L 2F17T8 Vanity	1
100W Incandescent Jelly Jar	New LED Mini Wallpack (18W)	1
100W Metal Halide	New 1x1 LED Canopy Light - 22W	6
175W Metal Halide	New LED Medium Flood	6
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	- 6
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	20
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	14
4' 2T12 Existing	New 4' 232L 2F25T8 Vapor Tight	- 6
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	9
4' 2T8 Lamp and Baliast	4' 232L 2F25T8 Lamp and Ballast	11
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	2
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	1
4' 4T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	1
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	1
400W Metal Halide	New FHB 2x332H 6F25T8 Highbay w/ Wire Cage	39
40W Incandescent	7W LED A19 Lamp	1
75W Incandescent	12W LED A19 Lamp	22
8' 2T12 Existing	8' 232L 2F25T8 LB w/ New Belly Pan & TG	12
8' 2T12 Non-Retrofittable	New 8' 432N 4F25T8 Wire Guard	35
Exit Incandescent	New LED Exit	1
N/A	Install Linear Fluorescent Tube Guards for Safety	18
Non-Retrofittable 4T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	2
Replace Existing Photocell	New Photo Cell	1
· · · · · · · · · · · · · · · · · · ·	Sensors	F
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	1
N/A	Individual Fixture Sensor	14
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	3
	Summary	
		Count
New Fixtures		99
	trofit Fixtures	99
Do N	lot Do Fixtures	0
Sensors		18

Mul	ti-purpose Bldg - D'Iberville	
	Fixtures	
Existing	Retrofit	Count
175W Metal Halide	New LED Medium Flood	8
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	19
400W Metal Halide	New FHB 454HO 4T5 Highbay w/ Wire Cage	12
Exit Incandescent	New LED Exit	1
	Sensors	
Existing	Retrofit	Count
N/A	N/A	0
	Summary	
		Count
	New Fixtures	
Retrofit Fixtures		19
Do Not Do Fixtures		0
Sensors		0

Exhibit A Attachment	 Lighting Upgrades Scope
Harrison County, MS	

Office - C	ode/Eng & Fire	
F	ixtures	·
Existing	Retrofit	Count
175W Metal Halide	New LED Medium Flood	8
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	6
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	35
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	97
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	3
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	1
40W Incandescent	7W LED A19 Lamp	10
70W Metal Halide	New LED Mini Wallpack (18W)	6
75W Incandescent	12W LED A19 Lamp	2
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	1
Non-Retrofittable 4T12 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	2
	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	15
N/A	Hallway Occupancy Sensor - Wireless	6
N/A	Wall Mount Occupancy Sensor - Wireless	3
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	6
S	ummary	_
		Cour
New Fixtures		16
Retrofit Fixtures		155
Do Not Do Fixtures		0
Sensors		30

Office - Co	unty Office Building	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 2' 232L 2F17T8 Vanity	6
100W Metal Halide	New 1x1 LED Canopy Light - 22W	3
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	2
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	18
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	68
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
Exit Incandescent	New LED Exit	3
	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	3
N/A	Hallway Occupancy Sensor - Wireless	5
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	1
	Summary	
		Count
New Fixtures		12
Retrofit	Fixtures	94
Do Not D	o Fixtures	0
	ISORS	9

Exhibit A Attachment 1	 Lighting Upgrades Scope
Harrison County, MS	

Office - E	lection Commission	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 2' 232L 2F17T8 Vanity	1
2' 2T12 Existing	2' 232L 2F17T8 LB	2
2x4 2T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	23
2x4 3T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	19
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	21
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	66
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	11
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	16
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	37
75W Incandescent	12W LED A19 Lamp	36
8' 2T12 Non-Retrofittable	New 8' 432L 4F25T8 Wrap	2
N/A	Install Emergency Ballast for Security	24
	Sensors	
Existing	Retrofit	Count
N/A	Ceiling Mount Occupancy Sensor - Wireless	3
N/A	Hallway Occupancy Sensor - Wireless	2
N/A	Wall Mount Occupancy Sensor - Wireless	1
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	3
	Summary	
		Count
	New Fixtures	
Retrofit	Retrofit Fixtures	
Do Not D	Do Not Do Fixtures	
Sensors		9

Seni	or Center - D'Iberville	
Fixtures		
Existing	Retrofit	Count
100W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	9
175W Metal Halide	New LED Medium Flood	12
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	50
2x4 4T8 Recessed	2x4 2321 2F25T8 w/M4 Reflector	69
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	12
4' 2T8-Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	22
4x42W CFL Parking Fixture	New LED Parking Fixture	2
Do Not Do Fixture	Do Not Do Fixture	29
Non-Retrofittable 4T8 Recessed 2x4 Troffer	New 2x4 232L 2F25T8 Recessed Troffer	2
	Sensors	
Existing	Retrofit	Coun
N/A	New VendMiser	1
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	9
	Summary	
		Coun
New Fixtures		16
Retrofit Fixtures		162
Do Not Do Fixtures		29
Sensors		10

	Senior Center - Lyman	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 4' 232L 2F25T8 Wrap	14
175W Metal Halide	New 4T5 Wallpack	6
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	20
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	8
2x4 4T8 Recessed	2x4 232H 2F25T8 w/M4 Reflector	6
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	14
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	7
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	67
40W Incandescent	7W LED A19 Lamp	2
70W Metal Halide	New LED Mini Wallpack (18W)	1
75W Incandescent	12W LED A19 Lamp	9
Candelabra E12 25W	5W LED Candelabra E12	11
	Sensors	
Existing	Retrofit	Count
N/A	New VendMiser	2
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	11
	Summary	
		Count
	New Fixtures	
	Retrofit Fixtures	
Do	Do Not Do Fixtures	
Sensors		13

Senior	Center - Frances Fredericks	
Fixtures		
Existing	Retrofit	Count
175W Metal Halide	New 4T5 Wallpack	2
175W Metal Halide	New LED Medium Flood	2
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	59
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	49
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	10
40W Incandescent	7W LED A19 Lamp	1
	Sensors	
Existing	Retrofit	Coun
N/A	New VendMiser	8
N/A	No Sensor	1
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	9
	Summary	
		Coun
New Fixtures		4
Retrofit Fixtures		119
Do Not Do Fixtures		0
Sensors		18

	Senior Center - Saucier	
Fixtures		
Existing	Retrofit	Count
150W Quartz Halogen	New Small LED Flood (37W)	8
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	75
75W Incandescent	12W LED A19 Lamp	1
8' 2T8 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	4
Exit Incandescent	New LED Exit	1
	Sensors	
Existing	Retrofit	Coun
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Dual Circuit Switching	8
	Summary	
		Coun
New Fixtures		9
Retrofit Fixtures		80
Do Not Do Fixtures		0
Sensors		8

7

N	lork Center (D'Iberville)	
	Fixtures	· · · · · · · · · · · · · · · · · · ·
Existing	Retrofit	Count
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	1
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	5
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
4' 4T12 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	6
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	15
400W Metal Halide	New FHB 2x332H 6F25T8 Highbay w/ Wire Cage	16
75W Incandescent	12W LED A19 Lamp	1
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	13
	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	1
	Summary	
		Coun
New Fixtures		. 16
Retrofit Fixtures		45_
Do Not Do Fixtures		0
Sensors		1

Work Cen	ter (Long Beach) - Garage, Office Fixtures	
Existing	Retrofit	
100W Incandescent	New 4' 232L 2F25T8 Wrap	1
100W Metal Halide	New 1x1 LED Canopy Light - 22W	1
175W Metal Halide	New LED Medium Flood	8
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	2
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	26
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	2
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
400W Metal Halide	New FHB 2x332H 6F25T8 Highbay w/ Wire Cage	
75W Incandescent	12W LED A19 Lamp	6
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	
	Sensors	
Existing	Retrofit	
N/A	Ceiling Mount Occupancy Sensor - Wireless	3
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	2
	Summary	
		Coun
New Fixtures		17
Retrofit Fixtures		41
Do Not Do Fixtures		0
Sensors		1

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

	County Garage, Penal Institute & Sheriffs Dispa	
	Fixtures	Count
Existing	Retrofit	
100W Incandescent	New 2' 232L 2F17T8 Vanity	1
100W Incandescent Jelly Jar	New LED Mini Wallpack (18W)	2
100W Metal Halide	New 1x1 LED Canopy Light - 22W	1
175W Metal Halide	New LED Medium Flood	8
2' 2T12 Existing	2' 232L 2F17T8 LB	4
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	73
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	19
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	7
75W Incandescent	12W LED A19 Lamp	8
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	27
Candelabra E12 25W	5W LED Candelabra E12	10
Candelabla E 12 2011	Sensors	
Existing	Retrofit	Coun
N/A	N/A	0
N/A	Summary	
Uninary		
New Fixtures		12
Retrofit Fixtures		160
Do Not Do Fixtures		0
Sensors		0

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

	Work Center (Lorraine Rd) - Wellness Clinic	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 2' 232L 2F17T8 Vanity	2
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	28
75W Incandescent	12W LED A19 Lamp	3
	Sensors	
Existing	Retrofit	Count
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	4
<u> </u>	Summary	
		Count
New Fixtures		2
Retrofit Fixtures		31
Do Not Do Fixtures		0
Sensors		4

Exhibit A Attachment 1 – Lighting Upgrades Scope	
Harrison County, MS	

Work Ce	nter (Lyman) - Garage, Office	
	Fixtures	
Existing	Retrofit	Count
100W Incandescent	New 4' 232L 2F25T8 Wire Guard	4
100W Incandescent	New 2' 232L 2F17T8 Vanity	3
100W Incandescent Jelly Jar	New LED Mini Wallpack (18W)	2
100W Metal Halide	New 1x1 LED Canopy Light - 22W	1
250W Metal Halide Gooseneck	New LED Large WW Flood (101W)	5
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	10
2x4 3T12 Recessed	2x4 232L 2F25T8 w/M4-Reflector	2
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	28
4' 2T12 Non-Retrofittable	New 4' 232L 2F25T8 Wire Guard	16
400W Metal Halide	New FHB 2x332H 6F25T8 Highbay w/ Wire Cage	28
75W Incandescent	12W LED A19 Lamp	5
8' 2T12 Non-Retrofittable	New 8' 432L 4F25T8 Wire Guard	
	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	
	Summary	
New Fixtures		62
Retrofit Fixtures		45
Do Not Do Fixtures		0
Sensors		1

