PERFORMANCE CONTRACT

This Performance Contract (this "Agreement") is made this 16th day of March 2017 between:

PARTIES

JOHNSON CONTROLS, INC. ("JCI")
6 AERIAL WAY
SYOSSET, NY 11791

and

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT ("Customer" or the "District")
385 DEPOT LANE
CUTCHOGUE, NEW YORK 11935

RECITALS

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

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

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

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

AGREEMENT

1. **SCOPE OF THE AGREEMENT.** JCI shall perform the Work set forth in Schedule 1. After the Work is Substantially Complete (as defined below) and the Certificate of Substantial Completion is executed by Customer, the Architect of Record (as defined below in Section 3) and JCI, JCI shall provide the assured performance guarantee (the "Assured Performance Guarantee") and the measurement and verification services (the "M&V Services") set forth in Schedule 2 (Assured Performance Guarantee). Customer shall make payments to JCI for the Work and the M&V Services in accordance with Schedule 4 (Price and Payment Terms). JCI represents and warrants that it has reviewed and is fully familiar with the Phase I energy performance project undertaken at the Customer's facilities, which was completed in or about the 2008-2009 school year. JCI further represents and warrants that the scope of work included in this Phase II energy performance contract does not overlap or conflict with the Phase I project in any way.

   JCI will install the Equipment identified on Schedule 1 of this Agreement (Work) and provide services detailed on Schedule 1 and Schedule 2 of this Agreement (Services). JCI shall supervise and direct the Work and Services and shall be solely responsible for all construction means, methods, techniques, sequences, and procedures and for coordinating all

portions of the Work and M&V Services under this Agreement. JCI shall be responsible to pay for all labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work and Services.

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

Schedule 1 – Scope of Work
Schedule 2 – Assured Performance Guarantee
Schedule 3 – Customer Responsibilities
Schedule 4 – Price and Payment Terms
Attachment 1 – Notice to Proceed
Attachment 2 – Change Order
Attachment 3 – Certificate of Substantial Completion; Certificate of Final Completion
Attachment 4 – Lighting Survey line-by-line – "Mattituck Schools lighting lxl Rev-B.xls"
Attachment 5 – Customer's Request for Proposals ("RFP")
Attachment 6 – Contract between Customer and John A Grillo Architects
Attachment 7 – JCI proposal in response to Customer's RFP
Attachment 8 – Detailed Energy Audit
Attachment 9 – Customer's AHERA Report and asbestos ceiling tile surveys
Attachment 10 – Pro Forma Cash Flow
Appendix 1- Scope of Architectural Services
Appendix 2- Scope of Construction Services

3. **ARCHITECT OF RECORD.** The Customer has identified John A Grillo Architect, P.C. (JAG) as the certified Architect of Record (the "Architect") to provide architectural/engineering services in connection with the Work to be performed by JCI ("Architectural/Engineering Services"). The fees and total compensation for such Architectural/Engineering Services shall be $83,453 and shall be paid by JCI to the Architect in accordance with the terms of the contract between the Customer and John A. Grillo Architect, P.C. as attached hereto as Attachment 6 and as set forth in Schedule 4 hereof. The Architect's fees are included in the Total Project Benefits and shall be covered by the Guaranteed Savings in all respects. Both JCI and Customer agree and acknowledge that the Architect owes its/his/her professional obligations and duties, including duties of care to the Customer. The Architect shall remain free from any financial interest in the Agreement which conflicts with the proper completion of its/his/her responsibilities under this Agreement and which conflicts with its/his/her responsibilities and duties to the Customer. JCI will coordinate all Work and activities under this Agreement with the Architect.

JCI will utilize the services of the Architect of record and issue payment as set forth herein and in Attachment 6.

4. **NOTICE TO PROCEED; SUBSTANTIAL COMPLETION; M&V SERVICES.** Pursuant to 8 NYCRR §155.20, this Agreement is subject to the approval of the Commissioner of Education of the State of New York. After receipt of written approval from the New York State Education Department ("SED"), and after Customer has secured financing subject to Section 32 of this Agreement, the Customer shall issue a Notice to Proceed, a form of which is attached hereto as Attachment 1 and which is in a form acceptable to SED. JCI shall commence performance of the Work within ten (10) business days of receipt of Customer's Notice to Proceed, and shall achieve Substantial Completion of the Work by the Substantial Completion date, which shall be the date on which Customer and Architect execute a Certificate of Substantial Completion in the form attached hereto as Attachment 3.

Substantial Completion shall be achieved when the following items are completed by JCI and approved by Customer and the Architect:

a. A written acknowledgement by the Customer that the Improvement Measures have been installed by JCI and completed to the satisfaction of the Customer and the Architect;

b. A written acknowledgment by the Customer of receipt of manuals and training provided by JCI under the Agreement;

c. A written acknowledgement by the Customer of the warranty start date and warranty period;

d. The receipt of a punch list of items remaining to be completed by JCI;

e. A written acknowledgement by the Customer of receipt of warranties, release of liens, and proof of payment to subcontractors; and,

f. JCI is responsible for obtaining fire marshal approval, if such is required for this Project. JCI shall be responsible for any costs related to its failure to secure such approval.

The M&V Services shall commence on the first day of the month following the month in which Customer executes a Certificate of Substantial Completion and shall continue throughout the Guarantee Term, subject to earlier termination of the Assured Performance Guarantee as provided herein. Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of Customer's responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate.

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

6. **ACCESS.** Customer shall provide JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties in Customer's control that are subject to the Work and M&V Services. Customer further agrees to assist JCI, its subcontractors, and its agents to gain access to facilities and properties that are not controlled by Customer but are necessary for JCI to complete the Work and provide the M&V Services. An equitable adjustment in the time for performance may be made as a result of any failure to grant such access, subject to the mutual written agreement of the parties. JCI shall be required to perform its Work between the hours of 2:30 p.m. to 10:30 p.m., Monday through Friday on school days when the buildings are open. During the summer, JCI shall be required to perform its work between the hours of 7:00am and 3:30pm Monday through Friday with no interruption to the District's operations, including its educational, administrative, business, special events and summer operations. Any work which will interfere with the District's operations and/or which is to be performed when the District's facilities are in operation shall be performed on evenings and weekends. Additionally, JCI shall conduct its Work during hours that are in compliance with federal, state, county or local, laws, rules, regulations, codes and ordinances. Provided that Customer allows JCI continuous access to the applicable facilities during normally scheduled custodial shifts, all costs incurred by the District, including overtime costs for District personnel, to make the facilities available during evening and weekends (Saturday and Sunday) shall be borne by JCI. The District reserves the right to determine what work will interfere with its operations and said determination shall be final. In addition, all overtime work that may be necessary must be pre-approved in writing by the Customer's Superintendent and the Assistant Superintendent. JCI shall be solely responsible for all costs associated with its failure to obtain such prior written approval. The Customer reserves the right to reject the use of any proposed subcontractors.

No drinking of alcoholic beverages, smoking or use of controlled substances is permitted on the grounds. JCI shall ensure that none of its employees, agents, consultants, or its Subcontractors' employees, agents, and/or consultant's report to the site impaired by alcohol or controlled substances. JCI bears the responsibility of determining if its employees, or its subcontractors', employees are in any way impaired and whether the safety of the public, the employees of JCI and its subcontractors, the Owner, Architect, or Construction Manager are jeopardized. Each contractor shall provide drinking water for its own employees. JCI's employees, representatives, agents and consultants, and all of its subcontractors' employees, representatives, agents and consultants at the site are to refrain from using indecent language. All doing so will be removed from the site. Artwork or decoration found on vehicles belonging to Contractor or Subcontractor employees parked on or near the school property which contain indecent language or pictures shall either be covered or removed from the location.

7. **PERMITS, TAXES, AND FEES.** JCI shall be responsible for obtaining all building permits and related permit fees associated with the Work and Services. Customer represents that it is a governmental entity and that it will cooperate with JCI and provide JCI with appropriate documentation that Customer is not obligated to pay any taxes associated with this Agreement. JCI shall pay any applicable sales, consumer, use, and other similar taxes and shall secure and pay for the building permit and other permits and governmental fees, licenses, and inspections necessary for proper execution. The

Customer shall be responsible for securing any necessary approvals, easements or assessments required for the Work or the ownership and use of the Improvement Measures.

JCI shall not be obligated to provide any changes to or improvement of the facilities or any portion thereof required under any applicable building, fire, safety, sprinkler or other applicable code, standard, law, regulation, ordinance or other requirement unless the same regulates the installation of the Improvement Measures. Without limiting the foregoing, JCI's obligations with respect to the Work is not intended to encompass any changes or improvements that relate to any compliance matters (whether known or unknown) that are not directly related to the installation of the Improvement Measures or which have been imposed or enforced because of the occasion or opportunity of review by any governmental authority. JCI shall be responsible for and shall pay when due all assessments, charges and sales, use, property, excise, or other taxes now or hereafter imposed by any governmental body or agency upon the provision of the Work or the M&V Services, implementation or presence of the Improvement Measures, the use of the Improvement Measures or payments due to JCI under this Agreement.

8. **WARRANTY.** JCI warrants that materials and equipment furnished by JCI will be of good quality and new and of recent manufacture, unless otherwise required or permitted by the Agreement documents; that the Work will be free from defects not inherent in the quality required or permitted; and that the Work and M&V Services will conform to the requirements of the Agreement Documents. Work not conforming to these requirements including substitutions not properly approved and authorized may be considered defective.

If within two (2) years following Substantial Completion (except where longer periods of time are specified in Schedule 1 and/or the Detailed Energy Audit or provided for in any manufacturer's warranties or special warranties issued or obtained following the commencement of the Work, in which case such longer periods shall apply) any of the work is found to be not in accordance with the requirements of the Agreement, JCI shall correct it promptly after receipt of written notice from the District and/or the Architect to do so, unless the District has previously given JCI a written acceptance of such condition. This period of two (2) years shall be extended with respect to portions of JCI's work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of such work. The obligation set forth hereunder shall survive acceptance by the District of the work, and/or termination of JCI's agreement with the District. The District shall give such notice within a reasonable period of time after discovery of the condition.

Upon written notice from the Customer, JCI shall, at its option, repair or replace the defective Work or re-perform defective Services to the satisfaction of the Customer, as long as Customer provides written notice to JCI within two (2) years following Substantial Completion except where longer periods of time are specified in Schedule 1. These warranties do not extend to any Work that has been abused, altered, misused, or repaired by the Customer or third parties without the supervision and/or prior written approval of JCI, except in the case of an emergency; or if JCI serial numbers or warranty date decals have been removed or altered. If any Work is altered or repaired in an emergency, Customer will notify JCI immediately of such alterations or repairs. The Customer must promptly report any failure of the Equipment to JCI in writing. All replaced Equipment or parts remain Customer's property.

Customer understands that JCI is a provider of services under this Agreement. JCI shall not be considered a merchant or a vendor of goods. If JCI installs or furnishes a piece of equipment under this Agreement, and that equipment is covered by a warranty from the manufacturer, JCI will transfer the benefits of that manufacturer's warranty to Customer if this Agreement with Customer terminates before the equipment manufacturer's warranty expires.

JCI further warrants that the design, engineering, and installation services it performs will be performed consistent with good engineering practices and that all Work performed by JCI is warranted to be free from defects in materials and workmanship for a period of two (2) years from the date of execution of the Certificate of Substantial Completion by Customer. Any manufacturers' warranties which exceed this two (2) year period shall be assigned to Customer to the extent allowed by the manufacturer. The warranty provided in this Agreement shall be in addition to and not in limitation of any other warranty required by the contract documentation or otherwise prescribed by law. JCI shall procure and deliver to the District, no later than the date claimed by JCI as the date of final completion, all normal and special warranties required by the contract documents.

Prior to the commencement of the Work and issuance of the final cash flow statement as set forth herein, JCI shall be fully responsible for reviewing any and all existing warranties of equipment, fixtures and appurtenances located at the Customer's facilities, including but not limited to roofs, windows and boilers that may be directly and/or indirectly impacted by the work performed under the Agreement and any amendment to the Agreement to verify that the Work will

not void any such existing warranties. In the event that its review uncovers a potential issue, JCI will notify the Customer in writing and the parties will agree upon a resolution. JCI shall coordinate with the existing manufacturers, if any, and have a pre-inspection of the equipment and/or materials performed prior to installation of the FIM. Further, JCI shall comply with all manufacturer warranty continuation procedures and will be responsible for all fees, inspections and additional materials to maintain the roof warranty. All inspections must be coordinated with the Customer and its Architect. Pre-inspection shall occur during the SED review phase. In the event that said work has any negative impact on the validity of any warranty, as determined by the applicable manufacturer(s), the Customer in its sole discretion shall have the right to terminate the Agreement or to reduce the scope of Work as necessary to achieve a positive cash flow for Customer during the term of the Agreement. In the event that the work proceeds as authorized by the manufacturer and said work is not installed in accordance with any manufacturer's requirements as set forth in the manufacturers' pre-inspection, JCI shall be full responsible for performing the necessary work to achieve the requirements of the manufacturer(s) for purposes of maintaining the existing warranties. JCI shall coordinate all pre and post installation inspections with the Customer's Architect of Record. In addition, all pre-inspection and post-inspection costs shall be borne solely by JCI. Notwithstanding the foregoing, if JCI (a) proceeds with any work that will impair or nullify any existing warranty and (b) the Customer has not been notified in writing of the potential issue and agreed to the performance of such work, JCI shall be fully liable for the warranty. Upon completion of the work/services of the Agreement and any amendment thereto, JCI shall be fully responsible for reviewing and informing Customer of all warranties for equipment installed and/or replaced during the installation.