Work Center	Sand Beach) - Maintenance, Office Fixtures	
Existing	Retrofit	
2x2 2T12 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	3
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	55
4' 2T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	30
4' 2T12 Vanity	New 4' 232L 2F25T8 Vanity	1
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	4
40W Incandescent	7W LED A19 Lamp	3
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	7
8' 2T12 Existing	8' 432L 4F25T8 LB w/ New Belly Pan, & TG	12
8' 2T8	New 4' 232L 2F25T8 Vapor Tight	2
8' 2T8 Existing	8' 432L 4F25T8 LB w/ New Belly Pan & TG	6
Candelabra E12 25W	5W LED Candelabra E12	4
Do Not Do Fixture	Do Not Do Fixture	1
Exit Incandescent	New LED Exit	
	Sensors	
Existing	Retrofit	Coun
N/A	Ceiling Mount Occupancy Sensor - Wireless	2
N/A	Wall-Switch Occupancy Sensor, Dual Technology, Single Switching	1
	Summary	
		Coun
New Fixtures		4
Retrofit Fixtures		124
Do Not Do Fixtures		1
Sensors		

Exhibit A Attachment 1 – Lighting Upgrades Scope Harrison County, MS

Exhibit A Attachment 1 -- Lighting Upgrades Scope Harrison County, MS

W	ork Center (Woolmarket)	
	Fixtures	
Existing	Retrofit	Count
100W Metal Halide	New 1x1 LED Canopy Light - 22W	2
175W Metal Halide	New LED Medium Flood	18
2' 2T12 Existing	2' 232L 2F17T8 LB	1
2x2 2T8 Recessed U-Tube	2x2 232L 2F25T8 w/M4 Reflector	5
2x4 2T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	4
2x4 3T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	4
2x4 4T12 Recessed	2x4 232L 2F25T8 w/M4 Reflector	25
2x4 4T8 Recessed	2x4 232L 2F25T8 w/M4 Reflector	3
4' 2T12 Vanity	New 4' 232L 2F25T8 Vanity	1
4' 2T8 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast	2
4' 4T12 Lamp and Ballast	4' 232L 2F25T8 Lamp and Ballast (Remove 2 Lamps)	
4' 4T8 Lamp and Ballast	4' 432L 4F25T8 Lamp and Ballast	23
70W Metal Halide Rec. Can	LED 17W Par 30 Lamp w/ Ballast Bypass & New Socket	
Exit Incandescent	New LED Exit	3
N/A		
	Sensors	
Existing	Retrofit	Coun
N/A	Wall-Switch Occupancy Sensor, Dual	
	Summary	····
		Cour
New Fixtures		24
Retrofit Fixtures		81
Do Not Do Fixtures		0
Sensors		

Exhibit A Attachment 2 – EMCS Scope Harrison County, MS

Energy Management and Control System (EMCS) – MCNEIL RHOADS will install upgrades at all Facilities identified in this section to control time-of-day (TOD) scheduling, monitoring and operation of the Heating, Ventilating and Air Conditioning (HVAC) equipment at the Facilities identified below. The intent and scope will vary by Facility and are identified in detail below. MCNEIL RHOADS shall provide design, engineering, installation, and project management to implement the IIM.

GENERAL NOTES: EMS PANEL COMMUNICATIONS

CLIENT is required to provide Internet network connection to the Siemens Talon® network manager panel(s) at each facility.

Facility Name	Start/Stop	Full Control
Civic Center – D'Iberville	Х	
Civic Center – West Harrison	Х	
Civic Center – Woolmarket	Х	
Courthouse – Biloxi		<u> </u>
Courthouse – Gulfport		X
Family Services (Gulfport) – Admin Offices (Bldg A)	х	
Family Services (Gulfport) – Counseling Offices (Bldg B)	х	
Family Services (Gulfport) – Family Court Center (Bldg C)	х	
Health Department – Biloxi	X	
Health Department – Gulfport		X
Human Services – Biloxi	X	
Human Services – Gulfport		X
Hurricane Shelter - County Farm	X	
Hurricane Shelter – Lobouy	Х	
Hurricane Shelter – Saucier	Х	
Justice Court - Gulfport		X
Library – Gulfport Downtown		Х
Library – Gulfport Orange Grove		Х
Office – Code/Eng & Fire	X	
Office – County Office Building	Х	
Senior Center – D'Iberville	Х	
Senior Center – Lyman	Х	
Senior Center – Saucier	Х	
Senior Center – Woolmarket	X	
Work Center (Sand Beach) – Office	X	

Table 1 – Facility Specific EMS Scope of Work Matrix

1. Start/Stop EMS – 18 Facilities as Identified in Table 1

These Facilities will have a Siemens Talon® Energy Management System installed with Start/Stop capability. The HVAC unit quantity identified below will be placed on a Time-of-Day (TOD) schedule to disable the units during unoccupied hours. Existing and proposed schedules for these facilities are given in Exhibit C. The actual space temperatures during the occupied times of the Facility will be controlled via the existing thermostat or control system that currently performs this function in these Facilities. The intent is for these Facilities to perform unoccupied period "temperature setback" or Time-of-Day HVAC equipment scheduling. Each Facility will contain one (1) humidity sensor and one (1) dry bulb temperature sensor for automated unoccupied period override when needed to enable units during excessive humidity or temperature conditions during "setback" mode. All exhaust fans will be controlled via the EMS with the exception of the three (3) Hurricane Shelters listed below which will be furnished with an occupancy sensor to control exhaust fan shutdown.

Facility	HVAC Quantity	
Civic Center – D'Iberville	4 – Package Units	
	4 – Package Units	
Civic Center – West Harrison	1 – Split System	
Civić Center – Woolmarket	4 – Package Units	
Family Services (Gulfport) - Admin	1 – Split System w/ Boiler	
Offices (Bldg A)	1 - Opin Oystern W Doner	
Family Services (Gulfport) -	4 – Split Systems	
Counseling Offices (Bldg B)	4 – Opin Oyatema	
Family Services (Gulfport) - Family	2 – Split Systems	
Court Center (Bldg C)	2 – Opin Oyaicina	
Health Department – Biloxi	6 – Split Systems	
Human Services – Biloxi	7 – Split Systems	
Hurricane Shelter - County Farm	4 – Split Systems	
Hurricane Shelter – Lobouy	4 – Split Systems	
Hurricane Shelter – Saucier	4 – Split Systems	
Office - Code/Eng & Fire	8 – Split Systems	
Office – County Office Building	5 – RTU Package Units	
Senior Center - D'Iberville	7 – Split Systems	
	5 – Split Systems	
Senior Center – Lyman	2 – Package Units	
Senior Center - Saucier	3 – Split Systems	
Senior Center – Woolmarket	4 – Package Units	
Work Center (Sand Beach) - Office	3 – Package Units	

2. Full Control EMCS at 7 Facilities as Identified in Table 1

These Facilities will have a Siemens Talon® Control System installed with full temperature control capability. The intent is for these Facilities to perform unoccupied period "temperature setback" with full remote temperature control capability during both unoccupied and occupied times. Existing thermostats will be removed and replaced or integrated into the new control system. The exact scope varies per Facility and is identified in detail below.

Page 2 of 6

- a. Courthouse Biloxi
 - Furnish and install a Web-based Siemens Talon® System to control all equipment included below:
 - o Chiller McQuay 100-ton Water-cooled Scroll
 - Cooling Tower BAC single Cell Cross Flow Belt-Driven 10 HP, Age = approximately 45 years
 - Cooling Tower VFD Siemens VFD controls an existing 10 HP Fan
 - o 3-way Condenser Mixing Valve on Chiller/CT Condenser Loop
 - o One (1) CHW Pump and One (1) CW Pump ~5HP ea
 - o Boiler AJAX Atmospheric Natural Gas, 1,600 Input MBtuH
 - AHU-1, 20 HP DDCV located in Central Plant Flr 1 and Serves Flr 1 less Vault
 - AHU-2, 30 HP DDCV located in FIr 2 NE Mech Rm and Services all of FIr 2
 - AHU-3, 1 HP SZCV located in Central Plant Fir 1 and Serves the Fir 1 Vault
 - Install one (1) space humidity sensor for Night Setback Override or Unoccupied Period Setback
 - Programming shall include implementation of Night Setback with High Temp and High Humidity override
 - Remote access shall be implemented
 - Provide owner training
- b. Courthouse Gulfport
 - Install a Web-based Siemens Talon® System to control all equipment listed below:
 - o Central Plant #1 (Serves Main Bldg less Civil Defense)
 - o Two (2) Chilled Water (CHW) Pumps 20 HP 744 GPM 75' ea
 - o Two (2) Condenser Water (CW) Pumps 10 HP ea
 - One (1) Marley Double-Flow Cooling Tower S/N# A 105887 with Wood Frame in a Concrete Basin
 - One (1) 1995 Trane Centrifugal Water-cooled Chiller M/N#CVHE320 10°F
 - One (1) 1987 Trane Centrifugal Water-cooled Chiller M/N#CVHE020F 5°F (Design Delta T TBD)
 - Central Plant #2 (Serves Civil Defense)
 - o One (1) Air-cooled Chiller with Scroll Compressors (~25-ton)
 - One (1) CHW Pump (<5HP)
 - o CRAC Units (Computer Room Air-Conditioning Units)
 - Approximately four (4) Condensers serving the indoor Split AHUs for Dedicated Computer Room Controls
 - o HVAC Distribution
 - o QTY-11 Constant-Volume Air-handling Units (AHUs)
 - QTY-96 Existing Mixing Boxes/Previous VAV Retrofitted
 - o QTY-22 Exhaust Fans Interlocked Located in Various Locations Roof & Inline

Exhibit A Attachment 2 – EMCS Scope Harrison County, MS

- QTY-8 Exhaust Fans with 3-speed Switch
- QTY-4 Electric Duct Heaters for Perimeter Heating on OA Units
- Design OA: 11,760 CFM for AHU 2,4,6,8 (Does not include OA at other AHU larger OA Units) Design EF: 9,300 CFM
- QTY-7 Electric Duct Heaters for two (2) Disable Multi-zones AHU-10 and AHU-11
- Programming shall include implementation of Night Setback with High Temp and High Humidity Automatic Enabling
- Remote access shall be implemented
- Take over functional control of all existing points within both central plants
- All Central Plants shall be able to be cycled down or shutoff during unoccupied time periods
- Retrofit existing Constant Volume AHUs (Multi-zone or otherwise straight CV) units to VAV to include:
 - o AHU-1 15 HP
 - o AHU-3 15 HP
 - o AHU-5 7.5 HP
 - o AHU-7 7.5 HP
 - o AHU-9 5 HP
 - o AHU-10 10 HP
- AHU-2, AHU-4, AHU-6, and AHU-8 shall remain CV with no VFDs installed and no box retrofits.
- Ensure functional OA dampers on all units. Install new actuators on all OA dampers.
- Ensure all existing interlocks with EF's are working and functional on the EFs that were designed for interlock
- Install a Hard Point to the EFs that are not interlocked
- Install one (1) Building Pressurization Monitor on Floor 1 Central Lobby Wall Near Board Room/SE Hall near AHU-1
- Install two (2) Indoor Space Humidity Sensors as follows:
 - o Floor 1 Central Lobby Near Board Room and Pressure Sensor
 - o Floor 2 East Central Hallway Near Visitor
- Provide owner training
- c. Health Department Gulfport
 - Install a Web-based Siemens Talon® System to control all equipment listed below
 - o Trane GEV Series WSHP's QTY 15 w/various capacities
 - One (1) Electric Duct Heater on Stand-alone Thermostat in the Adult Health Waiting Room
 - Cooling Tower Evapco Counterflow 15-HP Fan w/5 HP Circulating Pump
 - Cooling Tower VFD Field Verify
 - Two (2) WSHP Loop Pumps with one as primary and one as a standby. 15 HP each

Exhibit A Attachment 2 -- EMCS Scope Harrison County, MS

- Boiler One (1) Natural Gas Boiler 1,800 MBH Input
- Aaon Unit Roof Mounts
- For each existing Humidistat allow for Remote Programming of this Parameter for both Unoccupied Mode and Occupied Setpoint
- Programming shall include implementation of Night Setback with High Temp and High Humidity Automatic Enabling.
- Remote access shall be implemented
- Replace all chilled water piping from shutoff valves to AHUs
- Two and on-half inch (2.5") and above will be carbon steel piping buttweld or grooved connection
- Two inch (2") and below will be type L copper with press fittings
- Furnish new isolation and circuit setter balancing valves and pressure/temp ports to each AHU
- Furnish and install new 1.5" fiberglass insulation with factory jacket
- Piping exposed in AHU mechanical rooms will have PVC jacket
- Provide owner training
- d. Human Services Gulfport
 - Furnish and install a Web-based Siemens Talon® ® System to control all equipment including:
 - FHP Manufacturing EC Series WSHP's with Humidimiser Hot Gas Reheat
 - WSHP #1 #19 (Nineteen total)
 - Cooling Tower BAC Single Cell Cross Flow Belt-Driven 10-HP w/3HP Circulating Pump
 - Cooling Tower VFD Yaskawa 10-HP
 - Two (2) WSHP Loop Pumps with one as primary and one as a standy. 15 HP ea
 - o Boiler One (1) Fulton Electric 350 kW
 - For each existing Humidistat allow for Remote Programming for Both and Unoccupied Mode and Occupied Setpoint
 - Programming shall include implementation of Night Setback with High Temp and High Humidity Automatic Enabling
 - Remote access shall be implemented.
 - Provide owner training

e. Justice Court -- Gulfport

- Furnish and install a Web-based Siemens Talon® System to control all equipment including:
 - o Two VAV AHUs with electric reheat zone distribution units
 - One 90-ton A/C Carrier scroll chiller with on-board packaged pumps
 - o 28 VAV boxes
- Install one (1) space humidity sensor for Night Setback Override or Unoccupied Period Setback
- Programming shall include implementation of Night Setback with High Temp and High Humidity Automatic Enabling

Exhibit A Attachment 2 – EMCS Scope Harrison County, MS

- Reprogramming of the existing or proposed system shall be required to reduce tight reheat requirements.
- · Remote access shall be implemented.
- Replaced Failed Room Sensors as Needed
- Provide owner training
- f. Library Gulfport Downtown
 - Furnish and install a new Siemens Talon® (Jace) front end to control the following equipment:
 - o Three (3) DX/Electric Heat AHUs with electric heat
 - o One (1) Exhaust Fan. EF#7 to be controlled.
 - Remote access shall be implemented
 - Provide owner training
- g. Library Gulfport Orange Grove
 - Furnish and install a new Siemens Talon® front-end with schedule change capability, alarm outputs, and read/write capability for temperatures and web access
 - System verification
 - Provide owner training
- 3. Off-site Training

•

Five (5) day Niagra AX training class will be provided for two (2) Harrison County representatives. This class will teach how to use functions within the system to do trending, exception alarming, scheduling, data sharing, and graphic user interface interaction in order to monitor and control a facility. Meals, airfare, and hotel stay is included.

Page 6 of 6



Article 1: Payment for Scope of Work

- 1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to MCNEIL RHOADS \$4,027,881.00
- Escrow: The CLIENT has agreed to deposit the Price into an Escrow Account at 1.2 a financial institution satisfactory to the CLIENT. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. Pursuant to Section 8.2 of the Agreement, MCNEIL RHOADS shall submit monthly invoices to the CLIENT based on the Payment Schedule in Table B.1 below. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to MCNEIL RHOADS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 120 days of the execution of this Agreement, this Agreement shall be null and void. This 120 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement becomes null and void as described in this paragraph and CLIENT has previously authorized MCNEIL RHOADS to proceed with the Work, the CLIENT shall be obligated to reimburse MCNEIL RHOADS either: (i) for the materials purchased and Work performed to date; or (ii) for the Work specifically authorized in writing by the CLIENT.
- 1.3 **Timely Payments:** The CLIENT agrees to pay MCNEIL RHOADS progress payments monthly as the Work is completed. MCNEIL RHOADS will submit for approval and payment each month an AIA pay application indicating Work performed to date. CLIENT agrees to pay all invoices submitted by MCNEIL RHOADS per Article 8 of the Agreement.

See Project Rhase	Payments (\$)	Payments (%)	Schedule
Development, Eng, Mobilization & Material Procurement	\$805,576.20	20.00%	PMT 1
Lighting Installation & Material Procurement	\$604,182.15	15.00%	PMT 2
Lighting & EMS Installation	\$201,394.05	5.00%	PMT 3
Lighting & EMS Installation	\$201,394.05	5.00%	PMT 4
Lighting & EMS Installation	\$201,394.05	5.00%	PMT 5
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 6
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 7
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 8
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	РМТ 9

Table B.1 - Projected Work Payment Schedule



PROJECT TOTAL:	\$4,027,881.00	100%	
Training/Closcout	\$100,697.00	2.50%	PMT 18
Commissioning	\$100,697.03	2.50%	PMT 17
EMS & HVAC Installation	\$100,697.03	2.50%	PMT 16
EMS & HVAC Installation	\$100,697.03	2.50%	PMT 15
Lighting, EMS, & HVAC Installation	\$100,697.03	2.50%	PMT 14
Lighting, EMS, & HVAC Installation	\$100,697.03	2.50%	PMT 13
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 12
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 11
Lighting, EMS, & HVAC Installation	\$201,394.05	5.00%	PMT 10

Article 2: Payment for Measurement & Verification Program (MVP)

- 2.1 Price: As full consideration of the Services as described in Exhibit A, Article 3, the CLIENT shall pay to MCNEIL RHOADS the amounts identified in Table B.2 plus taxes, if applicable, on the dates identified therein.
- 2.2 Measurement & Verification Program Term: The term of the MVP shall commence on the Guarantee Date and shall extend for either: (a) the term of the Performance Guarantee Period where multi-year obligations are allowed; or (b) for twelve (12) month periods corresponding to the term of each Annual Period.
- 2.3 Automatic Renewal: Where the MVP term is limited to an Annual Period, the MVP shall automatically renew for successive Annual Periods beginning on the anniversary date of Guarantee Date. Either party may request to amend the MVP at the end of an Annual Period by giving the other party at least 30 days prior written notice of such amendments. Such amendment shall be mutually negotiated by the Parties and effective upon a written amendment signed by both Parties prior to commencement of the next Annual Period. Each automatic renewal shall be and remain subject to the terms and conditions of this Agreement. MCNEIL RHOADS obligations under the Performance Guarantee are dependent upon and subject to the express condition that the CLIENT maintains the MVP during the entire Performance Guarantee Period.
- 2.4 **Termination:** See Section 4.7 of the Agreement.

	Trogram rayment Scucouc
Total Annual To Payments (\$)	Notes a
\$30,000	Payments Due Quarterly in Arrears
\$30,000	Payments Due Quarterly in Arrears
\$30,000	Payments Due Quarterly in Arrears
\$30,000	Payments Due Quarterly in Arrears
\$30,000	Payments Due Quarterly in Arrears
\$30,000	Payments Due Quarterly in Arrears
	Total Annual Payments (\$) \$30,000 \$30,000 \$30,000 \$30,000 \$30,000 \$30,000 \$30,000 \$30,000 \$30,000

Table B.2 - Measurement & Verification Program Payment Schedule



Annual Period 7	\$30,000	Payments Due Quarterly in Arrears
Annual Period 8	\$30,000	Payments Due Quarterly in Arrears
Annual Period 9	\$30,000	Payments Due Quarterly in Arrears
Annual Period 10	\$30,000	Payments Due Quarterly in Arrears
Annual Period 11	\$30,000	Payments Due Quarterly in Arrears
Annual Period 12	\$30,000	Payments Due Quarterly in Arrears
Annual Period 13	\$30,000	Payments Due Quarterly in Arrears
Annual Period 14	\$30,000	Payments Due Quarterly in Arrears
Annual Period 15	\$30,000	Payments Due Quarterly in Arrears

By signing below, this Exhibit B is attached to and made a part of the Agreement between MCNEIL RHOADS and the CLIENT.

Agreed for	Harrison County Board of Supervisors, MS
(Signature) by:	Receile Martin
Print Name and Title:	Beverly Martin/President Board President
(Signature) by:	In the stan
Print Name and Title:	John WcAdams, Clerk of the Board Clerk of the Board
Agreed for	McNeil Rhoads, LLC
(Signature) by:	CIR
Print Name and Title:	Chris McNeil, President
(Signature) by:	Funt Rhad CEO
Print Name and Title:	Dusty Rhoads, CEO Dusty Rho ADS CEO



The following Articles and Tables are hereby included and made part of this Exhibit C:

- Article 1 Summary of Articles and Total Guaranteed Savings
- Article 2 Measurement and Verification Options
- Article 3 Performance Guarantee Period Responsibilities of CLIENT
- Article 4 Measurement and Verification Plan
- Article 5 Baseline Data
- Article 6 Utility Rate Structures and Escalation Rates
- Article 7 Contracted Baseline Data

Article 1: Summary of Articles and Total Guaranteed Savings

Table 1.1 – Guaran	teed Savings th	rough Annual	Period 1 (Units)

Performance Period	Electric Energy Saved (kWh)
Annual Period 1	3,778,978

1.1 Only Annual Period 1 is shown, as the energy/utility unit Savings will remain constant for each Annual Period of the Performance Guarantee Period based upon the CLIENT's operation of the Site in accordance with the Contracted Baseline identified in Article 7.