9. **CLEANUP.** JCI shall keep the premises and the surrounding area free from accumulation of waste materials or rubbish caused by the Work on a daily basis and, upon completion of the Work, JCI shall remove all waste materials, rubbish, tools, construction equipment, machinery, and surplus materials and shall clean up the Work, including any dust from the materials, and surrounding areas to the reasonable satisfaction of the Customer. In the event that JCI fails to clean up the Work and the surrounding areas, upon twenty-four (24) hours written notice to JCI, the Customer will have the same cleaned. All reasonable costs associated with such clean up shall be back charged to JCI.

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

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

Asbestos-Containing Materials: JCI shall be responsible for the abatement, cleanup, control, removal or disposal of asbestos-containing materials ("ACM") as identified in the Agreement, attachments and appendices. JCI hereby represents and warrants that it has reviewed the Customer's AHERA Report and the Customer's asbestos ceiling tile surveys and any and all other testing results or documentation related to such materials that have been provided to JCI by Customer and shall ensure that its subcontractors review said Report, surveys and other documentation. ACM removal, abatement or clean-up identified therein or in the attached schedules or Attachments and Appendices hereof is being undertaken as part of the Agreement. JCI shall cause to be performed such removal/abatement and clean-up in accordance with all applicable Federal, State and local laws, codes, rules, regulations and ordinances. JCI shall be fully responsible for the failure of JCI and/or its subcontractors to perform the Work in accordance with said requirements. JCI shall defend and hold harmless Customer, its officers, trustees, and employees from any and all actions, claims, costs, causes of action, damages, fines, fees, penalties, suits of any kind arising directly or indirectly from the performance of ACM related work and shall further cause its subcontractors to defend and hold harmless Customer, its officers, trustees, and employees from any and all actions, claims, costs, causes of action, damages, fines, fees, penalties, suits of any kind arising directly or indirectly from the performance of ACM related work. Customer shall provide in writing, and JCI and its subcontractors must review and become familiar with, the Customer's Asbestos Management Plan. Consistent with applicable Laws, Customer shall supply JCI with any information in its possession relating to the presence of ACM in areas where JCI undertakes any Work or M&V Services that may result in the disturbance of ACM. If either Customer or JCI becomes aware of or suspects the presence of ACM that has not previously been identified in Customer's AHERA Report, the Customer's asbestos ceiling tile surveys, and other testing results or documentation set forth above and that may be disturbed by JCI's Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other, and the parties shall meet to discuss how to proceed. Customer may request that JCI provide a calculation of the cost of enclosing, removing, encapsulating or otherwise abating such ACM in the areas in which Work or M&V Services are to be performed in accordance with applicable code, laws, rules, regulations, ordinances and guidelines. Upon receiving said calculation, the parties will meet and mutually agree upon how to proceed, including but not limited to the following

options: (i) arranging to have said ACM abated at the Customer's cost; or (ii) Customer paying JCI to cause such ACM to be abated.

Other Hazardous Materials: JCI shall be solely responsible for abating, removing or disposing of any Hazardous Materials (as defined below) associated with the Work or M&V Services ("JCI Hazardous Materials") and for the remediation of any areas impacted by the release of JCI Hazardous Materials. All costs for said abatement, disposal and/or removal of JCI Hazardous Materials, including all necessary and required testing, are solely the responsibility of JCI. For other Hazardous Materials that may be otherwise present at Customer's facilities ("Non-JCI Hazardous Materials"), Customer shall supply JCI with any information in its possession relating to the presence of such materials if their presence may affect JCI's performance of the Work or M&V Services. If either Customer or JCI becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with JCI's Work or M&V Services other than those Non-JCI Hazardous Materials already identified by Customer and JCI in writing as part of this Agreement, it shall promptly stop the Work or M&V Services in the affected area and notify the other. For purposes of this Agreement, "Hazardous Materials" means any material or substance that, whether by its nature or use, is now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant or contaminant under applicable Law relating to or addressing public or employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, mutagenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product, polychlorinated biphenyls or mercury. "Hazardous Materials" specifically includes mold. Should JCI and/or its subcontractors become aware of the presence of Non-JCI Hazardous Materials that may be disturbed by JCI's Work or M&V Services, JCI shall promptly notify Customer, and the parties shall meet to discuss how to proceed. Customer may request that JCI provide a calculation of the cost of remediating such Non-JCI Hazardous Materials in the areas in which Work or M&V Services are to be performed in accordance with applicable code, laws, rules, regulations, ordinances and guidelines. Upon receiving said calculation, the parties will meet and mutually agree upon how to proceed, including but not limited to the following options: (i) arranging to have said Non-JCI Hazardous Materials remediated at the Customer's cost; or (ii) Customer paying JCI to cause such Non-JCI Hazardous Materials to be remediated.

JCI shall not be responsible for any losses, costs, damages, expenses (including reasonable legal fees and defense costs), claims, causes of action or liability, directly or indirectly, relating to or arising from the Customer's use, or Customer's storage, release, discharge, handling or presence of mold or Non-JCI Hazardous Materials on, under or about the facilities, or Customer's failure to comply with this Section 11. Notwithstanding the foregoing, JCI shall indemnify and hold harmless the District from any and all liability associated with the removal, abatement and/or disposal of asbestos containing and hazardous materials undertaken by JCI, its employees, agents, representatives or its subcontractors or agents pursuant to this Agreement.

JCI shall coordinate any asbestos/hazardous material testing and sampling with the Customer's Environmental Consultant. All costs associated with such testing/sampling shall be the responsibility of JCI.

12. **CHANGE ORDERS.** The parties, without invalidating this Agreement, may request changes in the Work to be performed under this Agreement, consisting of additions, deletions, or other revisions to the Work ("Change Orders"). The price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted in accordance with the Change Order. Such adjustments shall be determined by mutual written agreement of the parties and shall be subject to the availability of funds and written approval of the Board of Education for Customer, the Architect, SED and leasing company, if necessary. Any Change Order will not be considered effective until it is signed by an authorized representative of each party and the Architect. Upon written consent of the Customer, JCI may delay performance of Work subject to the Change Order until adjustments arising out of the Change Order are clarified and agreed upon. If concealed or unknown conditions are encountered at the project, differing from the conditions represented by Customer in the proposal documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work, price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted subject to the availability of funds and written approval of the Board of Education, the Architect and SED.

13. **TITLE TO THE EQUIPMENT.** Title to all completed or partially completed work at the job site, all materials to be used in connection with the work, and all materials delivered to and/or stored at said job site which are intended to become a part of the completed work covered by this Agreement shall be in the name of the Customer. Notwithstanding the foregoing, and prior to acceptance of the completed work by the Customer, JCI shall be liable for all loss of or damage to said completed work, partially completed work, materials furnished by JCI, and/or materials or equipment furnished by

others, the custody of which has been given to JCI, arising from any cause other than those against which the Customer herein undertakes to carry insurance. In the event of loss or damage from cause other than those against which the Customer undertakes to carry insurance, JCI shall replace or repair the said work or materials at its own cost and expense, to the complete satisfaction of the Customer and its Architect.

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

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

15. INSURANCE.

A. Prior to commencing the Work, JCI shall provide a certificate of insurance with JCI showing its insurance coverage's, and JCI shall maintain such insurance in full force and effect at all times until the Work and Services have been completed, in the following minimum amounts:

COVERAGES	LIMITS OF LIABILITY
Errors & Omissions Policy	$2,000,000.00 per occurrence $2,000,000.00 aggregate
Workmen's Compensation Insurance or self- insurance, including Employer's Liability	Statutory $1,000,000 each accident, disease each employee and disease policy limit
Commercial General Liability Insurance, including Contractual.	$5,000,000 per Occurrence $5,000,000 Aggregate on a per project basis
Products – Completed/Operations Personal & Advertising Injury	$1,000,000 $1,000,000 each occurrence
Fire Damage (any one fire) Medical Expenses (any one person)	$1,000,000 $50,000
Commercial Automobile Liability Insurance	$5,000,000 Combined Single Limit
Installation floater insurance	Amount sufficient to repair or replace the work. The Customer must be listed as a loss payee on this policy.

The above limits are obtained through primary and excess policies.

Coverages shall be maintained without interruption from the date of commencement of the Work until the date of final payment and termination of any coverage required to be maintained after final payment.

A. The insurance required to be procured by JCI pursuant to paragraph A of this section shall be purchased from and maintained by an insurance carrier authorized to do business in the State of New York, with an A. M. Best rating of "A" or better. JCI must submit the Certificate of Insurance to the Customer for its approval prior to the commencement of any work.

B. All insurance coverage to be provided by JCI pursuant to paragraph A of this section shall include a cancellation pursuant to the terms of the policy (ies).

C. All commercial general and automobile liability insurance coverage to be provided by JCI shall include the Customer and its Architect and Construction Manager as additional insureds on the policy (ies) with respect to operations performed for Customer by or on behalf of JCI. Additionally, the insurance coverage to be provided by JCI pursuant to paragraph A of this section shall state that JCI's coverage shall be the primary coverage for JCI's work. Additional insured status will be provided by both ISO additional insured endorsement CG 2033 and CG 20 37 or equivalent.

D. In the event that any of the insurance coverage to be provided by JCI to the Customer contains a deductible, JCI shall indemnify and hold the Customer, Architect, Construction Manager, Consultant or Sub-Consultants and agents and employees of Customer, Architect, Construction Manager, Consultant or Sub-Consultants harmless from the payment of such deductible, which deductible shall in all circumstances remain the sole obligation and expense of JCI.

E. JCI acknowledges that its failure to obtain or keep current the insurance coverage required by paragraph A of this section shall constitute a material breach of contract and subjects JCI to liability for damages the Customer sustains as a result of such breach. This indemnity obligation is in addition to any other indemnity obligation provided in the Agreement. In addition, JCI shall be responsible for the indemnification to the Customer of any and all costs associated with such lapse in coverage, including but not limited to reasonable attorney's fees.

F. JCI shall require all subcontractors to carry appropriate insurance coverages and limits of liability similar to those set forth in paragraph A of this section and adjusted to the nature of subcontractors' operations and submit proof of same to the Customer for approval prior to start of any work. In the event that JCI fails to require its Subcontractors to carry such insurance and a claim is made or suffered, JCI shall indemnify, defend, and hold harmless the Customer, Architect, Construction Manager, Consultants, and Sub-Consultants, board, officers and their agents and employees from any and all claims for which the required insurance would have provided coverage. This indemnity obligation is in addition to any other indemnity obligation that will be provided for the Contract.

G. JCI assumes responsibility for all injury or destruction of JCI's materials, tools, machinery, equipment, appliances, shoring, scaffolding, false and form work, and personal property of JCI's employees. Any policy of insurance secured covering JCI or Subcontractors leased or hired by them and any policy of insurance covering JCI or Subcontractors against physical loss or damage to such property shall include an endorsement waiving the right of subrogation against the Customer for any loss or damage to such property.

H. The Customer in good faith may adjust and settle a loss with JCI's insurance carrier.

I. JCI waives all rights against the Customer, its board, officers, agents and employees for damages caused by fire or other perils to the extent of actual recovery of any insurance proceeds under any insurance policy procured or other property insurance applicable to JCI's work.

J. In addition to the coverages required and under the same terms and requirements of such coverages, in the event that JCI undertakes any asbestos and/or hazardous material work under this Agreement, JCI shall provide hazardous material liability insurance as follows: $2,000,000/occurrence/$2,000,000 aggregate, including products and completed operations. Such insurance shall name the Customer, its Architect and Construction Manager as additional insureds and include coverage for JCI's operations including, but not limited to, removal, replacement, enclosure, encapsulation and/or disposal of asbestos, or any other hazardous material, along with any related pollution events, including coverage for third party liability claims for bodily injury, property damage and cleanup costs. If a retroactive date is used, it shall predate the inception of the Agreement. If motor vehicles are used for transporting hazardous materials, shall provide pollution liability broadened coverage (ISO endorsement CA 9948) as well as proof of MC90. Coverage shall fulfill all requirements set forth herein and shall extend for a period of three (3) years following acceptance by the Customer of the Certificate of Completion. In the event that JCI engages an environmental subcontractor for removal, replacement, enclosure, encapsulation and/or disposal of asbestos, or any other hazardous material, along with any related pollution events, JCI shall require said environmental subcontractor to provide the hazardous material liability insurance as described herein.

K. In addition to the coverages required and under the same terms and requirements of such coverages, JCI shall require its environmental subcontractor to provide hazardous material liability insurance as follows: $2,000,000/occurrence/$2,000,000 aggregate, including products and completed operations. Such insurance shall name the Customer and its Architect as an additional insured and include coverage for the subcontractor's operations including, but not limited to, removal, replacement, enclosure, encapsulation and/or disposal of asbestos, or any other hazardous

material, along with any related pollution events, including coverage for third party liability claims for bodily injury, property damage and cleanup costs. If a retroactive date is used, it shall predate the inception of the Agreement. If motor vehicles are used for transporting hazardous materials, JCI's environmental subcontractor shall provide pollution liability broadened coverage (ISO endorsement CA 9948) as well as proof of MC90. Coverage shall fulfill all requirements set forth herein and shall extend for a period of three (3) years following acceptance by the Customer of the Certificate of Completion.