Performance Period	Energy/Utility Savings	Operational Savings	Total Savings
Annual Period 1	\$335,258.88	-	\$335,258.88
Annual Period 2	\$345,316.64	-	\$345,316.64
Annual Period 3	\$355,676.14	_	\$355,676.14
Annual Period 4	\$366,346.42		\$366,346.42
Annual Period 5	\$377,336.82	-	\$377,336.82
Annual Period 6	\$388,656.92	-	\$388,656.92
Annual Period 7	\$400,316.63	-	\$400,316.63
Annual Period 8	\$412,326.13		\$412,326.13
Annual Period 9	\$424,695.91	-	\$424,695.91
Annual Period 10	\$437,436.79		\$437,436.79
Annual Period 11	\$450,559.89	-	\$450,559.89
Annual Period 12	\$464,076.69		\$464,076.69
Annual Period 13	\$477,998.99	-	\$477,998.99
Annual Period 14	\$492,338.96	-	\$492,338.96
Annual Period 15	\$507,109.13	-	\$507,109.13
TOTALS	\$6,235,450.95	-	\$6,235,450.95

Table 1.2 – Total Guaranteed Savings (Cost)

- 1.2 Table 1.2 shows the CLIENT'S guaranteed cost Savings for each Annual Period that are extrapolated from the guaranteed energy/utility unit Savings shown in Table 1.1 by multiplying the energy/utility Savings by the Baseline energy/utility rates, including the stipulated Escalation Rates found in Article 6.
- 1.3 MCNEIL RHOADS cannot and does not predict fluctuations in utility rates or the cost of energy. Therefore, the CLIENT and MCNEIL RHOADS agree that the energy/utility cost Savings for each Annual Period will be calculated by multiplying the verified units of energy/utility Savings by the Annual Period's stipulated energy/utility rate and Escalation Rates and not the Annual Period's actual utility rate.



- 1.4 The determination of energy/utility Savings will follow current best practice, as defined in the IPMVP, or the FEMP Guidelines where required, unless otherwise agreed to by the Parties.
- 1.5 The Performance Guarantee does not operate to guarantee the Savings per-IIM. Rather, the calculation of Savings is based on aggregate performance of all of the IIMs contained in the Project. The projected value of such aggregate performance is contained in Table 1.2 above representing the Total Guaranteed Savings as monetized.

Article 2: Measurement and Verification Options

2.1 There are five measurement and verification options to measure and verify energy/utility Savings: Option A - Retrofit Isolation: Key Parameter Measurement; Option B - Retrofit Isolation: All Parameter Measurement; Option C - Whole Site; and Option D - Calibrated Simulation. Options A through and including D are part of the IPMVP. Option E - Stipulated is based on industry accepted engineering standards and is the Option used for purposes of calculating Operational Savings.

Option A – Retrofit Isolation: Key Parameter Measurement: Savings are determined by field measurement of the key performance parameter(s), which define the energy use of the IIM's affected system(s) and/or the success of the Project. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the measured parameter and the length of the reporting period. Parameters not selected for field measurement are estimated. Estimates can be based on historical data, manufacturer's specifications, or engineering judgment. Documentation of the source or justification of the estimated parameter is required.

Option B – **Retrofit Isolation: All Parameter Measurement**: Savings are determined by field measurement of the energy use of the IIM-affected system. Measurement frequency ranges from short-term to continuous, depending on the expected variations in the savings and the length of the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Measurement & Verification Program.

Option C - Whole Site: Savings are determined by measuring energy use at the whole Site or sub-Site level. Continuous measurements of the entire Site's energy use are taken throughout the reporting period. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Measurement & Verification Program.

Option D - Calibrated Simulation: Savings are determined through simulation of the energy use of the whole Site or of a sub-Site. Simulation routines are demonstrated to adequately model actual energy performance measured in the Site. This Option usually requires considerable skill in calibrated simulation. If applicable, the predetermined schedule for data collection, evaluation, and reporting is defined in Exhibit A, Article 3-Measurement & Verification Program.

Option E – Stipulated: This Option is the method of measurement and verification applicable to IIMs consisting either of Operational Savings or where the end use capacity or operational efficiency; demand, energy consumption or power level; or manufacturer's measurements, industry standard efficiencies or operating hours are known in advance, and used in a calculation or analysis method that will stipulate the outcome. Both CLIENT and MCNEIL RHOADS agree to the stipulated inputs and outcome(s) of the analysis methodology. Based on the established analytical methodology, the Savings stipulated will be achieved upon completion of the IIM and no further measurements or calculations will be performed during the Performance Guarantee Period. If applicable,



the methodology and calculations to establish Savings value will be defined in Section 4.6 of this Exhibit C.

IIM Name/Type	Method	Key Parameter	Source/Units
Lighting	Option	Efficiency – Fixture Wattage	Electrical
Upgrades	A		Power – kW
EMCS	Option	Run-time – HVAC Equipment	Electrical
	A	Unoccupied Use	Energy – hours

Table 2.1 – M&V Method and Key Parameter Measurement

2.2 Table 2.2 below summarizes the first Annual Period's Guaranteed Savings (See Article 1, Tables 1.1, 1.2 and Article 2, Table 2.1) utilizing the applicable Measurement and Verification Options as applied to the referenced IIMs valued pursuant to the agreed upon amounts identified in Article 6 hereof.

IIM Name/Type	Energy/Utility Savings \$	Operational Savings \$	Total Savings \$	
Lighting Upgrades	\$194,596	-	\$194,596	
EMCS	\$140,663	-	\$140,663	
TOTALS	\$335,259		\$335,259	

Table 2.2 – Savings for First Annual Period by Option



2.3 Table 2.3 identifies the source of Operational Savings defined and quantified by the Parties. The Parties affirm that such amounts are Stipulated Savings for purposes of calculating Annual Realized Savings and acknowledge that the Guaranteed Savings identified herein have been based on CLIENT'S affirmation. OPERATIONAL SAVINGS SHALL NOT BE MEASURED OR MONITORED DURING THE PERFORMANCE GUARANTEE PERIOD.

Account/Vendor	Description	Annual Cost \$	# of Annual Periods Savings Are Applied	Annual Period Savings Begin
N/A	N/A	N/A	N/A	N/A

Table	2.2	Course	~F ()	nevetional	Cavinaa
anic	Z.J "	Source	UL U	perational	Javings

2.4 MCNEIL RHOADS has explained to the CLIENT and the CLIENT has satisfied itself as to how Operational Savings are incorporated into the Annual Realized Savings.

2.5 The Escalation Factor applicable to Operational Savings is 3%.

Agreed for	Harrison County Board of Supervisors, MS
(Signature) by:	Sweeter Martin
Print Name and Title:	Beverly Martin, President Board President
(Signature) by:	/ when an
Print Name and Title:	John McAdams, Clerk of the Board Clerk of the Board
Agreed for	McNeil Rhoads, LLC
Agreed for (Signature) by:	McNeil Rhoads, LLC
• • • •	McNeil Rhoads, LLC Chris McNeil, President
(Signature) by: Print Name and	Cen



Article 3: Performance Guarantee Period Responsibilities of the CLIENT

In addition to the CLIENT'S responsibilities under Article 6 of the Agreement, this Article details the responsibilities of the CLIENT in connection with the management and administration of the Performance Guarantee.

- 3.1 The CLIENT will provide a representative at each Site to coordinate work and provide the required data described below.
- 3.2 The CLIENT will provide MCNEIL RHOADS with accurate Site operating information as defined below and in the Contracted Baseline article of this Exhibit C during each Annual Period, within thirty (30) days of any Material Change that may increase or decrease energy usage.
- 3.3 If applicable, the CLIENT will provide MCNEIL RHOADS with copies of utility bills within thirty (30) days of receipt by the CLIENT or provide access to utility vendor information to allow MCNEIL RHOADS to include a utility bill analysis in the Annual Measurement & Verification Report. The utility bill analysis does not take the place of the Measurement and Verification Plan identified in Article 4 of this Exhibit C and is not used to measure the Project's performance.
- 3.4 If required for the Work, CLIENT will provide telephone/data remote access, through Siemens Talon® software package or otherwise, as MCNEIL RHOADS reasonably requests. All charges related to telephone/data line installation, activation, and communication services are the responsibility of the CLIENT.
- 3.5 If required for the Work, CLIENT will provide and coordinate utility meter upgrade for interface with MCNEIL RHOADS metering and data collection. All charges related for these upgrades are the responsibility of the CLIENT. CLIENT shall promptly notify MCNEIL RHOADS of any problems with the installed IIMs and will provide the necessary access to Equipment and affected systems. MCNEIL RHOADS shall then determine the best course of action to ensure Site occupant comfort and to maintain the Guaranteed Savings. Changes in operation of systems associated with the IIMs may require Baseline adjustments.



Article 4: Measurement and Verification Plan

The following information is applicable to this Agreement:

Article 4.1 General Overview

Article 4.2 Option A - Retrofit Isolation: Key Parameter Measurement

Article 4.3 Option B - Retrofit Isolation: All Parameter Measurement

Article 4.4 Option C - Whole Site

Article 4.5 Option D - Calibrated Simulation

Article 4.6 Option E - Stipulated-Energy/Utility Savings

4.1 General Overview -

The purpose of the Measurement and Verification (M&V) Plan is to identify the methods, measurements, procedures and tools that will be used to verify the Savings for each IIM, which has energy/utility Savings. Savings are determined by comparing prior usage, consumption or efficiencies (defined as the "Baseline") against the post-IIM implementation usage, consumption or efficiencies. The Baseline usage, consumption or efficiencies are described in this Exhibit C, Article 5. The post-IIM implementation usage, consumption or efficiencies is defined as the Contracted Baseline and are described in this Exhibit C, Article 7.

It shall be the responsibility of the CLIENT to notify MCNEIL RHOADS of any problems with the installed IIMs and to provide the necessary access to Equipment and systems affected. MCNEIL RHOADS shall then determine the best course of action to ensure Site occupant comfort and to maintain the Guaranteed Savings. Changes in operation of systems associated with this IIM may require Baseline adjustments.

4.2 Option A - Retrofit Isolation: Key Parameter Measurement

4.2.1 Lighting Upgrades

Description

Verification of Savings (kWh) achieved by the lighting retrofit shall be based upon a onetime measurement of the lighting power capacity under existing conditions, a one-time measurement of the lighting power capacity upon completion of the lighting IIM, and agreed-upon annual operating hours. A statistically valid representative sample size of major lighting-fixture types will be used to ascertain pre-retrofit and post-retrofit kW. Major fixture types are defined as those fixture types whose total savings comprise the top 80% of the total kWh savings for this IIM. Sample size will conform to 80% confidence and 20% precision. If such measurements are unavailable or unobtainable or if the fixture type is not considered a major fixture type, wattage tables published by Department of Energy (DOE) for standard bulb and fixture combinations shall be used instead.

<u>Calculations</u> Formulas for Power (kW): kW_R = (kW_{pre} - kW_{post}) _{Usage Group} **

Formulas for Energy (kWh) Savings: kWh_S = (kW_R * AOHrs)_{Usage Group A} + (kW_R * AOHrs)_{Usage Group B} +

Formulas for Cost (\$) Saving: Total \$ Savings = (kWh_s * \$/kWh_{contract})

Calculations Variables Index Where:



kW_R = reduction in power for lighting retrofit for each Usage Group "x"

kWpre = measured lighting power prior to retrofit project for each Usage Group "x"

kWpost = measured power for lighting after retrofit project for Usage Group *x*

\$/kWh_{contract} = cost of electricity based on Table 6.1.1 and stipulated escalations kWh_s = total annual lighting energy savings

AOHrs = annual pre and post agreed upon operating hours based on Table 5.1.1b and Table 7.1.2

Measurement or Reference Tables

Pre-retrofit measurements:

- Instantaneous or "spot" kW of representative samples of existing lighting-fixture types. MCNEIL RHOADS will use hand-held metering instruments to determine the pre-retrofit power use.
- Count of each fixture-type, by each Usage Group to determine average power consumption for the group.

Post-retrofit measurements:

- Instantaneous or 'spot' kW of representative samples of the installed/retrofitted lighting-fixture types. MCNEIL RHOADS will use hand-held metering instruments to determine the pre-retrofit power use.
- Count of each fixture-type, by each Usage Group to determine average power consumption for the group.

Agreed Upon Parameters:

• The annual operating hours associated with each Usage Group will be the same for the purposes of calculating pre and post energy use (kWh) for each group.

Responsibility of the Parties

It shall be the responsibility of the CLIENT to notify MCNEIL RHOADS of any problems with the IIMs installed by MCNEIL RHOADS and to provide the necessary access to Equipment and systems affected. MCNEIL RHOADS shall then determine the best course of action to ensure Facility occupant comfort and to maintain the Guaranteed Savings. Unintended changes in operation of systems associated with these IIMs by the CLIENT may require Baseline adjustments.

Specifications on Measurement Tools:

Hand-held and portable metering instruments will be used to measure the pre-retrofit and post-retrofit power consumption to determine the average power consumption for a given fixture type.

Pre-retrofit measurements:

- Hand-held electric power meter Fluke Model 43B or equivalent
- Power meter data logger Various
- Amp meter data logger Various

Post-retrofit measurements:

- Hand-held electric power meter Fluke Model 43B or equivalent
- Power meter data logger Various
- Amp meter data logger Various

4.2.2 Energy Management and Control System (EMCS)

Description

Verification of electric (kWh) energy savings achieved by HVAC Time of Day (TOD) implementation shall be based upon a one-time spot sampling measurement of the



schedules of the HVAC units associated with the TOD scheduling program in the Siemens Talon[®] System, manufacture's estimated efficiency, and calculated unoccupied heating and cooling usage. The existing operating hours and the new programmed operating hours are agreed between the Parties. Upon completion of the IIM, the EMCS will start/stop equipment as programmed/scheduled. MCNEIL RHOADS will provide ongoing performance variable monitoring of the post implementation TOD schedules.

Calculations

Formulas for Electric Energy (kWh) Savings: kWh_{TOT} = kWh_{RTU/AC} +kWh_{AHUFH} + kWh_{EH}

 $kWh_{RTU/AC} = ((kW/Ton * (Ton-hours_{pre} - Ton-hours_{post}))_{RTU-a} + (kW/Ton * (Ton-hours_{pre} - Ton-hours_{post}))_{RTU-b} + 8LA_{RTU/AC}$

kWh_{AHUFH} = (HP * .746 kW/HP * ((Ton-hours_{pre} – Ton-hours_{post})/Ton + EFLH-HEAT_{pre} – EFLH-HEAT_{post})) _{AHU a} + (HP * .746 kW/HP * ((Ton-hours_{pre} - Ton-hours_{post})/Ton+ EFLH-HEAT_{pre} – EFLH-HEAT_{post})) _{AHU b} + BLA_{AHUFH}

kWh_{EH} = (kW_{HEAT} * (TF%_{pre} * EFLH-HEAT_{pre} -TF%_{pos1} * EFLH-HEAT_{pos1})) _{RTU a} + (kW_{HEAT} * (TF%_{pre} * EFLH-HEAT_{pre} -TF%_{pos1} * EFLH-HEAT_{pos1})) _{RTU b} + BLA_{kWHEAT}

Formulas for Electric Cost (\$) Saving: Total \$Elec Savings = (kWh_{TOT} * \$/kWh_{CONTRACT})

Total \$ Savings = Total \$Elec Savings

Calculations Variables Index HP = supply air fan name plate horsepower Ton = nominal rated capacity of the unit based on Table 5.1.2a kW/Ton = total power of condenser, compressor, controls based on Table 5.1.2a kWh_{TOT} = total annual electric energy savings kWhen = total annual electric heating energy savings kWHEAT = the capacity of heat pumps and/or electric strip heating systems kWhAHUEH = total annual RTU or Split System fan cooling/heating energy savings kWh_{RTWAC}= total annual RTU or Split System cooling energy savings Ton-hourspre = Cooling Ton-hours before implementation based on Table 5.1.2b Ton-hourspost = Cooling Ton-hours after implementation based on Table 7.1.3a \$/kWh_{CONTRACT} = cost of electricity based on Table 6.1.1 and stipulated escalations BLAAHUEH = baseline energy adjustment to account for changes in air-handling unit fan energy requirements during the heating mode (positive for increased requirements) BLA_{RTUAC} = baseline energy adjustment to account for changes in rooftop unit or split system requirements (positive for increased requirements) BLA_{kWHeal} = baseline energy adjustment to account for changes in the installed kW of the heating system requirements (positive for increased requirements) EFLH-HEATpre = Full Load Equivalent Operating Hours for Heating before implementation based on Table 5.1.2b EFLH-HEAT_{post} = Full Load Equivalent Operating Hours for Heating after implementation based on Table 7.1.3b TF%pre= tuning factor to account for weather/building load TF%post= tuning factor to account for weather/building load Measurement or Reference Tables

Pre-retrofit measurements:

- Manufacturer's data for estimated efficiency and capacity (kW/ton, Tons, etc...)
- Spot Sampling of Unit Run-time
- Calculated Ton-hours of each unit associated with the existing schedule.



Post-measurements:

- Manufacturer's data for estimated efficiency (kW/ton, Tons, etc...)
- Calculated Ton-hours of each unit associated with the TOD schedule.
- Periodic Monitoring of Unit programmed schedules.

Baseline Adjustments:

Changes in Facility use due to new construction, extended or contracted operating schedules, occupancy, or changes in functionality can change energy consumption and require adjustments to the usage predicted by the Pre-Retrofit baseline models. The schedules implemented in the control system will be verified to remain valid. Override of the control system and schedule changes for affected equipment may justify adjustment of the baseline. Any changes in operating conditions will be documented as soon as found, reported to the CLIENT, and reported on the next Annual Savings Guarantee Report. The CLIENT will have thirty (30) days from the date of this notice to reset the schedules/overrides to the contractual condition(s) at no penalty to either MCNEIL RHOADS or the CLIENT. If notified and uncorrected within the time allotted, the change will be deemed a Material Change and a Baseline adjustment will be incorporated. The Annual Savings Guarantee Report will document changes in conditions that may affect Savings persistence.

Responsibility of the Parties

It shall be the responsibility of the CLIENT to notify MCNEIL RHOADS of any problems with the IIMs installed by MCNEIL RHOADS and to provide the necessary access to Equipment and systems affected. MCNEIL RHOADS shall then determine the best course of action to ensure Facility occupant comfort and to maintain the Savings Guarantee. Unintended changes in operation of systems associated with these IIMs by the CLIENT may require Baseline adjustments.

Measurement Tools

- Hand-held electric power meter, power, or amp metering data logger Fluke Model 87 or equivalent
- Existing control system schedule, time clock pin settings or verified manual shutdown times. Equipment with no verified start/stop capability is estimated to operate continuously. The new control system schedule will be used to determine postinstallation operating hours. Equipment with no verified start/stop capability is estimated to operate continuously.
- HOBO Data Loggers for lighting, run-time, occupancy, or other
- 4.3 Option B Retrofit Isolation: All Parameter Measurement Not Applicable
- 4.4 Option C Whole Site Not Applicable
- 4.5 Option D Calibrated Simulation Not Applicable
- 4.6 Stipulated-Energy/Utility Savings Not Applicable



Article 5: Baseline Data

5.1 The energy Baselines are presented on an IIM-by-IIM basis as required when using an Option A savings methodology. The year selected as the Baseline Period starts in May 2013 and ends in April 2014. For the facilities identified in which there is an IIM, the approximate total bill was \$1,769,206 with an electrical usage of 17,966,159 kWh for this May 2013-April 2014 Billing Period. This Baseline Period's energy consumption and rate tariffs' in place were used as a reference for establishing the IIM-by-IIM baseline energy use shown in Table 5.1 below.

Table 5.1 –	Baseline Energy	Usage

IM ID	Electricity Usage (kWh/yr)
Lighting Upgrades	3,751,603
EMCS	6,716,473
TOTALS	10,468,076

The Tables below (Tables 5.1.1a, 5.1.1b, 5.1.2a, 5.1.2b, and 5.1.2c) contain values attained from manufacturers data, data logging, customer interviews, and/or derived utilizing standard engineering principles. The values contained in the tables below for the basis for the calculations used to derive the agreed upon Baseline Energy Usage in Table 5.1.