L. Before commencement of its work, JCI shall obtain and pay for such insurance as may be required to comply with the provisions outlined under the Agreement.

16. INDEMNIFICATION.

To the fullest extent permitted by applicable Law, JCI agrees to defend, indemnify and hold the District, its Board, officers, agents and employees, harmless from and against any and all claims, liabilities, actions, judgments, losses, costs, damages or expenses (including reasonable attorneys' fees) suits, actions or damages ("claims") arising by reason of bodily injury, death or damage to property to the extent caused by the negligence, misconduct or wrongful act of JCI , its officers, agents, subcontractors or employees.

JCI shall indemnify and hold harmless the District, its board, officers, employees, agents, representatives and assigns against any and all claims, actions, damages, liabilities, and expenses, including reasonable attorney's fees as determined by court order, arising out of or related to any claims of patent infringement and any claims of construction or materialman's lien made by any subcontractor or materialman.

JCI shall indemnify and hold harmless the District, its board, officers, employees, agents and assigns from and against all claims, actions, damages, liabilities and expenses, including reasonable attorney's fees, arising out of or related to JCI's, its officers, employees, agents, representatives, or its subcontractor's performance of this Agreement.

This paragraph 16 shall survive termination of this Agreement.

17. PAYMENT AND PERFORMANCE BOND.

A. JCI shall, prior to the commencement of construction, deliver to the Customer Performance and Payment Bonds in a sum equal to the contract amount with sureties licensed by the State of New York and satisfactory to the Customer, conditioned upon the faithful performance by JCI, for the implementation of the Improvement Measures, such bonds to be in such form of AIA Document A312, as modified, and shall contain such provisions as are reasonably satisfactory to the Customer. The Performance and Payments Bonds shall apply only to the Installation Period, as defined in Schedule 2. Such bonds shall not apply to the Assured Performance Guarantee. A rider including the following provisions shall be attached to each Bond:

1. Surety hereby agrees that it consents to and waives notice of any addition, alteration, omission, change, or other modification of the Agreement Documents. Such addition, alteration, change, extension of time, or other modification of the Agreement Documents, or a forbearance on the part of either the Customer or JCI to the other, shall not release the Surety of its obligations hereunder and notice to the Surety of such matters is hereby waived.

2. Surety further agrees that in event of any default by the Customer in the performance of the Customer's obligations to JCI under the Agreement, JCI or Surety shall cause written notice of such default (specifying said default in detail) to be given to the Customer, and the Customer shall have thirty (30) days from time after receipt of such notice within which to cure such default, or such additional reasonable period of time as may be required if the nature of such default is such that it cannot be cured within thirty (30) days. Such Notice of Default shall be sent by certified or registered U.S. Mail, return receipt requested, first class postage prepaid, to Lender and the Customer.

B. In addition to the payment and performance bond described herein, JCI shall deliver to the Customer an Energy Savings Guarantee Bond in an amount equal to 100% of the total cost of the guaranteed savings as set forth in this Agreement. The Energy Savings Guarantee Bond shall be issued for the term of the Guarantee Period as defined in Schedule 2 hereof.

C. If the financial lending institution selected by the District requires a Dual Obligee Rider, such Rider shall be subject to review and approval by the District and its legal counsel. In addition, JCI shall undertake all necessary efforts to expedite the issuance of said Dual Obligee Rider and the required modifications to said Rider, if any.

18. **REVIEW BY THE STATE EDUCATION DEPARTMENT/APPROVAL OF CONTRACT.** JCI and Customer acknowledge that this Agreement is subject to 8 NYCRR 155.20 and, as such, requires the approval of the Commissioner of Education of the State of New York. This Agreement shall not be executory until Commissioner's approval is obtained. Upon receiving SED approval and building permits, state aid runs, and all necessary approvals, the cash flow for the Project will be recalculated with current energy costs, utility rebates, building aid and current interest rates. If the recalculation of cash flow does not yield a positive cash flow for Customer, Customer reserves the right in its sole discretion and without any liability to JCI whatsoever, to terminate this Agreement in its entirety or reduce the scope of the Work as necessary to achieve a positive cash flow for the Customer during the term of the Agreement. Moreover, in the event that building aid for the Project is reduced and/or eliminated or, the necessary approvals referenced herein are not received or are substantially modified, Customer, in its sole discretion and without any liability to JCI whatsoever, shall have the right to terminate the Agreement or to reduce the scope of Work as necessary to achieve a positive cash flow for Customer during the term of the Agreement. The Price and Payment Terms set forth at Schedule 4 of this Agreement will be adjusted by Change Order or amendment to this Agreement to reflect any necessary modifications resulting therefrom. Upon request by Customer, JCI will assist Customer in obtaining additional aid for the Project which may include SED building aid and/or rebates.

In addition, this Agreement shall not be executory until Customer's attorneys' approval is obtained. Prior to SED approval, it shall be JCI's sole responsibility to validate each Improvement Measure with Customer and gain the final approval of the savings outlined in Schedule 2. This process may include the providing of mock-ups and/or site visits as well as delivering additional presentations if necessary. Without final Customer approval of Schedule 2 and any requested mock-ups, this Agreement shall not be executory. If SED approval is not obtained within 365 days of the date of the Architect's submittal to SED, JCI reserves the right to propose modifying the terms of this Agreement, including but not limited to the cost to be financed under this Agreement, subject to Customer's approval in writing, which shall not be unreasonably withheld. JCI agrees to cooperate with Customer in obtaining necessary approvals, including approval by the Commissioner of Education. This shall include providing the certifications pursuant to 155.20 (d) (7) (ii), (iii) and (iv) of the Regulations of the Commissioner of Education. Notwithstanding the above, should any portion of this Agreement fail to be approved by SED, or, if the Scope of Work contained in this Agreement is not approved by SED in its entirety, Customer may, in its sole discretion, elect to terminate this Agreement. JCI shall have no remedy at law or in equity for such termination or for any costs incurred by JCI up to the effective date of termination.

In addition to the Customer's right to reduce the scope of work as set forth in this Section 18 and Section 19 herein or Customer's right to terminate this Agreement as described herein, the Customer further reserves the right, in its sole discretion and without any liability to JCI whatsoever, to reduce the scope of work if the Customer determines that any FIM, or portion thereof, if no longer necessary or if any FIM, or portion thereof, is undertaken by the Customer as part of a capital improvement project or bond referendum project. JCI shall schedule its work with JAG and shall be responsible for coordinating its work with any capital improvements undertaken at the District.

19. **CASH FLOW STATEMENTS.** It is understood and agreed that, at all times during the Guarantee Period, the annual savings set forth in the cash flow statements must remain positive. JCI shall provide the District with the required cash flow statements as set forth herein. Such cash flow statements shall be appended to this Agreement. The cash flow statement shall list the guaranteed rebates; however, all rebates shall inure to and be payable to the District. In addition, JCI shall provide the District with revised cash flow statements at the following intervals: (1) upon the New York State Education Department's approval of the Agreement and any amendment between the parties; (2) upon issuance of the State Aid report identifying the aid that will be allocated for the project; (3) upon receipt of any utility rebate or incentive; (4) upon the District's finalization of its financing of the project (the "Financing Period"); (5) prior to the commencement of any work under the Agreement and any amendments; and (6) at any other time as may be requested by the District. All revised cash flow statements shall be attached and become part of the contract documents. If the Project does not yield a positive cash flow to the District for any year of the contract term (as identified by the cash flow statements provided during the Financing Period), the District shall be permitted to reduce the scope of the Project without liability of any type so as to achieve a positive cash flow in each year of the contract term. The Project shall not commence until the District provides its written acceptance of the final cash flow statement, which must include the eligible building aid for the Project as provided by the New York State Education Department in writing and the applicable interest rate for the Project. Under no circumstance, shall the Project commence without written authorization from the District approving the cash flow for

the Project. In the event that JCI commences without written approval of the final cash flow statement, JCI shall be liable for any negative cash flow of the District for the entire term of the Agreement and for any other loss incurred by the District resulting from its failure to produce a positive cash flow for each year of the Project.

20. **CORRESPONDENCE.** JCI shall provide copies of all correspondence and/or other communications by and/or between it, the Architect, Consultants and/or the New York State Education Department contemporaneously with its transmission or receipt of such communications. JCI shall be responsible for assuring that the District received the transmittals and correspondence, maintaining all correspondence and turning over the same after project completion.

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

22. **JCI'S PROPERTY.** Except as set forth in Schedule 1 – Scope of Work regarding materials to be furnished or installed as part of the Work, all materials and tools used by JCI personnel and/or JCI subcontractors or agents at the installation site, including documentation, schematics, test equipment, software and associated media, remain the exclusive property of JCI or such other third party. Customer agrees not to use such materials for any purpose at any time without the express authorization of JCI. Customer agrees to allow JCI personnel and/or JCI subcontractors or agents to retrieve and to remove all such materials remaining after installation or maintenance operations have been completed upon appointment during normal business hours. Customer acknowledges that any software furnished in connection with the Work and/or M&V Services is proprietary and subject to the provisions of any software license agreement associated with such software.

23. **GOVERNING LAW.** The Agreement shall be governed and construed in accordance with the laws of the State of New York without regard to choice of law principles. The parties agree that the sole jurisdiction and venue for actions related to the subject matter hereof shall be the State and U.S. Federal courts in the County of Suffolk New York. Both parties consent to the jurisdiction of such courts and waive any objections regarding venue in such courts.

24. **MODIFICATIONS.** Additions, deletions, and modifications to this Agreement may be made upon the mutual agreement of the parties in writing. The parties contemplate that such modifications may include, but are not limited to, the installation of additional improvement measures, energy conservation measures, facility improvement measures, and operational efficiency improvements or furnishing of additional services within the identified facilities, as well as other facilities owned or operated by the Customer. These modifications may take the form of additional work or modifications to the original scope of Work or Services.

25. **TERMINATION.** Customer reserves the right to terminate this Agreement for any reason, or no reason whatsoever, upon thirty (30) days written notice to JCI. In the event of such termination, the parties shall endeavor in an orderly manner to wind down activities hereunder. In the event of termination, all reports and services due to the Customer must be completed by JCI, its employees, and/or agents within thirty (30) days of the termination date. Customer shall pay to JCI all undisputed amounts due for Work satisfactorily completed up to the date of termination.

26. **WAGE AND HOURS PROVISIONS.** This is a public work contract covered by Article 8 of the Labor Law. Neither JCI's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, JCI and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law. Accordingly, JCI and each of its subcontractors shall comply with Prevailing Wage Rates as issued by the State of New York Department of Labor for the location and duration of this Project and shall comply with all requirements governing its payments to its employees as set forth in section 220 et. seq. of the New York State Labor Law. JCI must submit the required certified payrolls with its requests for payment. The Customer will not make any payment to JCI unless the completed certified payrolls are submitted to the Customer.

27. **CONSENTS; APPROVALS; COOPERATION.** Whenever Customer's consent, approval, satisfaction or determination shall be required or permitted under this Agreement, and this Agreement does not expressly state that Customer may act in its sole discretion, such consent, approval, satisfaction or determination shall not be unreasonably withheld, qualified,

conditioned or delayed, whether or not such a "reasonableness" standard is expressly stated in this Agreement. Whenever Customer's cooperation is required by JCI in order to carry out JCI's obligations hereunder, Customer agrees that it shall act in good faith and reasonably in so cooperating with JCI and/or JCI's designated representatives or assignees or subcontractors. Customer shall furnish decisions, information, and approvals required by this Agreement in a timely manner so as not to delay the performance of the Work or M&V Services.

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

29. **INDEPENDENT CONTRACTOR.** JCI is an independent contractor in all respects with regard to this Agreement. Nothing contained in this Agreement shall be deemed to create a partnership, joint venture, fiduciary, or similar relationship between the parties. Nothing in this Agreement shall be construed as reserving to Customer any right to exercise any control over or to direct in any respect the conduct or management of business or operations of JCI on the Customer's property. The entire control or direction of such business and operations shall be in and shall remain in JCI, subject only to JCI's performance of its obligations under this Agreement. Neither JCI nor any person performing any duties or engaged in any Work on the Customer's property on behalf of JCI shall be deemed an employee or agent of Customer. Nothing in this Section shall be deemed to be a waiver of the Customer's right to use its property. Customer and JCI are independent of one another and shall have no other relationship relating to or arising out of this Agreement. Neither party shall have or hold itself out as having the right or authority to bind or create liability for the other by its intentional or negligent act or omission, or to make any contract or otherwise assume any obligation or responsibility in the name of or on behalf of the other party.

30. **NOTICE/SERVICE OF PROCESS.** In addition to the methods of service allowed by the New York State Civil Practice Law & Rules ("CPLR"), the parties hereby consent to service of process upon them by registered or certified mail, return receipt requested. Service hereunder shall be complete upon a party's receipt of process or upon the sending party's receipt of the return thereof by the United States Postal Service as refused or undeliverable. The parties must promptly notify each other, in writing, of each and every change of address to which service of process can be made. Service by a party to the last known address of the other party shall be sufficient.