5.1.1 Lighting Upgrades

Table 5.1.1a Lighting Hours by Area Type			
Area Type	Hours		
Classroom	2,500		
Closet	1,600		
Courtroom	2,200		
Dressing Room	2,500		
Elevators	1,600		
Emergency Egress Lighting	0		
Exits	8,760		
Exterior Storage Building	750		
Garage	3,000		
Gym/APR	2,500		
Hallway/Corridors/Lobby/Entry	2,500		
Hallway/Corridors/Lobby/Entry	8,760		
Kitchen/Cafeteria	2,200		
Library/Media	2,500		
Locker Room/Dressing	2,500		
Room/Shower	2,000		
Mech/Elec./Boiler Room	2,500		
Meeting/Conf Room	2,500		
Office	2,500		
Outside Lighting	3,000		
Patient Room	2,500		
Inmate Holding	2,500		
Restroom	2,500		
Room	2,500		
Security Areas (on 24x7)	8,760		
Stage/Auditorium	2,000		

Table 5.4.1a – Lighting Hours by Area Type



McNen, Risous

Area Туре	Hours
Stairwell	2,500
Storage Room	2,000
Vending	8,760
Work Rm/Break Rm	2,500

Facility/Site Name	# Fixtures	installed kW	Annual Operating Hours	Annuai kWh
Adult Detention Facility - Main Jail, Sheriff Support Services Complex	2,352	263.77	3,891	1,035,136
Civic Center - D'Iberville, West Harrison, Woolmarket	751	69.13	2,427	169,889
Community Center - Good Deeds	215	23.59	3,188	76,513
Community Center - Isaiah Fredericks	128	23.58	2,533	60,803
Community Center - Success	42	6.32	2,871	17,225
Courthouse - Biloxi	490	43.98	2,640	116,151
Courthouse - Gulfport	1,732	155.57	3,998	623,649
Fairgrounds - Arena, Office & Meeting Rms	157	138.41	1,328	183,218
Family Services (Gulfport) - Admin Offices (Bldg A), Counseling Offices (Bldg B), Family Court Center (Bldg C), Children's Shelter, Modulars	486	50.50	2,242	114,333
Fire Station - Lizana #1	58	6.18	2,754	16,522
Fire Station - West Wortham #2	52	9.44	2,830	25,468
Fire Station - County Farm Rd #3	51	11.01	2,748	30,228
Fire Station - County Farm #4	57	7.38	2,866	20,062
Fire Station - Canal Road #5	42	5.41	3,057	15,285
Fire Station - Deliste #6	57	7.38	2,866	20,062
Fire Station - West Harrison #7	53	6.78	2,669	18,680
Fire Station - Saucier #8	41	4.34	2,859	11,436
Fire Station - Success #9	43	9.13	2,872	25,847
Fire Station - Bethel Road #10	43	6.64	2,533	17,734
Fire Station - North Woolmarket #11	51	11.01	2,748	30,228
Fire Station - East Harrison #12	52	9.50	3,002	27,020
Fire Station - Cuevas #13	46	5.11	2,798	13,992
Fire Station - Henderson Point #14	47	4.15	2,596	10,385
Health Department - Biloxi	N/A	N/A	N/A	N/A
Health Department - Gulfport	573	42.24	2,337	98,139
Human Services - Biloxi	175	20.56	2,467	51,815
Human Services - Gulfport	783	83.04	2,524	209,487
Hurricane Shelter - County Farm, Lobouy, Saucier	N/A	N/A	N/A	N/A
Justice Court - Biloxi	57	3.72	2,249	8,994
Justice Court - Gulfport	16	1.87	2,798	5,595
Library - Gulfport Downtown	N/A	N/A	N/A	N/A

Table 5.1.1b -	 Baseline Facil 	ity Liahting	Energy Co	nsumption

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Facility/Site Name	# Fixtures	Installed kW	Annual Operating Hours	Annual kWh
Library - Gulfport Orange Grove	N/A	N/A	N/A	N/A
Maintenance (Lorraine Rd) - Dist. #4 Road and Mosquito, Recycling Center, Storage Shed, VO-TECH	197	8.19	2,294	110,130
Multi-purpose Bldg - D'Iberville	40	21.96	1,657	13,255
Office - Code/Eng & Fire	171	8.42	2,424	53,337
Office - County Office Building	106	24.58	2,609	20,875
Office - Election Commission	258	59.09	1,921	48,020
Senior Center - D'Iberville, Lyman, Woolmarket	376	16.43	2,480	143,814
Senior Center - Frances Fredericks	123	10.29	2,562	40,995
Senior Center - Saucier	89	12.37	2,611	26,112
Work Center (D'Iberville)	61	10.49	2,821	33,847
Work Center (Long Beach) - Garage, Office	58	19.33	2,828	28,277
Work Center (Lorraine Rd) - County Garage, Penal Institute & Sheriffs Dispatch, Wellness Clinic	205	23.12	2,361	44,863
Work Center (Lyman) - Garage, Office	107	15.14	2,760	63,476
Work Center (Sand Beach) - Maintenance, Office	129	13.00	2,446	36,696
Work Center (Woolmarket)	105	8.19	2,616	34,010
	10,675	1,319.67	2,843	3,751,603

5.1.2 EMCS

	Cooling		Heating	
Facility/Site Name	Installed tons	kW/Ton	Total kW	
Office - County Office Building	27	1.04	N/A	
Civic Center - D'Iberville, West Harrison, Woolmarket	155	1.28	250	
Courthouse – Biloxi	70	1.60	N/A	
Courthouse – Gulfport	420	1.15	278	
Family Services (Gulfport) - Admin Offices (Bldg A), Counseling Offices (Bldg B), Family Court Center (Bldg C)	60	1.00	50	
Health Department - Biloxi	29	1.14	46	
Health Department - Gulfport	125	0.92	110	
Human Services - Biloxi	25	0.92	N/A	
Human Services - Gulfport	195	1.00	280	
Hurricane Shelter - County Farm, Lobouy, Saucier	150	1.25	200	
Justice Court - Gulfport	90	1.00	146	
Library - Gulfport Downtown	31	1.08	100	
Library - Gulfport Orange Grove	145	0.92	240	



	Cooli	Heating	
Facility/Site Name	Installed tons	kW/Ton	Total kW
Office - Code/Eng & Fire	30	1.04	54
Senior Center - D'Iberville, Lyman, Woolmarket	91	1.09	330
Senior Center - Saucier	12	1.20	16
Work Center (Sand Beach) - Office	35	1.25	N/A
	1,690	1.11	2,100

Facility/Site Name	Current Operation	Cooling ton-hrs	Cooling EFLH	Cooling kWh/yr
Civic Center - D'Iberville, West Harrison, Woolmarket	Enabled 24/7	101,384	654	130,118
Courthouse - Biloxi	Enabled 24/7	241,347	3,448	386,155
Courthouse - Gulfport	Enabled 24/7	2,386,306	5,682	2,753,430
Family Services (Gulfport) - Admin Offices (Bldg A), Counseling Offices (Bldg B), Family Court Center (Bldg C)	Enabled 24/7	90,264	1,504	90,264
Health Department - Biloxi	Enabled 24/7	64,493	2,224	73,706
Health Department - Gulfport	Enabled 24/7	277,988	2,224	256,604
Human Services - Biloxi	Enabled 24/7	40,881	1635	37,736
Human Services - Gulfport	Enabled 24/7	459,170	2,355	459,170
Hurricane Shelter - County Farm, Lobouy, Saucier	Enabled 24/7	147,170	981	183,962
Justice Court - Gulfport	Enabled 24/7	494,207	5491	494,207
Library - Gulfport Downtown	Enabled 24/7	65,431	2,111	70,736
Library - Gulfport Orange Grove	Enabled 24/7	237,107	1,635	218,868
Office - Code/Eng & Fire	Enabled 24/7	49,057	1,635	51,190
Office - County Office Building	Enabled 24/7	32,565	1,206	33,980
Senior Center - D'Iberville, Lyman, Woolmarket	Enabled 24/7	163,686	1,799	178,566
Senior Center - Saucier	Enabled 24/7	17,660	1,472	21,192
Work Center (Sand Beach) - Office	Enabled 24/7	42,213	1,206	52,767
		4,910,929		5,492,651

Table 5.1.2b - Baseline EMCS Cooling - Electricity Consumption



Facility/Site Name	Current Operation	Heating EFLH	Heating kWh/yr
Civic Center - D'Iberville, West Harrison, Woolmarket	Enabled 24/7	134	33,538
Courthouse - Biloxi	Enabled 24/7	N/A	N/A
Courthouse - Gulfport	Enabled 24/7	1,911	531,166
Family Services (Gulfport) - Admin Offices (Bldg A), Counseling Offices (Bldg B), Family Court Center (Bldg C)	Enabled 24/7	164	8,198
Health Department - Biloxi	Enabled 24/7	194	8,914
Health Department - Gulfport	Enabled 24/7	224	24,595
Human Services - Biloxi	Enabled 24/7	N/A	N/A
Human Services - Gulfport	Enabled 24/7	671	187,813
Hurricane Shelter - County Farm, Lobouy, Saucier	Enabled 24/7	373	74,529
Justice Court - Gulfport	Enabled 24/7	1,119	163,389
Library - Gulfport Downtown	Enabled 24/7	224	22,359
Library - Gulfport Orange Grove	Enabled 24/7	333	79,888
Office - Code/Eng & Fire	Enabled 24/7	224	12,074
Office - County Office Building	Enabled 24/7	N/A	N/A
Senior Center - D'Iberville, Lyman, Woolmarket	Enabled 24/7	224	73,784
Senior Center - Saucier	Enabled 24/7	224	3,577
Work Center (Sand Beach) - Office	Enabled 24/7	N/A	N/A

- 1,223,824
- 5.2 The operating practices during the Baseline Period determine the utility consumption shown in Table 5.1. The data shown in Tables 5.1.1 through 5.1.2c indicates the operating characteristics that were in effect during the Baseline Period. The Guaranteed Savings provided under this Agreement are based on the efficiencies gained by implementing the Work and implementing the Contracted Baseline in Article 7 of this Exhibit C.

	Occupied Temperature Setpoint Range	Unoccupied Temperature Setpoint Range	Occupied Humidity Setpoint	Unoccupied Humidity Setpoint
All Facilities not Identified within this Table below	68-72°F, +-2°F	Same as Occupied	N/A	N/A
Justice Court- Gulfport	68-72°F, +-2°F	Same as Occupied	50%rh, +-2%	50%rh, +-2%
Library-Orange Grove	68-72°F, +-2°F	Same as Occupied	60%rh, +-2%	60%rh, +-2%
Library-Gulfport Downtown	68-72°F, +-2°F	Same as Occupied	60%rh, +-2%	60%rh, +-2%



Table 5.2.2 – Bas	eline Site Operating Conditions	
Facility/Site Name	General Occupancy or Occupied Hours	Area (ft ²)
Adult Detention Facility - Main Jail	24/7	207,900
Adult Detention Facility - Sheriff Support Services Complex	24/7	7,690
Civic Center - D'Iberville	Variable, ~70 hrs/wk	9,600
Civic Center - West Harrison	Variable, ~70 hrs/wk	15,800
Civic Center - Woolmarket	Variable, ~70 hrs/wk	10,800
Community Center - Good Deeds	Variable, ~70 hrs/wk	15,420
Community Center - Isaiah Fredericks	Variable, ~70 hrs/wk	13,152
Community Center - Success	Variable, ~70 hrs/wk	2,200
Courthouse - Biloxi	8-5 M-F	36,200
Courthouse - Gulfport	7-5 M-F, 24/7 Civil Defense	120,300
Fairgrounds - Arena	6-10 PM Daily plus 24/7 during Events	55,620
Fairgrounds - Office & Meeting Rms	7-4 M-F, plus Events	4,098
Family Services (Gulfport) - Admin Offices (Bldg A)	8-5 M-F	6,600
Family Services (Gulfport) - Children's Shelter	24/7	3,800
Family Services (Gulfport) - Counseling Offices (Bldg B)	8-5 M-F	1,920
Family Services (Gulfport) - Family Court Center (Bldg C)	8-5 M-F	5,837
Family Services (Gulfport) - Modulars	8-5 M-F	5,400
Fire Station - Lizana #1	Available 24/7	4,500
Fire Station - West Wortham #2	Available 24/7	4,550
Fire Station - County Farm Rd #3	Available 24/7	3,600
Fire Station - County Farm #4	Available 24/7	4,500
Fire Station - Canal Road #5	Available 24/7	4,550
Fire Station - Delisle #6	Available 24/7	4,550
Fire Station - West Harrison #7	Available 24/7	3,600
Fire Station - Saucier #8	Available 24/7	6,200
Fire Station - Success #9	Available 24/7	4,500
Fire Station - Bethel Road #10	Available 24/7	4,550
Fire Station - North Woolmarket #11	Available 24/7	3,600
Fire Station - East Harrison #12	Available 24/7	4,500
Fire Station - Cuevas #13	Available 24/7	4,500
Fire Station - Henderson Point #14	Available 24/7	3,780
Health Department - Biloxi	8-5 M-F	9,800
Health Department - Gulfport	8-5 M-F, TB 24/7	27,500
Human Services - Biloxi	8-5 M-F	10,000
Human Services - Gulfport	8-5 M-F	43,000
Hurricane Shelter - County Farm	Occupied 14 hrs/wk	15,193



Facility/Site Name	General Occupancy or Occupied Hours	Area (ft ²
Hurricane Shelter - Lobouy	Occupied 14 hrs/wk	15,193
Hurricane Shelter - Saucier	Occupied 14 hrs/wk	15,193
Justice Court - Biloxi	8-5 M-F	7,000
Justice Court - Gulfport	8-5 M-F	15,441
Library - Gulfport Downtown	9-6 M-TH, 9-3 F, 10-2 Sat	10,428
Library - Gulfport Orange Grove	9-6 M-TH, 9-3 F, 10-2 Sat	35,957
Maintenance (Lorraine Rd) - Dist. #4 Road and Mosquito	6-4:30 M-F	15,260
Maintenance (Lorraine Rd) - Recycling Center	6-4:30 M-F	1,890
Maintenance (Lorraine Rd) - Storage Shed	6-4:30 M-F	5,363
Maintenance (Lorraine Rd) - VO-TECH	6-4:30 M-F	10,890
Multi-purpose Bldg - D'Iberville	Variable, ~70 hrs/wk	6,000
Office - Code/Eng & Fire	8-5 M-F	10,000
Office - County Office Building	8-5 M-F	7,400
Office - Election Commission	8-5 M-F, MDOC As Needed	15,961
Senior Center - D'Iberville	7-6 M-F and 10hrs/wk Variable	11,300
Senior Center - Frances Fredericks	7-6 M-F and 10hrs/wk Variable	9,645
Senior Center - Lyman	7-6 M-F and 10hrs/wk Variable	8,100
Senior Center - Saucier	9-6 M-TH, 9-3 F, 10-2 Sat	5,700
Senior Center - Woolmarket	7-6 M-F and 10hrs/wk Variable	10,335
Work Center (D'Iberville)	6 - 4:30 M-F	10,040
Work Center (Long Beach) - Garage	7-4 M-F, As-needed	3,200
Work Center (Long Beach) - Office	7-4 M-TH	2,100
Work Center (Lorraine Rd) - County Garage	7-4 M-F	10,000
Work Center (Lorraine Rd) - Penal Institute & Sheriffs Dispatch	24/7	19,800
Work Center (Lorraine Rd) - Wellness Clinic	8-5 M-F	1,581
Work Center (Lyman) - Garage	7-4 M-F, As-needed	12,300
Work Center (Lyman) - Office	7-4 M-F	3,500
Work Center (Sand Beach) - Maintenance	7-4 M-F, As-needed	3,600
Work Center (Sand Beach) - Office	8-5 M-F	9,400
Work Center (Woolmarket)	7-4 M-F, As-needed	15,200

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5.3 Applicable codes - Federal, State (Provincial), County or Municipal codes or regulations are applicable to the use and operation of the Site. MCNEIL RHOADS will maintain the current level of Site compliance relative to applicable codes unless specifically outlined to the contrary below. Unless specifically set forth in the Scope of Work and Services, Exhibit A, nothing herein should be construed as to require MCNEIL RHOADS to provide additional work or services in the event that the current applicable code or regulation is modified.



Article 6: Utility Rate Structures and Escalation Rates

6.1 Utility costs used for Savings calculations will be based on the utility rates provided in the table below. An Escalation Rate of 3% per Annual Period will be applied to the below stipulated utility rates when calculating Annual Realized Savings.

		e o.i - othay itale.	· · · · · · · · · · · · · · · · · · ·		
Facility/Site Name	Utility Co.**	Account # (s)	Meter # (s)	Lighting Upgrades Electric Rate (\$/kWh)	EMCS Electric Rate (\$/kWh)
Adult Detention Facility - Main Jail, Sheriff Support Services Complex	MSP	6399144002 5643677020 4047293009 3855208019 6504144018 0315723061 608535011	3279912 720213 718499 622532 709983 621436 3252869	\$0.1027	N/A
Civic Center - D'Iberville	MSP	6597163003	717980	\$0.1340	\$0.0965
Civic Center - West Harrison	CEPA	112710-099	5300000847	\$0.1340	\$0.0965
Civic Center - Woolmarket (Meter=Sr Ctr)	CEPA	112710-034	5300004830	\$0.1340	\$0.0965
Community Center - Good Deeds	MSP	3732841014	626318	\$0.1149	N/A
Community Center - Isaiah Fredericks	MSP	2091145007	725975	\$0.1246	N/A
Community Center - Success	CEPA	77777800-031	5300001530	\$0.1000	N/A
Courthouse - Biloxi	MSP	5052162021	714458	\$0.0873	\$0.0638
Courthouse - Gulfport	MSP	2263143006	700590	\$0.0720	\$0.0720
Fairgrounds - Arena	CEPA	77777800-009	5300000990	\$0.1146	N/A
Fairgrounds - Office & Meeting Rms	CEPA	63072-012	5300004756	\$0.1146	N/A
Family Services (Gulfport) - Admin Offices (Bldg A), Counseling Offices (Bldg B), Family Court Center (Bldg C)	MSP	146143008	^т 626923	\$0.1101	\$0.0695
Family Services (Gulfport) - Children's Shelter	MSP	125143008	707916 [;]	\$0.1101	\$0.0695
Family Services (Gulfport) - Modulars	MSP	0104143008 0955895100	714554 714890	\$0.1101	\$0.0695
Fire Station - Lizana #1	CEPA	63072-058	5300001666	\$0.1000	N/A

Table 6.1	Effility	Rates	ner	Site	ner	HM
1 4010 0.1	UTHILLY	1/0103	hei	JICE	her.	



Fire Station - West Wortham #2	CEPA	77777800-011	5300003006	\$0.1000	N/A
Fire Station - County Farm Rd #3	CEPA	77777800-023	5300003060	\$0.1000	N/A
Fire Station - County Farm #4	CEPA	77777800-065	5300004929	\$0.1000	N/A
Fire Station - Canal Road #5	CEPA	77777800-076	5300002498	\$0.1000	N/A
Fire Station - Deliste #6	MSP	8144148003	714710	\$0.1117	N/A
Fire Station - West Harrison #7	CEPA	63072-040	5000 0 67905	\$0.1000	N/A
Fire Station - Saucier #8	MSP	2933025008	719191	\$0,1117	N/A
Fire Station - Success #9	CEPA	77777800-050	5300002404	\$0.1000	N/A
Fire Station - Bethel Road #10	SREPA	29892002	98453981	\$0.0950	N/A
Fire Station - North Woolmarket #11	CEPA	77777800-025	5300002457	\$0.1000	N/A
Fire Station - East Harrison #12	CEPA	77777800-051	53000065809	\$0,1000	N/A
Fire Station - Cuevas #13	MSP	5120377009	361400	\$0.1117	N/A
Fire Station - Henderson Point #14	MSP	333112020	528113	\$0.1117	N/A
Health Department - Biloxi	MSP	180163008	727307	N/A	\$0:0823
Health Department - Gulfpört	MSP	3930648019	627950	\$0.0965	\$0.0833
Human Services - Biloxi	MSP	2631292023	718192	\$0.1143	\$0.0819
Human Services - Gulfport	MSP	6378144002	713851	\$0.0964	\$0.0856
Hurricane Shelter - County Farm	СЕРА	63072-056	5300000139	N/A	\$0.1025
Hurricane Shelter - Lebouy	CEPA	63072-057	5300000816	N/A	\$0.1025
Hurricane Shelter - Saucier	MSP	13015032	718478	N/A	\$0.1025
Justice Court - Biloxi	MSP	3792447014	624323	\$0.1182	N/A
Justice Court - Gulfport	MSP	2915822045	718134	\$0.0832	\$0.0720
Library - Gulfport Downtown	MSP	04848-75014	718150	N/A	\$0.0979
Library - Gulfport Orange Grove	MSP	22987-51025	710361	N/A	\$0.0688
Maintenance (Lorraine Rd) - Dist. #4 Road and Mosquito, Recycling Center, Storage Shed, VO-TECH	MSP	5440149007 5503149009 6994149009	627752 3252831 724536	\$0.0906	N/A



Multi-purpose Bldg - D'Iberville	MSP	3930373035	3101564	\$0.1576	N/A
Office - Code/Eng & Fire	MSP	896143007	722598 361325 233198	\$0.1131	\$0.0866
Office - County Office Building	MSP	919143007	718062	\$0.1201	\$0.0895
Office - Election Commission	MSP	0339113021 7849144008	721209 707898	\$0.1046	N/A
Senior Center - D'Iberville	SREPA	47498001	96108824	\$0.1194	\$0.1072
Senior Center - Lyman	CEPA	112710-034	5300004736	\$0.1194	\$0.1072
Senior Center - Saucier	MSP	4128409007	721184	\$0.1217	\$0.1154
Senior Center - Woolmarket (Meter=Civic)	CEPA	112710-034	5300004830	\$0.1194	\$0.1072
Work Center (D'Iberville)	MSP	8089161006	721084	\$0.1204	N/A
Work Center (Long Beach) - Garage, Office	MSP	9161146004 9581146008	719744 533518	\$0.1240	N/A
Work Center (Lorraine Rd) - County Garage, Penal Institute & Sheriffs Dispatch, Wellness Clinic	MSP	923876019 5839149008 6406328001 6973149018 8477052009	719003 247029 720206 623237 4763327	\$0.1004	N/A
Work Center (Lyman) - Garage, Office	СЕРА	63072-056	5300000139	\$0.1305	N/A
Work Center (Sand Beach) - Office	MSP	3488146008	715130	\$0.1278	\$0.1000
Work Center (Sand Beach) - Maintenance	MSP	3299146001 3446146017 5723797005 6543793000	218558 3264207 537124 719358	\$0.1278	N/A
Work Center (Woolmarket)	СЕРА	77777800-048	5300004587	\$0,1000	N/A
			AVG*	\$0.1003	\$0.0765

* Weighted average utility rates

**MSP -- Mississippi Power Company

CEPA – Coast Electric Power Association SREPA – Singing River Electric Power Association



Article 7: Contracted Baseline Data

7.1 The following tables detail the Site operating parameters that are required to be implemented on the Guarantee Date or on such time as agreed upon by the Parties. This specific configuration of Site operating parameters is the Contracted Baseline and failure of the CLIENT to maintain the Contracted Baseline may result in a Material Change, which may require a modification of the Performance Guarantee pursuant to Article 4 of the Agreement.