31. **COMPLIANCE WITH LAW.** JCI shall comply with and obtain, at its expense, all licenses and permits required by Federal, State and local laws, rules, regulations and ordinances in connection with the installation of the Improvement Measures. To the extent that JCI agrees to perform operations and/or maintenance of specified Improvement Measures or other equipment, it shall comply with and obtain, at its expense, all licenses and permits which may be required by Federal, state and local laws, rules, regulations and ordinances in connection with the operation and/or maintenance of such specified Improvement Measures. In the event that JCI cannot procure any such license or permit in light of a requirement that Customer is required to do so, Customer will procure the same at JCI's cost and expense. JCI shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities (collectively "Laws") in connection with its performance hereunder.

32. **NON-APPROPRIATION**. Pursuant to New York State Energy Law section 109, et. seq. and 8 N.Y.C.R.R. 155.20, this Agreement shall be executory only to the extent of the monies appropriated and available for the purposes of this Agreement, and no liability on account therefor shall be incurred beyond the amount of such monies. It is understood that neither this Agreement nor any representation by any public employee or officer creates any legal or moral obligation to request, appropriate or make available monies for the purpose of the Agreement.

33. **ASSIGNMENT**. The parties agree not to assign, transfer, convey or sublet or otherwise dispose of this Agreement nor any duties or obligations hereunder or rights, title and interest therein or power to execute such Agreement, to any other person, firm or corporation without the previous consent in writing of the other party; provided, however, that JCI may subcontract any portion of the Work to be performed hereunder in accordance with the provisions set forth herein. JCI may not assign any monies due or to become due to it pursuant to its Agreement with Customer without Customer's prior written consent. Any such assignment shall be in a form acceptable to Customer and the financial lending institution selected by the Customer, if necessary. If JCI attempts to make such an assignment without such consent from Customer, JCI shall nevertheless remain legally responsible for all obligations under its Agreement with Customer.

34. **SUBCONTRACTING**. JCI may elect to use subcontractors in meeting its obligations hereunder. All subcontractors must be approved by Customer in writing and in advance. Customer reserves the right to reject the use of any subcontractor, upon discussion and mutual agreement of JCI. Subcontractors will not be acceptable unless, when requested by the Architect, evidence is furnished that the proposed subcontractor has satisfactorily completed similar

subcontracts as contemplated under this prime contract, and has the necessary experience, personnel, equipment, plant, and financial ability to complete the subcontract in accordance with the intent of this Agreement. JCI and its subcontractors will be required to wear photo identification and yellow safety vests at all times while on Customer's property. JCI and its subcontractors as necessary shall attend any meetings when reasonably required during the construction of the Project. By appropriate agreement, JCI shall require each subcontractor to be bound to JCI by the terms of this Agreement and shall further require its subcontractors to procure the required insurance as set forth herein at paragraph 15.

35. **NOTIFICATIONS OF GOVERNMENTAL ACTION - Occupational Safety and Health**. The parties agree to notify each other as promptly as is reasonably possible upon becoming aware of an inspection under, or any alleged violation of, the Occupational Safety and Health Act or any other provision of Federal, state or local codes, laws, rule or regulation relating in any way to the undertakings of either Party under this Agreement. JCI represents and warrants that it will meet all applicable OSHA requirements applicable to this Agreement, including any required certification and training requirements for its employees and its subcontractors.

36. **TRAINING**. JCI shall provide adequate training to Customer's employees to allow Customer or its employees to have sufficient knowledge with respect to the proper use and operation of the equipment and FIMs.

37. **WAIVER**. The failure of either party to require compliance with any provision of this Agreement shall not affect that party's right to later enforce the same. It is agreed that the waiver by either party of performance of any other terms of this Agreement or of any breach thereof will not be held or deemed to be a waiver by that party of any subsequent failure to perform the same or any other term or condition of this Agreement or any breach thereof.

38. **NON-DISCRIMINATION**. JCI agrees not to discriminate against any employee, or applicant for employment, to be employed in the performance of this Agreement, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of age, sex, race, disability, color, religion, national origin, Vietnam era military service or ancestry in accordance with applicable Federal, New York State or local laws, rules, and ordinances.

39. **INTERNATIONAL BOYCOTT**. In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this Agreement exceeds $5,000, JCI, as a material condition of the Agreement, represents that neither JCI nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the Federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If JCI, or any of the aforesaid affiliates of JCI, is convicted or is otherwise found to have violated said laws or regulations under the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contractors execution, such contract, amendment or modification thereto shall be rendered forfeit and void. JCI shall so notify Customer within five (5) business days of such conviction, determination or disposition of appeal (2 NYCRR 105.4).

40. **NON-COLLUSION**. JCI warrants, under penalty of perjury, that its proposal was arrived at independently and without collusion aimed at restricting competition. JCI further warrants that at the time it submitted its response to the Customer's RFP an authorized and responsible person executed and delivered to the Customer a valid non-collusive, certification on JCI's behalf.

41. **SET OFF RIGHTS**. Customer shall have all of its common law, equitable and statutory rights of setoff. These rights shall include, but not be limited to, Customer's option to withhold for the purposes of set-off any moneys due to JCI under this Agreement up to any amounts due and owing to Customer with regard to this Agreement, any other contract with Customer, including any contract for a term commencing prior to the term of this Agreement, plus any amounts due and owing to Customer for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. Customer shall exercise its set-off rights in accordance with normal Customer practices including, in cases of set-off pursuant to an audit, the finalization of such Customer audit by a State agency, its representatives, or the State Comptroller.

42. **BOOKS; RECORDS**. JCI shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this Agreement (hereinafter, collectively the "Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter or such longer period as may be required by applicable Law. The State Comptroller, the Attorney General, the Commissioner of Education, and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this Agreement, shall have access to the Records during normal business hours at an office of JCI

within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. Customer shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law provided that: (i) JCI shall timely inform an appropriate Customer official, in writing, that said Records should not be disclosed; and (ii) said Records shall be sufficiently identified; and (iii) designation of said Records as exempt under the statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, either party's right to discovery in any pending or future litigation.

43. **THIRD PARTY BENEFICIARIES.** This Agreement does not create, and shall not be construed as creating, any rights or interests enforceable by any person not a party to this Agreement.

44. **CUSTOMER POLICIES.** It is understood and agreed that JCI, its employees, agents, subcontractors and employees of such agents and subcontractors, shall adhere to Customer's policies with respect to conduct on the Customer's property as well as any and all Federal, State, and local laws, rules, ordinances, regulations, Customer's policies and procedures applicable to construction projects on Customer's premises, to the extent such policies are provided to JCI in writing.

45. **POWER AND AUTHORITY.** Each party represents and warrants to the other that (i) it has all requisite power and authority to execute and deliver this Agreement and perform its obligations hereunder, (ii) all corporate, board, body politic, or other approvals necessary for its execution, delivery, and performance of this Agreement have been or will be obtained, and (iii) this Agreement constitutes its legal, valid, and binding obligation, except as provided in Section 32 hereof.

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

47. **COMPLETE AGREEMENT.** It is understood and agreed that this Agreement contains the entire agreement between the parties relating to all issues involving the subject matter of this Agreement. In the event that any of the terms of this Agreement, any schedule, attachment or appendix hereto, except for those terms of Attachment 6 which do not apply to JCI, and except for any scope of work provisions in the RFP, conflict with one another or with the terms of the Customer's RFP for District-wide implementation of Energy Conservation Measures on a Performance Contracting basis, the terms more favorable to Customer shall prevail. No binding understandings, statements, promises or inducements contrary to this Agreement exist. This Agreement supersedes and cancels all previous agreements, negotiations, communications, commitments and understandings with respect to the subject matter hereof, whether made orally or in writing. Each of the parties to this Agreement expressly warrants and represents to the other that no promise or agreement which is not herein expressed has been made to the other, and that neither party is relying upon any statement or representation of the other that is not expressly set forth in this Agreement. Each party hereto is relying exclusively on the terms of this Agreement, its own judgment, and the advice of its own legal counsel and/or other advisors in entering into this Agreement. Customer acknowledges and agrees that any purchase order issued by Customer associated with this Agreement is intended only to establish payment authority for Customer's internal accounting purposes. No purchase order shall be considered a counteroffer, amendment, modification, or other revision to the terms of this Agreement.

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

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

50. **NOTICES.** All notices or communications related to this Agreement shall be in writing and shall be deemed served if and when sent by facsimile (516-822-0592) or mailed by certified or registered mail: to Johnson Controls, Inc. at the address listed on the first page of this Agreement, ATTN: Regional Solutions Manager, with a copy to Johnson Controls, Inc., ATTN: General Counsel – Building Efficiency Americas, 507 East Michigan Street, Milwaukee, Wisconsin, 53202: and to Customer by mail or certified mail at the address listed on the first page of this Agreement.

51. **EXECUTION**. A copy of a signature on a facsimile and/or electronic transmission of this Agreement shall have the same force and effect as if it were an original signature.

IN WITNESS WHEREOF, the duly authorized officers or representatives of the Parties have set their hand on the date first written above with the intent to be legally bound.

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT

Signature: Charles E. Anderson

Printed Name: Charles E. Anderson

Title: Vice President Board of Education

Date: 3-16-17

JOHNSON CONTROLS, INC.

Signature: James B. Cotter

Printed Name: James B. Cotter

Title: RGM

Date: 3/15/17

Construction Management

Construction Management Services

All work set forth in the Agreement must be coordinated with the Customer, approved by the Architect as set forth in the Agreement and attachments thereto and be carried out in accordance with this Agreement and all attachments and appendices hereto.

1. JCI will prepare and maintain an overall Project Management Plan and Construction Schedule which shall be provided to the Customer and Architect for approval. Updates will be provided by JCI to the Customer and the Architect on an on-going basis.

2. JCI shall maintain a staff to administer the contract terms and conditions with all subcontractors.

3. JCI will provide coordination and total supervision of the work of separate FIMs ensuring enforcement of all contract provisions, compliance with energy initiatives, and timely completion of the project. All such work must be coordinated with the Customer and the Architect and shall further be scheduled and coordinated with any capital improvements undertaken at the District facilities. JCI shall be responsible for scheduling and coordinating all work identified within Schedule 1 with any capital improvement projects at the Customer's facilities.

4. JCI shall establish and maintain coordination procedures, including project meetings, documentation process, etc. JCI shall attend all project meetings as required by the Customer and/or the Architect.

5. JCI shall submit a site accessibility plan to the Customer, Architect and contractors/subcontractors to ensure continuous operation of school services and activities. All schedules and site accessibility plans require approval by the Customer and Architect.

6. JCI shall perform all inspection work necessary to assure the conformity to the plans and specifications until final completion and acceptance of the project by the Customer.

7. JCI shall coordinate post-completion activities including the assembly of guarantees, manuals, as-built drawings of all trade and subcontractors, and the Customer's final acceptance with the Architect. JCI shall coordinate training of the Customer's personnel by installers and vendors for the operations of the project with the Customer's Representative and Architect.

8. JCI shall coordinate all aspects of the project with the District-approved Architectural/Engineering firm, John A Grillo Architects (JAG). JAG will prepare and submit all necessary design work to the New York State Education Department for approval in accordance with the terms of the Agreement between the District and Architect attached hereto at Attachment 6 and Appendix 1, Scope of Architectural Services.

9. In addition to the terms set forth herein, Appendix 2, Scope of Construction Services delineates the terms and conditions of the construction services to be provided by JCI. JCI represents that it is aware of and bound by the terms and conditions of the services as provided said Appendices.

10. JCI and its subcontractors will be required to wear photo identification at all times while on School District property.

11. JCI and its subcontractors shall attend Customer Committee meetings at the request of the Customer, if any, during the construction of the project and meetings related to the District's capital improvements at its facilities.

12. Work will commence upon SED approval and the Customer's receipt of the necessary financing for the project. Hours of work shall be as set forth in paragraph six (6) of this Agreement. All costs incurred by the Customer, including overtime costs for District personnel, to make the facilities available during evening and weekends shall be borne solely by JCI.

SCOPE OF WORK

SCOPE OF WORK SCHEDULE

1. **SUMMARY OF WORK:** The following summarizes the Work to be provided by JCI under this Agreement, as further defined below:

Mattituck HS/MS	**Cutchogue East ES**
FIM 1 Lighting – Fixture Retrofit	FIM 1 Lighting – Fixture Retrofit
FIM 2 Energy Management System	FIM 2 Energy Management System
FIM 3 Pipe and Valve Insulation	FIM 3 Pipe and Valve Insulation
FIM 4 Boiler Controllers	FIM 4 Boiler Controllers
FIM 6 Window Film	FIM 5 Window Replacement
FIM 7 Plug Load Controllers	FIM 6 Window Film
FIM 8 UV Refurbishment	FIM 7 Plug Load Controllers
FIM 9 Refrigeration Compressor Controllers	FIM 8 UV Refurbishment
	FIM 9 Refrigeration Compressor Controllers
District Office	
FIM 1 Lighting – Fixture Retrofit	
FIM 6 Window Film	

GENERAL

All work to be undertaken and performed by JCI shall be performed in strict accordance with all applicable laws, rules, regulations and ordinances in effect at the time of contract signing. In addition, all work undertaken by JCI must be in strict accordance with the plans and specifications developed by the District Architect and approved by the SED.

JCI shall be responsible for all removal, remediation and disposal of hazardous materials/wastes impacted by the scope of work included in this energy performance project, either directly or indirectly in accordance with paragraph 11 and the requirements set forth in the District's RFP. The guaranteed savings for the energy performance project must cover the costs for the removal, remediation and disposal of these hazardous materials/wastes. All abatement work shall be included.

FIM 1 – Lighting-Fixture Retrofit

Johnson Controls shall upgrade exterior lighting to new LED technology at Mattituck Jr.Sr High School , Cutchogue East Elementary School and District Office as per the line x line at Attachment 4. The lighting upgrade will consist of both new fixtures and retrofitting existing. The work shall also consist of LED re-lamping in the corridors and some offices throughout the Mattituck HS/MS and Cutchogue East ES.

FIM 2 – Energy Management Systems

Supervisory Controllers

- Furnish, install and commission new web-enabled (JCI FX-60 Niagara/Metasys) platform network supervisory controller for each impacted building. New and existing points scheduled for migration shall be incorporated in the new supervisory network. Incorporate the functionality of existing systems and additional sequences as required by Owner or Engineer. Provide alarming and trending as specified.
- Network supervisory controllers shall be integrated into a single temperature control network running on remote server at owner-specified location.
- Owner IT department to provide addresses and permissions for integration to site LAN.
- Provide and install the network wiring between the District's IT equipment and our new supervisory controller.
- Johnson FX-Server software package that allows single-point access to the entire EMS system. The FX-Server also provides for long-term storage of alarms and data trends.

Buildings Included:
Mattituck High School/Middle School
Cutchogue East Elementary School

Unit Ventilator DDC Retrofit

Convert or migrate unit ventilators listed below to DDC Control, including electronic end-devices. Existing unit ventilators listed below at the Cutchogue East Elementary School presently have obsolete stand-alone electronic controls. New JCI DDC controls will be furnished, installed and commissioned for the UV's listed below. This includes the following points and sequences:

- Economizer control, including outdoor air enthalpy change-over on cooling equipment
- Heating
- Cooling
- Discharge control

- Freeze protection
- Local or remote set point control
- Warm-up/Cool-down
- The unit ventilators listed below will be converted to fully electronic type (new end devices) and will no longer require a compressed air supply.
- Includes the steam fitting costs to replace both the existing control valve for the UV coil and the valve for the associated radiation with new electronic valves.

Building	Unit Ventilator DDC Retrofit
Cutchogue East Elementary School	53

Unit Ventilator (UV) pneumatic controls repair and refurbishment

Johnson Controls will perform high School Unit Vent Pneumatic Controls Repair and Refurbishment per scope of work below.

Unit Ventilator Pneumatic Repair & Refurbishment includes:

- Provide repair and refurbishment of existing pneumatic controls in UV's.
- Verify piping and sequence of operations conforms to requirements of savings guarantee.
- Stroke end devices; confirm full range of operation, tight seal-off and reliability.
- Repair or replace deficient control components.
- Free up, lubricate and adjust linkages of economizer dampers as necessary to achieve full range and reliable operations.
- Verify operation of control devices including EP relays, switching valves, PE switches, receiver-controllers, thermostats, and specialty relays. Calibrate; replace devices which prove defective or unreliable.
- Inspect valve disks and seats, refurbish or replace device as necessary to achieve as-new performance.
    - Inspect tubing in unit ventilator and behind thermostat for, repair leaks.
    - Prove operation of night setback controls.
- Replace the existing air compressors with new duplex air compressors including a control panel with motor starters and automatic alternation.
- Replace UV filters and PRV stations.
- Commission.

Building	Unit Ventilator Pneumatic Retrofit
Mattituck Jr. Sr. High School	30

Exhaust Fans

- Furnish, install and commission DDC control for non-toilet exhaust fans, quantities as indicated in itemization
- Provide start/stop, status, and alarm for each exhaust fan listed below.
- Provide occupancy programming/control as per requirements to meet the savings guarantee.
- Tie in exhaust fans that are already tied into the existing pneumatic controls to the new EMS

Building	Exhaust Fan DDC Control
Mattituck Jr.Sr High School	23
Cutchogue East Elementary School	34
Total	**57**

Relief Hoods, Gravity Dampers

- Furnish, install and commission DDC control for relief and gravity hoods counts and locations below
- Repair or replace damper assemblies as required
- Provide manually activated or schedule control to meet requirements to meet savings guarantee
- Control is to be open/close (not proportional)

Building	Relief Hoods/Dampers & Gravity Dampers
Mattituck Jr.Sr High School	3
Total	**3**

Optimal Start

Provide programming that HVAC equipment will operate with an optimal start warm up cycle.

Buildings Included for Optimal Start:
Mattituck Jr.Sr High School
Cutchogue East Elementary School

FIM 2 Exclusions:

- Duct cleaning and coil cleaning and/or repair;

FIM 3- Heating Distribution System- Pipe and Valve Insulation

Johnson Controls shall install fiberglass insulation and/or thermal jackets on hot water and steam systems to minimize heat loss. By improving the heat retaining efficiency of piping, we can reduce the amount of fuel used to generate steam or hot water, reduce the amount of emissions, and extend the useful life of the associated systems. We will install pipe and valve insulation according to the following table below:

Building	Type of Piping/Tank	Location	Quantity	Pipe Material	Line Size Diam. (in)	Length (ft) or Surface Area (sqft)
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	4	Steel	1.25	0.95
Mattituck Jr.Sr High School	HW Piping	HW Boiler Room	1	Steel	1.25	9
Mattituck Jr.Sr High School	Control Valve (HW)	HW Boiler Room	1	Steel	2	2.1
Mattituck Jr.Sr High School	Strainer (HW)	HW Boiler Room	1	Steel	2	1.8
Mattituck Jr.Sr High School	Balancing Valve (HW)	HW Boiler Room	2	Steel	2	2.1
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	1	Steel	2	2.1

Building	Type of Piping/Tank	Location	Quantity	Pipe Material	Line Size Diam. (in)	Length (ft) or Surface Area (sqft)
Mattituck Jr.Sr High School	HW Piping	HW Boiler Room	1	Steel	2	3
Mattituck Jr.Sr High School	DHW Piping	HW Boiler Room	1	Steel	2	1
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	2	Steel	2.5	2.3
Mattituck Jr.Sr High School	Control Valve (HW)	HW Boiler Room	1	Steel	2.5	2.3
Mattituck Jr.Sr High School	DHW Piping	HW Boiler Room	1	Steel	2.5	3
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	4	Steel	3	2.4
Mattituck Jr.Sr High School	HW Piping	HW Boiler Room	1	Steel	3	2
Mattituck Jr.Sr High School	Butterfly Valve (HW)	HW Boiler Room	1	Steel	3	1.1
Mattituck Jr.Sr High School	Balancing Valve (HW)	HW Boiler Room	6	Steel	3	2.4
Mattituck Jr.Sr High School	Suction Strainer (HW)	HW Boiler Room	2	Steel	3	2.4
Mattituck Jr.Sr High School	Flex (HW)	HW Boiler Room	4	Steel	3	1
Mattituck Jr.Sr High School	Butterfly Valve (HW)	HW Boiler Room	3	Steel	4	1.5
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	7	Steel	4	3
Mattituck Jr.Sr High School	Check Valve (HW)	HW Boiler Room	2	Steel	4	3
Mattituck Jr.Sr High School	Strainer (HW)	HW Boiler Room	3	Steel	4	2.8
Mattituck Jr.Sr High School	Suction Strainer (HW)	HW Boiler Room	3	Steel	4	3
Mattituck Jr.Sr High School	Flex (HW)	HW Boiler Room	6	Steel	4	1
Mattituck Jr.Sr High School	HW Piping	HW Boiler Room	1	Steel	6	3
Mattituck Jr.Sr High School	Butterfly Valve (HW)	HW Boiler Room	1	Steel	6	2.3
Mattituck Jr.Sr High School	Flange (HW)	HW Boiler Room	6	Steel	6	2.3
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	6	Steel	6	4.5
Mattituck Jr.Sr High School	Gate Valve (HW)	HW Boiler Room	1	Steel	8	5.7
Mattituck Jr.Sr High School	DHW Tank Head	HW Boiler Room	1	Steel	12	1
Mattituck Jr.Sr High School	Vapor Separator	HW Boiler Room	1	Steel	4' x 2'	31.4
Mattituck Jr.Sr High School	Condensate Piping	Steam Boiler Room	1	Steel	0.75	75
Mattituck Jr.Sr High	Feed Water Piping	Steam Boiler Room	1	Steel	1.5	40

Building	Type of Piping/Tank	Location	Quantity	Pipe Material	Line Size Diam. (in)	Length (ft) or Surface Area (sqft)
School						
Mattituck Jr.Sr High School	Condensate Piping	Steam Boiler Room	1	Steel	1.5	50
Mattituck Jr.Sr High School	Gate Valve (Condensate)	Steam Boiler Room	1	Steel	1.5	1.3
Mattituck Jr.Sr High School	Feed Water Piping	Steam Boiler Room	1	Steel	2	8
Mattituck Jr.Sr High School	Condensate Piping	Steam Boiler Room	1	Steel	2	60
Mattituck Jr.Sr High School	Gate Valve (Condensate)	Steam Boiler Room	3	Steel	2.5	2.3
Mattituck Jr.Sr High School	Condensate Piping	Steam Boiler Room	1	Steel	2.5	90
Mattituck Jr.Sr High School	Flange (Steam)	Steam Boiler Room	10	Steel	4	1.1
Mattituck Jr.Sr High School	Bonnet (Steam)	Steam Boiler Room	2	Steel	4	2
Mattituck Jr.Sr High School	Condensate Piping	Steam Boiler Room	1	Steel	5	15
Mattituck Jr.Sr High School	Steam Piping	Steam Boiler Room	1	Steel	5	8
Mattituck Jr.Sr High School	Gate Valve (Condensate)	Steam Boiler Room	2	Steel	5	3.2
Mattituck Jr.Sr High School	Bonnet (Steam)	Steam Boiler Room	3	Steel	6	3.9
Mattituck Jr.Sr High School	Flange (Steam)	Steam Boiler Room	15	Steel	6	2.3
Mattituck Jr.Sr High School	Bonnet (Steam)	Steam Boiler Room	2	Steel	8	5.4
Mattituck Jr.Sr High School	Flange (Steam)	Steam Boiler Room	6	Steel	8	2.8
Mattituck Jr.Sr High School	Flange Cap (Steam)	Steam Boiler Room	1	Steel	10	2.9
Mattituck Jr.Sr High School	Gate Valve (Steam)	Steam Boiler Room Basement Corridor	1	Steel	5	3.2
Mattituck Jr.Sr High School	Flange (Steam)	Steam Boiler Room Basement Corridor	3	Steel	5	1.3
Mattituck Jr.Sr High School	Condensate Piping	Storage Adjacent to Steam Boiler Room	1	Steel	2.5	50
Cutchogue East Elementary School	Gate Valve (Condensate)	New Boiler Room	1	Steel	1.25	0.95
Cutchogue East Elementary School	Strainer (Steam)	New Boiler Room	1	Steel	1.25	0.95
Cutchogue East Elementary School	Gate Valve (Steam)	New Boiler Room	1	Steel	1.25	0.95
Cutchogue East Elementary School	Feed Water Piping	New Boiler Room	1	Steel	1.5	110
Cutchogue East Elementary School	Gate Valve (Feed Water)	New Boiler Room	2	Steel	1.5	1.3
Cutchogue East Elementary School	Strainer (Condensate)	New Boiler Room	1	Steel	2	1.8