Facility/Site Name	Occupied Temperature Setpoint Range	Unoccupied Temperature Setpoint	Occupied Humidity Setpoint	Unoccupied Humidity Setpoint
All Facilities not Identified within this Table below	70°F, +/-2°F	Same as Occupied	N/A	N/A
Civic Center - D'Iberville, West Harrison, Woolmarket	N/A	Cooling – 80°F High Only, Heat – N/A	N/A	80% rh High Only
Courthouse - Gulfport	70°F, +/-2°F	Cooling – 80°F High Only, Heat – 50°F	N/A	75% rh High Only
Family Services (Gulfport) - Admin Offices (bldg A), Counseling Offices (bldg B), Family Court Center (bldg C)	N/A	Cooling – 80°F High Only, Heat – N/A	N/A	80% rh High Only
Health Department - Biloxi	N/A	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only
Health Department - Gulfport	70°F, +/-2°F	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only
Human Services - Biloxi	N/A	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only
Human Services - Gulfport	70°F, +/-2°F	Cooling – 85°F High Only, Heat – N/A	60%rh, +/-2%	80% rh High Only
Hurricane Shelter - County Farm, Lobouy, Saucier	N/A	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only
Justice Court - Gulfport	70°F, +/-2°F	Cooling – 85°F High Only, Heat – N/A	60%rh, +/-2%	80%rh, +/-2%
Library - Gulfport Downtown	70°F, +/-2°F	Cooling – 80°F High Only, Heat – N/A	60%rh, +/-2%	75%rh, +/-2%
Library - Gulfport Orange Grove	70°F, +/-2°F	Cooling – 80°F High Only, Heat – 60°F	60%rh, +/-2%	75%rh, +/-2%
Office - Code/Eng & Fire	N/A	Cooling – 80°F High Only, Heat – 55°F	N/A	75% rh High Only
Office - County Office Building	N/A	Cooling – 85°F High Only, Heat – N/A		80% rh High Only
Senior Center - D'Iberville, Lyman,	N/A	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only

Table 7.1.1 – Contracted Baseline Data for EMCS

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Acguerancies

Facility/Site Name	Occupied Temperature Setpoint Range	Unoccupied Temperature Setpoint	Occupied Humidity Setpoint	Unoccupied Humidity Setpoint
Woolmarket				
Senior Center - Saucier	N/A	Cooling – 80°F High Only, Heat – N/A	N/A ·	70% rh High Only
Work Center (Sand Beach) - Office	N/A	Cooling – 85°F High Only, Heat – N/A	N/A	80% rh High Only

Table 7.1.2 -- Contracted Baseline Annual Lighting Operating HoursThere is no change to Baseline Operating Hours (See Table 5.1 and 5.1.1a).

Facility/Site Name	Contracted Operation	Cooling ton-hrs	Cooling EFLH	Cooling kWh/yr
Civic Center - D'Iberville, West Harrison, Woolmarket	Variable, ~70 hrs/wk per Facility, 2-hr Startup, 10-10 7 Days/wk per Facility	24,285	509	101,277
Courthouse - Biloxi	8-5 M-F, 2-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	120,800	1,726	193,280
Courthouse - Gulfport	7-5 M-F, 24/7 Civil Defense, 2- hr Startup, 1-hr Post, <hol, plus<br="">100 hrs/yr for after-hour or weekend override</hol,>	1,847,017	3,017	. 2,131,174
Family Services (Gulfport) - Admin Offices (bldg A), Counseling Offices (bldg B), Family Court Center (bldg C)	8-5 M-F, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	70,024	1,167	70,024
Health Department - Biloxi	8-5 M-F, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	45,675	1,575	52,200

Table 7.1.3a - Contracted Baseline EMCS Cooling - Electricity Consumption



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Facility/Site Name	Contracted Operation	Cooling ton-hrs	Cooling EFLH	Cooling kWh/yr
Health Department - Gulfport	8-5 M-F, TB 24/7, 1-hr Startup, <hol, <tb,="" plus<br="">2-hr Post</hol,>	198,090	1,585	182,852
Human Services - Biloxi	8-5 M-F, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	29,784	1,191	27,493
Human Services - Gulfport	8-5 M-F, 2-hr Startup, 3-hr Post, <hol< td=""><td>241,050</td><td>1,236</td><td>241,050</td></hol<>	241,050	1,236	241,050
Hurricane Shelter - County Farm, Lobouy, Saucier	Occupied 14 hrs/wk per Facility, 2-hr Startup	115,167	768	143,959
Justice Court - Gulfport	8-5 M-F, 2-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	228,381	2,538	228,381
Library - Gulfport Downtown	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol< td=""><td>48,304</td><td>1,558</td><td>52,220</td></hol<>	48,304	1,558	52,220
Library - Gulfport Orange Grove	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol, +<br="">Unocc RH Change</hol,>	180,242	1,243	166,377
Office - Code/Eng & Fire	8-5 M-F less 25% 24/7, 1-hr Startup, <hol, <25% 24/7</hol, 	38,169	1,272	39,828
Office - County Office Building	8-5 M-F, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	19,499	722	20,347
Senior Center - D'Iberville, Lyman, Woolmarket	7-6 M-F and 10hrs/wk Variable per Facility, 1-hr Startup, <hol per Facility</hol 	125,985	1,384	137,439



Facility/Site Name	Contracted Operation	Cooling ton-hrs	Cooling EFLH	Cooling kWh/yr
Senior Center - Saucier	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	12,431	1,036	14,918
Work Center (Sand Beach) - Office	8-5 M-F, 1-hr Startup, <hol, plus 100 hrs/yr for after-hour or weekend override</hol, 	31,487	900	39,359
	-•	3,376,390	•	3.842.178

Table 7.1.3b - Contracted EMCS	Heating - Electricity Consumption
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Facility/Site Name	Contracted Operation	Heating EFLH	Heating kWh/yr
Office - County Office Building	N/A	N/A	N/A
Civic Center - D'Iberville, West Harrison, Woolmarket	Variable, ~70 hrs/wk per Facility, 2-hr Startup, 10-10 7 Days/wk per Facility	97	24,285
Courthouse - Biloxi	N/A	N/A	N/A
Courthouse - Gulfport	7-5 M-F, 24/7 Civil Defense, 2-hr Startup, 1-hr Post, <hol, 100<br="" plus="">hrs/yr for after-hour or weekend override</hol,>	2,645	175,632
Family Services (Gulfport) - Admin Offices (bldg A), Counseling Offices (bldg B), Family Court Center (bldg C)	8-5 M-F, 1-hr Startup, <hol, plus<br="">100 hrs/yr for after- hour or weekend override</hol,>	112	5,572
Health Department - Biloxi	8-5 M-F, 1-hr Startup, <hol, plus<br="">100 hrs/yr for after- hour or weekend override</hol,>	148	6,782
Health Department - Gulfport	8-5 M-F, TB 24/7, 1- hr Startup, <hol, <tb, 2-hr="" plus="" post<="" td=""><td>144</td><td>15,841</td></tb,></hol, 	144	15,841
Human Services - Biloxi	N/A	N/A	N/A
Human Services - Gulfport	8-5 M-F, 2-hr Startup, 3-hr Post, <hol< td=""><td>226</td><td>63,039</td></hol<>	226	63,039



Facility/Site Name	Contracted Operation	Heating EFLH	Heating kWh/yr
Hurricane Shelter - County Farm, Lobouy, Saucier	Occupied 14 hrs/wk per Facility, 2- hr Startup	318	63,479
Justice Court - Gulfport	8-5 M-F, 2-hr Startup, <hol, plus<br="">100 hrs/yr for after-hour or weekend override</hol,>	328	47,725
Library - Gulfport Downtown	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol< td=""><td>143</td><td>14,329</td></hol<>	143	14,329
Office - Code/Eng & Fire	8-5 M-F less 25% 24/7, 1-hr Startup, <hol, 24="" 7<="" <25%="" td=""><td>152</td><td>8,206</td></hol,>	152	8,206
Orange Grove Library	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol, +="" rh<br="" unocc="">Change</hol,>	225	54,065
Senior Center - D'Iberville, Lyman, Woolmarket	7-6 M-F and 10hrs/wk Variable per Facility, 1-hr Startup, <hol per<br="">Facility</hol>	161	53,090
Senior Center - Saucier	9-6 M-TH, 9-3 F, 10-2 Sat, 1-hr Startup, <hol, 100="" for<br="" hrs="" plus="" yr="">after-hour or weekend override</hol,>	156	2,495
Work Center (Sand Beach) - Office	N/A	N/A	N/A
			534,540

This Exhibit C, comprised of 25 pages, is attached to and made a part of the Agreement between MCNEIL RHOADS and the CLIENT. BY SIGNING BELOW, THE PARTIES CONFIRM THAT THEY HAVE REVIEWED THE INCLUDED M&V OPTIONS AND THEIR APPLICATION TO BE USED IN CALCULATING SAVINGS UNDER THE AGREEMENT.

Agreed for	Harrison County Board of Supervisors, MS
(Signaturé) by:	Buener Martin
Print Name and Title:	Beverly Martin President
(Signature) by:	
Print Name and Title:	John McAdams, Clerk of the Board
· · · · · · · · · · · · · · · · · · ·	
Agreed for	McNeil Rhoads, LLC
Agreed for (Signature) by:	McNeil Rhoads, LLC
(Signature) by:	McNeil Rhoads, LLC
(Signature) by:	and
(Signature) by: Print Name and Title:	Chris McNeil, President Durg Rhad CEO