Building	Type of Piping/Tank	Location	Quantity	Pipe Material	Line Size Diam. (in)	Length (ft) or Surface Area (sqft)
Cutchogue East Elementary School	Gate Valve (Condensate)	New Boiler Room	2	Steel	2	2.1
Cutchogue East Elementary School	Condensate Piping	New Boiler Room	1	Steel	2	4
Cutchogue East Elementary School	Strainer (Steam)	New Boiler Room	1	Steel	2	1.8
Cutchogue East Elementary School	Gate Valve (Steam)	New Boiler Room	1	Steel	2	2.1
Cutchogue East Elementary School	Bonnet (Steam)	New Boiler Room	1	Steel	3	2
Cutchogue East Elementary School	Condensate Piping	New Boiler Room	1	Steel	3	25
Cutchogue East Elementary School	Flange (Steam)	New Boiler Room	6	Steel	4	1.1
Cutchogue East Elementary School	Gate Valve (Steam)	New Boiler Room	1	Steel	4	3
Cutchogue East Elementary School	Strainer (Steam)	New Boiler Room	1	Steel	4	2.8
Cutchogue East Elementary School	Control Valve (Steam)	New Boiler Room	1	Steel	4	3
Cutchogue East Elementary School	Strainer (Condensate)	New Boiler Room	1	Steel	4	2.8
Cutchogue East Elementary School	Control Valve (Steam)	New Boiler Room	1	Steel	5	3.2
Cutchogue East Elementary School	Gate Valve (Steam)	New Boiler Room	2	Steel	6	4.5
Cutchogue East Elementary School	Strainer (Steam)	New Boiler Room	1	Steel	6	3.9
Cutchogue East Elementary School	Balancing Valve (HW)	New Boiler Room	2	Steel	6	4.5
Cutchogue East Elementary School	Suction Strainer (HW)	New Boiler Room	2	Steel	6	4.5
Cutchogue East Elementary School	Butterfly Valve (HW)	New Boiler Room	2	Steel	6	2.3
Cutchogue East Elementary School	Bonnet (Steam)	New Boiler Room	3	Steel	8	5.4
Cutchogue East Elementary School	Flange Cap (Steam)	New Boiler Room	1	Steel	8	2.8
Cutchogue East Elementary School	Condensate Tank	New Boiler Room	1	Steel	1' x 3' x 1.5'	18
Cutchogue East Elementary School	Vapor Separator	New Boiler Room	1	Steel	3' x 2'	25.12
Cutchogue East Elementary School	Feed Water Tank	New Boiler Room	1	Steel	6' x 3'	70.65
Cutchogue East Elementary School	HW Piping	Original Boiler Room (Pump Room)	1	Steel	1.5	3
Cutchogue East Elementary School	Balancing Valve (HW)	Original Boiler Room (Pump Room)	1	Steel	2	2.1
Cutchogue East Elementary School	Balancing Valve (HW)	Original Boiler Room (Pump Room)	2	Steel	2.5	2.3
Cutchogue East	Butterfly Valve	Original Boiler Room (Pump	2	Steel	2.5	0.75

Building	Type of Piping/Tank	Location	Quantity	Pipe Material	Line Size Diam. (in)	Length (ft) or Surface Area (sqft)
Elementary School	(HW)	Room)				
Cutchogue East Elementary School	Check Valve (HW)	Original Boiler Room (Pump Room)	3	Steel	2.5	2.3
Cutchogue East Elementary School	Strainer (HW)	Original Boiler Room (Pump Room)	1	Steel	2.5	2.1
Cutchogue East Elementary School	Gate Valve (HW)	Original Boiler Room (Pump Room)	4	Steel	2.5	2.3

FIM 4- Boiler/DHW Heater-Burner Controllers

Johnson Controls shall furnish, install and commission Intellidyne boiler and domestic hot-water controllers at the following locations:

Building	Boiler Controllers	DHW Controllers
Mattituck Jr.Sr High School	5	1
Cutchogue East Elementary School	2	1
Total	7	2

FIM 5- Window Replacement

Johnson Controls shall furnish and install new track sliding windows at Cutchogue East ES. The work shall consist of replacing windows at Cutchogue East ES in rooms 103(nurse), 109,110,112,114,116,177, abatement of perimeter window caulking as asbestos containing material as necessary, installation of new Architectural Window series 6500i sliding window, any required interior restoration associated with removal of existing windows, removal and reinstallation of blinds.

FIM 6 – Windows-Window Film

Johnson Controls shall furnish and install window film at the locations specified in the FIM matrix. Install VISTA Low Emissivity series VE 50 CDF window film on inside surface of the exterior perimeter windows.

BUILDING	SQUARE FT.
Mattituck Jr.Sr High School	10,403
Cutchogue East Elementary School	4,535
District Office	814

FIM 7 – Plug Load Controllers

Johnson Controls shall furnish, install and commission a plug load management system that will gain control of specified plug load equipment as listed below. The system will use an existing Wi-Fi network that will communicate to an energy management user interface. Through the user interface, equipment will be monitored, scheduled and turned on / off. In areas where no Wi-Fi connection exists, plugs will be programmed with the intended schedule for the equipment.

- Main Printers and Copiers

- Large Coffee Makers
- Conference Rooms Projectors
- Water Fountains
- Window AC units

Building	Copier	Printer	Smart Board	Projector	Window AC	Water Fountain	Large Coffee Maker
Mattituck Jr.Sr High School	6	29	38	30	13	5	1
Cutchogue East Elementary School	4	20	42	23	5	8	0
Total	**10**	**49**	**80**	**53**	**18**	**13**	**1**

FIM 7 Exclusions:

- When equipment is changed out it will be the responsibility of the Customer to ensure the controller is moved to the new equipment.

FIM 8 – Unit Ventilator Refurbishment

Johnson Controls shall refurbish and commission Unit Ventilators as described below. Mechanical refurbishment includes:

- Vacuum cleaning of entire unit ventilator cabinet
- Vacuum cleaning of heating and (if applicable) cooling coils
- Repair/replacement of defective motors (as deemed necessary by Owner or Architect)
- Replacement of damper bearing and edge seals (as deemed necessary by Owner or Architect)
- Repair/replacement of speed switch and fan transformer (as deemed necessary by Owner or Architect)
- Repair/replacement of fuses and disconnect (as deemed necessary by Owner or Architect
- Filter replacement.

Building	Refurbishment UVs
Mattituck Jr.Sr High School	40
Cutchogue East Elementary School	53
Total	**93**

FIM 9 – Refrigeration Compressor Controllers

Johnson Controls shall furnish, install and commission new IntelliCon-RU controllers on the individual compressor units located in the buildings as listed below.

Building	Location	Area-System Served	Equipment Type
Mattituck Jr.Sr High School	Kitchen Basement	Walk-In Refrigeration Unit	Refrigeration Compressor
Mattituck Jr.Sr High School	Kitchen Basement	Walk-In Refrigeration Unit	Refrigeration Compressor
Cutchogue East Elementary School	Roof	Walk-In Refrigeration Unit	Refrigeration Compressor

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT

Signature: Charles E. Anderson

Printed Name: CHARLES E. ANDERSON

Title: VP, BOARD OF EDUCATION

Date: 3-16-17

JOHNSON CONTROLS, INC.

Signature: James B. Cotton

Printed Name: James B. Cotton

Title: RGM

Date: 3/15/17

ASSURED PERFORMANCE GUARANTEE

A. Certain Definitions

For purposes of this Agreement, the following terms have the meanings set forth below:

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

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

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

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

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Exhibit 6 below.

Guarantee Period is eighteen (18) years after the date of Substantial.

Guarantee Term will commence on the first day of the month next following the Substantial Completion date and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement.

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

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

Operational Cost Avoidance are the savings achieved through material reduction of the new equipment that were installed as set forth in Schedule 1.

Guaranteed Rebate Project Benefits are rebate dollars offered through the local utility for installing energy efficient equipment and guaranteed by JCI.

Guaranteed Project Benefits are the Measured Project Benefits plus the Operational Cost Avoidance to be achieved for a particular period during the term of this Agreement. The cost of the M&V Services is included in the Total Guaranteed Project Benefits guaranteed to be achieved during the entire term of this Agreement.

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

B. Guarantee Details

The following Exhibits are attached and made part of this Schedule 2, Section B:

Table 2.1.1: Exhibits Summary

Exhibit 1	Total Project Benefits
Exhibit 2	Measurement and Verification Methodologies
Exhibit 3	Measured Project Benefits
Exhibit 4	Operational Cost Avoidance and Guaranteed Rebate Project Benefits
Exhibit 5	Change in Use or Condition
Exhibit 6	Baseline Calculations and Utility Rates
Exhibit 7	Primary Operations Schedules Pre & Post Retrofit
Exhibit 8	Measurement and Verification Services

EXHIBIT 1: TOTAL PROJECT BENEFITS – Chart will require revision after modification of scope - Done

Subject to the terms and conditions of this Agreement JCI guarantees that Customer will achieve a total of $2,905,997 in Measured Project Benefit (Utility Cost Avoidance Measurable Savings), $160,550 in Operations Cost Avoidance Savings during the term of this Agreement, for Total Guaranteed Project Benefits of $3,066,546 as set forth in the Total Project Benefits Table below.

Table 2.1.2: Total Project Benefits

Year	Utility Cost Avoidance* Measurable Savings	Operations & Maintenance Cost Avoidance**	Total Guaranteed Project Benefits
Implem.			
1	$135,716	$7,498	$143,214
2	$138,430	$7,648	$146,078
3	$141,199	$7,801	$149,000
4	$144,023	$7,957	$151,980
5	$146,904	$8,116	$155,020
6	$149,842	$8,278	$158,120
7	$152,838	$8,444	$161,282
8	$155,895	$8,613	$164,508
9	$159,013	$8,785	$167,798
10	$162,193	$8,961	$171,154
11	$165,437	$9,140	$174,577
12	$168,746	$9,323	$178,069
13	$172,121	$9,509	$181,630
14	$175,563	$9,699	$185,263
15	$179,075	$9,893	$188,968
16	$182,656	$10,091	$192,747
17	$186,309	$10,293	$196,602
18	$190,035	$10,499	$200,534
Totals	**$2,905,997**	**$160,550**	**$3,066,546**

*Utility Cost Avoidance is a Measured Project Benefit. Utility Cost Avoidance figures in the table above are based on anticipated 2% increase in unit energy costs as set forth in the table in Exhibit 6

Annual Measurement and Verification (M&V) Services

JCI shall provide M&V Services for a period of three (3) years starting on the first day of the month next following the Substantial Completion date. Within sixty (60) days of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved during the Installation Period. Any Project Benefits achieved during the Installation Period shall inure to the benefit of the Customer and shall not be allocated to any subsequent year of the Guarantee Term. Within sixty (60) days of each anniversary of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved for the applicable year plus any Operational Cost Avoidance and any additional Guaranteed Energy Rebates & Incentives applicable to such period and advise Customer of same in writing.

As set forth in the Certification provided by JCI to the NY State Education Department, JCI guarantees recovery of costs of the Agreement from energy savings realized by the Customer during a period of 18 years after Substantial Completion.

Customer acknowledges and agrees that if, for any reason during the agreed-upon period of M&V Services for years 4-18, it (i) cancels or terminates receipt of M&V Services, or (ii) cancels or terminates this Agreement, it shall be assumed (in accordance with Option A and Option B of the North American Energy Measurement and Verification Protocol (NEMVP), and based upon the equipment continuing to operate in accordance with specified criteria) that the Annual Project Benefits will be met during each year of the Guarantee Period.

Customer further acknowledges and agrees that if, for any reason, it (i) fails to pay for M&V Services in accordance with Schedule 4 – Price and Payment Terms, (ii) fails to fulfill any of Customer's responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, including but not limited to Customer's failure to operate and maintain the equipment and/or systems pursuant to manufacturer instructions, or (iii) otherwise materially breaches this Agreement, JCI shall issue a written notice to the Customer stating the nature of the alleged breach and shall provide Customer with a twenty (20) day period to cure such breach. If the Customer fails to cure such breach within such twenty (20) day period, Customer acknowledges and agrees that the Assured Performance Guarantee shall automatically terminate.

C. **Project Benefits Shortfalls or Surpluses.**

(1) During the period in which JCI is providing M&V Services, the following shall apply:

(a) *Project Benefits Shortfalls*. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, JCI shall, (a) pay to Customer the amount of such shortfall, or (b) subject to Customer's written agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer in accordance with all applicable laws, rules and regulations.

(b) *Project Benefits Surpluses*. If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, the surplus, in its entirety, shall inure to the benefit of the Customer and shall not be applied to any shortfall during any year of the Guarantee term.

(2) If Customer elects M&V Services over a period of time shorter than the Guarantee Period, or if Customer terminates M&V Services early as set forth above, then the following shall apply:

(a) If the Annual Project Benefits are met in each year during the period that M&V Services are provided, it shall be assumed (in accordance with Option A and Option B of the NEMVP, and based upon the equipment continuing to operate in accordance with specified criteria) that the Annual Project Benefits will be met during each year of the Guarantee Period.

(b) If there is an Annual Project Benefits Shortfall in any one year during the period that M&V Services are provided and such Shortfall is the result of the equipment not operating in accordance with specified criteria, then Customer shall allow JCI access to the property to conduct repairs or make adjustments to the equipment as necessary to resolve the cause of the Shortfall. Once the cause of the

Shortfall is resolved and payment for the Shortfall is received by the Customer, it shall be assumed (based upon the equipment continuing to operate in accordance with the specified criteria) that the Annual Project Benefits will be met during each year of the Guarantee Period. If the Shortfall continues to exist notwithstanding the equipment operating in accordance with the specified criteria, JCI shall pay the amount of the Shortfall to Customer from the time that the Shortfall occurred through the remainder of the Guarantee Period.

(c) If there is an Annual Project Benefits Shortfall in any one year during the period that M&V Services are provided and such Shortfall is not the result of the equipment not operating in accordance with specified criteria, then JCI shall pay the amount of the Shortfall to Customer from the time the Shortfall occurred through the remainder of the Guarantee Period.

All payments to Customer for any Shortfall shall be payable to Customer in the form of a certified check.

EXHIBIT 2: MEASUREMENT AND VERIFICATION METHODOLOGIES

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

Option A
Partially Measured Retrofit Isolation

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

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

Table 2.2.1: Option A Measures

FIM #	Facility Improvement Measure	M&V Option
FIM 1	Lighting - Fixture Retrofit	A
FIM 3	Heating Distribution System-Pipe and Valve Insulation	A
FIM 4	Boiler/DHW Heater – Burner Controllers	A
FIM 5	Window Replacements	A
FIM 6	Windows-Window Film	A
FIM 7	Plug Load Controllers	A
FIM 8	Unit Ventilator Refurbishments	A
FIM 9	Refrigeration Compressor Controllers	A

FIM 1: Lighting – Fixture Retrofit

M&V Option: NEMVP-A (One Time)

Measurement Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the light fixtures subject to the lighting retrofit project.

Verification Period & Frequency: One time during post-retrofit year in Customer's presence.

Pre-Installation Activities:
Pre-retrofit lighting kw will be analyzed and listed in the lighting line by line by location and fixture type. The kw data from the line by line will be used for pre-retrofit savings calculation. Pre-kw will be sampled and measured to validate the line by line. Light level will be quality checked. Lighting hours provided by the customer will be used.

Post-Installation Activities:
Post-kw measurements will be sampled and measured once after retrofit and will be used for rest of the guarantee term. Light level will be quality checked. Inspection results and JCI warranty commitments will be communicated to the customer to maximize warranty benefits. Lighting hours provided by the customer will be used. Warranty claim procedure will be the responsibility of the customer.

Formulas and values in the DEA will be used to calculate the savings

FIM 3: Heating Distribution System - Pipe and Valve Insulation
M&V Option: NEMVP-A (One Time)

Measurement Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to this Pipe and Valve Insulation project.

Verification Equipment: Thermal gun (or infrared camera) and measuring tape

Verification Frequency & Period: One time during both pre-retrofit period and post-retrofit period

Pre-Installation Activities:
A thermal gun will be used to measure surface temperatures or an infrared camera will be used to capture the thermo graphic image of pre-retrofit thermal leaks.

Post- Installation Activities:
Accuracy of the as-built will be verified (sampling will be conducted as detailed in the sampling procedure). A digital camera will be used to document the post-retrofit conditions. A thermal gun or an infrared camera will be used to verify proper operation (sampling will be conducted as detailed in the sampling procedure).

Formulas and values in the DEA will be used to calculate the savings

FIM 4: Boilers/DHW Heaters - Burner Controllers

M&V Option: NEMVP-A (One Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to this boiler burner controller project.

Verification Period & Frequency: One-time the first post-retrofit year.

Pre-Installation Activities:
Verify that the boilers do not have any burner controllers installed on them.

Post- Installation Activities:
A digital camera will be used to document the post- retrofit conditions. Inspect and verify installed boiler controllers to see if they meet the specifications of the contract in terms of quantity, quality and rating. Verify if they perform in accordance with functional tests and provide commissioning report for each unit

Formulas and values in the DEA will be used to calculate the savings

FIM 5 – Windows-Window Replacement

M&V Option: NEMVP-A (One Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to this building envelope improvements – attic insulation project.

Interaction: None.

Verification Equipment: Infrared camera, thermal gun and measuring tape

Verification Period & Frequency: One time during post-retrofit year in Customer's presence and under designed conditions.

Verification Details:
Post-Verification Procedure:
A digital camera will primarily be used to document the post-retrofit conditions. A thermal gun will be used to measure surface temperatures. If possible, an infrared camera will be used to capture the thermo graphic image of preretrofit thermal leaks and lack thereafter

Formulas and values in the DEA will be used to calculate the savings

FIM 6 – Windows-Window Film

M&V Option: NEMVP-A (One Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to this measure.

Interaction: None.

Verification Equipment: Infrared camera, thermal gun and measuring tape

Verification Period & Frequency: One time during post-retrofit year in Customer's presence and under design conditions.
Verification Details:
Post-Verification Procedure:
A digital camera will primarily be used to document the post-retrofit conditions. A thermal gun will be used to measure surface temperatures.

Formulas in the DEA will be used to calculate the savings

FIM 7: Plug Load management - BERT
M&V Option: NEMVP-A (One-Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to the plug load Management project.

Measured Key Parameter: Operating Schedule

Measuring Equipment: M&V BERT Kit

Verification Period & Frequency: One time Two weeks prior to installation and one time two weeks after installation

Pre-Installation Activities: M&V BERT Kit will be installed on 10% of the equipment that will be controlled for a period of two weeks to establish the baseline operating schedule.

Post-Installation Activities: A digital camera will be used to document the post- retrofit conditions. Inspect and verify the BERT installation to see if they meet the specifications of the contract in terms of quantity, quality and rating. Once the BERT plugs are installed, schedules are established and operational.
Formulas and assumptions in the DEA will be used to calculate the savings

FIM 8 - Unit Ventilator Refurbishments

M&V Option: NEMVP-A (One Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to this unit ventilator refurbishments project.

Verification Period & Frequency: One-time the first post-retrofit year.

Post- Verification Procedure: A digital camera will be used to document the post- retrofit conditions. Inspect and verify the unit ventilator refurbishments to see if they meet the specifications of the DEA in terms of quantity and manufacturer's specifications.

Formulas and values in the DEA will be used to calculate the savings

FIM 9 - Refrigeration Compressor Controllers

M&V Option: NEMVP-A (One Time)

Verification Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the items that are subject to the refrigeration compressor controller project.

Verification Period & Frequency: One-time the first post-retrofit year.

Post- Verification Procedure: A digital camera will be used to document the post- retrofit conditions. Inspect and verify the refrigeration compressor controller installation to see if they meet the specifications of the DEA in terms of quantity and manufacturer's specifications.
Verify if they perform in accordance with the functional specifications in the DEA and meeting the functional tests and provide commissioning report for each unit

Formulas and values in the DEA will be used to calculate the savings

Option B
Retrofit Isolation

Measured Project Benefits are determined by field measurement of the energy use of the systems to which an Improvement Measure was applied separate from the energy use of the rest of the facility. Short-term, long-term or continuous measurements are taken throughout the pre and post-retrofit periods. Engineering calculations in the Detailed Energy Audit, using short term, long-term or continuous pre and post-retrofit measurements are used to calculate the Measured Project Benefits for the duration of the Guarantee Term.

Measured Project Benefits from the following Improvement Measures will be calculated using Option B:

FIM #	Facility Improvement Measure	M&V Option
FIM 2.1	Energy Management System - Exhaust Fan/Relief Damper Control	B
FIM 2.2	Energy Management System - Optimal Start	B

Table 2.2.2: Option B Measures

FIM 2.1: Energy Management System - Exhaust Fan/Relief Damper Control
M&V Option: NEMVP-B (continuous)

Measurement Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the exhaust fans and relief dampers affected by the energy project.

Measured Parameter: Continuous measurement of outdoor air temperature and exhaust fan ON/OFF status.

Interaction: None

Measuring Equipment: Energy Management System

Measuring Equipment Calibration: Not applicable.

Measurement Period: 15 minute samples

Measurement Frequency: Continuous measurement

Measurement and Verification Details:

Pre-Installation Activities:
During detail audit on site it was documented that the district's exhaust fans operated continuously 24/7.

Post-Installation Activities:
Energy Management System will continuously monitor post-retrofit exhaust fan status. The date-time stamp will be included to differentiate occupied/unoccupied and summer/winter periods.

Formulas and values in the DEA will be used to calculate the savings

FIM 2.2: Energy Management System - Optimal Start
M&V Option: NEMVP-B (continuous)

Measurement Boundary: Retrofit isolation – Project savings will be determined within the measurement boundary that encompasses only the spaces temperatures and unit status affected by the energy project.

Measured Parameter: Continuous measurement of outdoor air temperature, space temperature and unit status.

Interaction: with Temperature Setback

Measuring Equipment: Energy Management System

Measuring Equipment Calibration: Not applicable.

Measurement Period: 15 minute samples

Measurement Frequency: Continuous measurement

Measurement and Verification Details:

Pre-Installation Activities:
During detail audit on site it was documented via interviews that the systems were manually started based on building operating schedule.

Post-Installation Activities:
Energy Management System will continuously monitor post-retrofit outdoor air, space temperature and unit status. The date-time stamp will be included to differentiate occupied/unoccupied and summer/winter periods.

Formulas and values in the DEA will be used to calculate the savings

EXHIBIT 3: MEASURED PROJECT BENEFITS

Table 2.3 below defines and describes the ECMs included in this guarantee that comprise Measured Utility Cost Avoidance savings:

Table 2.3: Measured Project Benefits Summary

FIM#	PROPOSED MEASURES	Electricity Savings kW	Electricity Savings kWh/yr	Electricity Savings $/yr	Thermal MMBtu/yr	Thermal $/yr	Total Savings $/yr
FIM 1	Lighting - Fixture Retrofit	14.3	177,816	$ 26,457	(86)	$ (1,673)	$ 24,784
FIM 2.1	Energy Management System - Exhaust Fan/Relief Damper Control	0	12,478	$ 1,786	1,099	$ 15,107	$ 16,892
FIM 2.2	Energy Management System - Optimal Start	0	-	$ -	709	$ 12,884	$ 12,884
FIM 3	Heating Distribution System - Pipe and Valve Insulation	0	-	$ -	1,323	$ 25,622	$ 25,622
FIM 4	Boilers/DHW Heaters - Burner Controllers	0	-	$ -	664	$ 14,904	$ 14,904
FIM 5	Windows - Replacements	0	990	$ 144	79	$ 884	$ 1,028
FIM 6	Windows - Window Film	0	62,983	$ 8,924	819	$ 15,705	$ 24,629
FIM 7	Plug Load Controllers	0	74,125	$ 10,574	-	$ -	$ 10,574
FIM 8	Unit Ventilator Refurbishments	0	-	$ -	244	$ 3,971	$ 3,971
FIM 9	Refrigeration Compressor Controllers	0	3,003	$ 427	-	$ -	$ 427
	TOTALS	**14**	**331,395**	**$ 48,312**	**4,852**	**$ 87,404**	**$ 135,716**

Table 2.3.2: Detailed breakdown required by 8 N.Y.C.R.R. §155.20(d)(4)

Table 2.3.2 represents the detailed breakdown set forth in 8 N.Y.C.R.R. §155.20(d). Said chart is subject to modification based upon review by SED. All modifications to this Table must be submitted to the Customer for its written approval.

FIM #	PROPOSED MEASURES	Cost $	Total Savings $/yr	Payback yrs
FIM 1	Lighting - Fixture Retrofit	$ 246,714	$ 24,784	10.0
FIM 2	Energy Management System	$ 502,845	$ 29,776	16.9
FIM 3	Heating Distribution System - Pipe and Valve Insulation	$ 53,388	$ 25,622	2.1
FIM 4	Boilers/DHW Heaters - Burner Controllers	$ 59,331	$ 14,904	4.0
FIM 5	Windows - Replacements	$ 252,703	$ 1,028	245.8
FIM 6	Windows - Window Film	$ 119,220	$ 24,629	4.8
FIM 7	Plug Load Controllers	$ 56,286	$ 10,574	5.3
FIM 8	Unit Ventilator Refurbishments	$ 70,267	$ 3,971	17.7
FIM 9	Refrigeration Compressor Controllers	$ 2,790	$ 427	6.5
	PM/Engineering/AE fee	$ 388,968		
	O&M Savings		$ 7,498	
	TOTALS	**$ 1,752,512**	**$ 143,214**	

EXHIBIT 4: OPERATIONAL & MAINTENANCE (O&M) AND REBATE PROJECT BENEFITS

Operational Cost Avoidance:

M&V Option: NEMVP-A
For measures where the baseline (or boundary) is well understood, and measure operating hours are not expected to change, only the "change in equipment performance" is needed in order to calculate the savings (or cost avoidance).

Lighting Operational Cost Avoidance is calculated by comparing the existing lamp and ballast average failure rate and replacement cost with the proposed project replacement lamp and ballast average failure rate and replacement cost. Measure operating hours are not expected to change.

Boiler Operational Cost Avoidance is calculated by comparing the maintenance cost of the existing boilers and comparing it to the maintenance cost of the newly installed boilers. Measures operating hours are not expected to change.

Lighting Operation & Maintenance Cost Avoidance: $7,498

Total Operational Cost Avoidance: $ 7,498

Customer agrees that the Operations Cost Avoidance savings are reasonable and that the installation of the Improvement Measures will enable Customer to take actions that will result in the achievement of such savings.

EXHIBIT 5: CHANGES IN USE OR CONDITION

ADJUSTMENT TO BASELINE
AND/OR ANNUAL PROJECT BENEFITS

Customer agrees to notify JCI, within fourteen (14) days, of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Improvement Measure to which this Schedule applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Benefits realized under this Agreement.

Such a change, expansion, addition, or condition is defined as: (a) changes in the primary use of any facility, Improvement Measure, or portion of the premises; (b) changes to the hours of operation of any facility, Improvement Measure, or portion of the premises; (c) changes or modifications to the Improvement Measures or any related equipment; (d) changes to the M&V Services provided under this Agreement; (e) failure of any portion of the premises to meet building codes; (f) changes in utility suppliers, utility rates, method of utility billing, or method of utility purchasing; (g) insufficient or improper maintenance not in accordance with manufacturers recommendations of the Improvement Measures or any related equipment at any facility or portion of the premises (other than by JCI); (h) changes to the Improvement Measures or any related equipment or to any facility or portion of the premises required by building codes or any governmental or quasi-governmental entity; or (i) additions or deletions of Improvement Measures or any related equipment at any facility or portion of the premises.

Upon receipt of such notice, or if JCI independently learns of any such change or condition, JCI shall calculate and send to Customer a notice of adjustment to the Baseline and/or Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose provided, however that Customer shall have ten (10) days following its receipt of the notice to review and approve such adjustment, which approval shall not be unreasonably withheld, conditioned or delayed.

EXHIBIT 6: BASELINE CALCUALTIONS AND UTILITY RATES

The unit utility costs for the Baseline period are set forth below as "Base Utility Cost" and shall be used for all calculations made under this Schedule. The Base Utility Cost shall be escalated annually by the actual utility cost escalation but such escalation shall be no less than the mutually agreed "floor" escalation rate of two percent (2%). The Base Utility Cost for each type of utility represents the 12 month average utility costs from July 1, 2014 through June 30, 2015, unless the time period used is otherwise modified by SED or requested by the Customer.

Table 2.6.1: Baseline Electrical Consumption Data & Rates

Name	Sq-ft	Electric Usage and Cost						
		Demand kW	Avg kW Cost	Electric Usage kWh	Usage kWh Cost	Unblended $/kWh	Total Electric Cost	Cost per kWh (BEER)
Mattituck High Jr/Sr School	114,000	328	$ 9.85	1,368,900	$ 197,744	$ 0.144	$ 236,580	$ 0.173
Cutchogue Elementry	98,000	173	$ 8.98	711,040	$ 105,449	$ 0.148	$ 124,048	$ 0.174
Admin	12,994	18	$ 9.31	41,088	$ 6,812	$ 0.166	$ 8,833	$ 0.215
	224,994	**519**		**2,121,028**	**$ 310,005**		**$ 369,460**	

The above rates shown in Table 2.6.1will be known as **Floor Electrical Rates**, for the purpose of the Assured Performance Guarantee. The annual calculated electric rates are expected to increase every year. In the event that the annual rates are lower than the above baseline rates, the 2% escalated floor rates will be substituted for the annual calculated rate.

The Electric Rates will be averaged over the course of the one-year baseline period, as provided by customer. In turn, the Incremental Electric Rate (IER), and the Demand Rate (DR) will be averaged annually over the course of the reporting periods, as reflected on utility invoices, for equitable cost avoidance savings reporting.

The following formula will be used to calculate the current reporting period Incremental Energy Rate (IER):

FORMULA B-2

$$IER = \sum TKC_{1\text{-}12} \div \sum TKWH_{1\text{-}12}$$

Where:

IER: Incremental Electrical Rate (Dollars per kWh)

$\sum TKC_{1\text{-}12}$: Sum Total of Monthly Electrical Utility Costs (Dollars) for kWh included Fuel Adjustment Cost and other related Energy Charges for Months 1 Through 12 of the current reporting period.

$\sum TKWH_{1\text{-}12}$: Sum Total of Monthly Electrical Incremental Use (kWh) for Months 1 Through 12 of the current reporting period.

The following formula will be used to calculate the current reporting period Incremental Demand Rate (DR):

FORMULA B-3

$$DR = \Sigma TKC_{1\text{-}12} \div \Sigma TKWH_{1\text{-}12}$$

Where:

DR: Demand Electrical Rate (Dollars per kW)

$\Sigma TKC_{1\text{-}12}$: Sum Total of Monthly Electrical Utility Costs (Dollars) for kW included Fuel Adjustment Cost and other related Energy Charges for Months 1 Through 12 of the current reporting period.

$\Sigma TKW_{1\text{-}12}$: Sum Total of Monthly Electrical Demand Use (kW) for Months 1 Through 12 of the current reporting period.

Table 2.6.2: Baseline Gas Consumption Data & Rates

Name	Sq-ft	Nat Gas Usage and Cost					
		Gas Usage Therms		Gas Cost		Cost per Therm	
Mattituck High Jr/Sr School	114,000	5,575	$	5,255	$	0.943	
Cutchogue Elementry	98,000	44,119	$	39,734	$	0.901	
Admin	12,994	0	$	-			
	224,994	**49,693**	**$**	**44,989**	**$**	**0.905**	

The above rates shown above in Table 2.6.2 will be known as **Floor Natural Gas Rates**, for the purpose of the Assured Performance Guarantee. The annual calculated natural gas rates are expected to increase every year. In the event that the annual rates are lower than the above baseline rates, the 2% escalated floor rates will be substituted for the annual calculated rate.

The natural gas unit costs have been averaged over the course of the one-year period. In turn, unit costs will be averaged over the course of the reporting period, as reflected on utility invoices, for equitable cost avoidance savings reporting.

The following formulas will be used to calculate the current reporting period Fuel Rate(s) for Natural Gas:

FORMULA G-1

$$NGR = \Sigma TGC_{1\text{-}12} \div \Sigma TGU_{1\text{-}12}$$

Where:

NGR: Natural Gas Rate ($/Therm)

$\Sigma TGC_{1\text{-}12}$: Sum Total of Monthly Gas Costs ($)

$\Sigma TGU_{1\text{-}12}$: Sum Total of Monthly Gas Purchased (Therms) for Months 1 Through 12 of the reporting period.

Table 2.6.3: Baseline Fuel Oil Consumption Data & Rates

Name	Sq-ft	Oil Usage and Cost					
		Oil Usage Gallons		Oil Cost		Cost per Gallon	
Mattituck High Jr/Sr School	114,000	60,981	$	202,927	$	3.328	
Cutchogue Elementry	98,000	4,765	$	17,003	$	3.568	
Admin	12,994	6,961	$	23,317	$	3.350	
	224,994	**72,708**	**$**	**243,248**	**$**	**3.346**	

The above rates shown above in Table 2.6.3 will be known as the **Floor Fuel Oil Rates (except for the Cogen)** for the purpose of this Assured Performance Guarantee. The annual calculated FOR shall never go below the floor rate(s).
In the event that the annual rates are lower than the above baseline rates, the 2% escalated floor rates will be substituted for the annual calculated rate.

The Fuel Oil unit costs have been averaged over the course of the one-year period. In turn, unit costs will be averaged over the course of the reporting period, as reflected on utility invoices, for equitable cost avoidance savings reporting.

The following formulas will be used to calculate the current reporting period Fuel Rate(s) for Fuel Oil:

FORMULA O-1

$$\mathbf{FOR} = \Sigma TGC_{1\text{-}12} \div \Sigma TGU_{1\text{-}12}$$

Where:

FOR: Fuel Oil Rate ($/Gallon)

$\Sigma TGC_{1\text{-}12}$: Sum Total of Monthly Oil Costs ($)

$\Sigma TGU_{1\text{-}12}$: Sum Total of Monthly Oil Purchased (Gallons) for Mos. 1 – 12 of the reporting period

Energy Conversion Conventions

For purposes of this Guarantee the follow fuel conversions will apply:

1 CCF (100 cubic feet) of Natural Gas = 103,000 Btus (British Thermal Units)
1 Therm of Natural Gas = 100,000 Btus
1 MMBtu of Natural Gas = 1,000,000 Btus
1 Decatherm of Natural Gas = 1,000,000 Btus
1 Gallon of Fuel Oil = 139,000 Btus

EXHIBIT 7: PRIMARY OPERATIONS SCHEDULE PRE & POST RETROFIT

District Wide Pre and Post Operation Schedule:

Table 2.7.1: Pre-Retrofit Facility/Area

	Lighting		HVAC	
	Time On	Time Off*	Time On	Time Off*
Monday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Tuesday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Wednesday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Thursday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Friday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Saturday	Unoccupied	Unoccupied	Unoccupied	Unoccupied
Sunday	Unoccupied	Unoccupied	Unoccupied	Unoccupied
Holidays	Unoccupied	Unoccupied	Unoccupied	Unoccupied

*Elementary school shutdown at 4 PM, all other operation coincides with high school and middle school.

Occupied Room Temperature During Heating Season: 70degrees F
Unoccupied Low Temperature Limit During Heating Season: 65 degrees F
Heating season is September 15th – May 31st

Occupied Room Temperature During Cooling Season: 72 degrees F
Unoccupied High Temperature Limit During Cooling Season: 78 degrees F
Cooling season is May 1st to September 14th

Table 2.7.2 Post-Retrofit Facility/Area

	Lighting		HVAC	
	Time On	Time Off*	Time On	Time Off*
Monday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Tuesday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Wednesday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Thursday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Friday	6:00 AM	5:00 PM	6:00 AM	5:00 PM
Saturday	Unoccupied	Unoccupied	Unoccupied	Unoccupied
Sunday	Unoccupied	Unoccupied	Unoccupied	Unoccupied
Holidays	Unoccupied	Unoccupied	Unoccupied	Unoccupied

*Elementary school shutdown at 4 PM, all other operation coincides with high school and middle school.

Occupied Room Temperature During Heating Season: 68 degrees F
Unoccupied Low Temperature Limit During Heating Season: 55 degrees F
Heating season is September 15th – May 31st

Occupied Room Temperature During Cooling Season: 72 degrees F
Unoccupied High Temperature Limit During Cooling Season: 78 degrees F
Cooling season is May 1st to September 14th

EXHIBIT 8: MEASUREMENT & VERIFICATION SERVICES

JCI will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a JCI Performance Assurance Specialist will track Measured Project Benefits. JCI will report the Measured Project Benefits achieved during the Installation Period, to Customer within 60 days of the commencement of the Guarantee Term.

2. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will provide Customer with an annual written report containing:

    A. an executive overview of the project's performance and Project Benefits achieved to date;

    B. a summary analysis of the Measured Project Benefits accounting; and

    C. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.

3. During the Guarantee Term, a JCI Performance Assurance Specialist will monitor the on-going performance of the Improvement Measures, as specified in this Agreement, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Specialist will periodically assist Customer, on-site or remotely, with respect to the following activities:

    A. review of information furnished by Customer from the facility management system to confirm that control strategies are in place and functioning;

    B. advise Customer's designated personnel of any performance deficiencies based on such information;

    C. coordinate with Customer's designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and

    D. inform Customer of opportunities to further enhance project performance and of opportunities for the implementation of additional Improvement Measures.

4. For specified Improvement Measures utilizing an "Option A" M&V protocol, JCI will:

    A. conduct pre and post installation measurements required under this Agreement;

    B. confirm the building management system employs the control strategies and set points specified in this Agreement; and

    C. analyze actual as-built information and adjust the Baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).

5. For specified Improvement Measures utilizing an "Option B" M&V protocol, JCI will:

    A. confirm that the appropriate metering and data points required to track the variables associated with the applicable Improvement Measures' benefits calculation formulas are established; and

    B. set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.

    C. Trend data records maintained in the ordinary course of system operation shall be used and relied upon by Johnson Controls in connection with Project Benefit calculations. Johnson Controls will use commercially reasonable efforts to ensure the integrity of the data collected to calculate the required metrics. In the event data are lost due to equipment failure, power failure or other interruption in data collection, transmission or storage, Johnson Controls will use reasonable engineering methods to estimate or replace the lost data.

Schedule 3

CUSTOMER RESPONSIBILITIES

In order for JCI to perform its obligations under this Agreement with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Customer shall be responsible for:

1. Providing JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;

2. Providing for shut down and scheduling of affected locations during installation, including timely shutdowns of chilled water and hot water systems as needed to accomplish the Work and/or M&V Services;

3. Providing assistance to JCI in obtaining any permits, approvals, and licenses required under this Agreement [Note: JCI is responsible for obtaining all permits, etc. as per the terms of the Agreement] that are JCI's responsibility to obtain as set forth in Schedule 1;

4. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;

5. Providing the utility bills, reports, and similar information reasonably necessary for administering JCI's obligations under the Assured Performance Guarantee within fifteen (15) days of Customer receipt and/or generation or JCI's request therefor; and,

6. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by JCI.

PRICE AND PAYMENT TERMS

Customer shall make payments to JCI pursuant to this Schedule 4.

Total Project Costs. The total cost of the Project, including payment for JCI, and the Engineer of Record is $1,752,512 and is broken down as follows:

Johnson Controls, Inc.:	$1,669,059
John A. Grillo Architects, P.C.:	$83,453

1. **Payments shall be made to JCI as follows**: within fifteen (15) days after execution of this Agreement, JCI shall submit for the Architect's review and approval a Schedule of Values for all of the Work to be performed under the Agreement. Such Schedule will (i) subdivide the Work into its respective parts; (ii) include values for all items comprising the Work; and (iii) serve as the basis for monthly progress payments made to JCI throughout the Work. The Work will commence upon approval of SED, the securing of the necessary financing by the Customer for the Work and the Customer's receipt of all necessary documents, including the final cash flow statement.

   Customer shall make payment to JCI against monthly invoices for work completed and approved in accordance with the agreed upon Schedule of Values. Payments will be made on a progress payment basis for work completed and accepted by the Customer and the Architect using the AIA format. JCI must attach certified payrolls to each application for payment, together with supporting documents as required by the Customer and Architect.

2. **Payments for Architectural/Engineering Services.** JCI shall be responsible for making payments for Architectural/Engineering services directly to the Architect as set forth herein. The total fee to be paid to the Architect is $83,453. JCI will make payments to the Architect according to the following schedule:

   a. 25% upon District signing contract with ESCO;

   b. 35% upon submittal of plans and specifications to NYSED;

   c. 20% upon approval of plans and specifications by NYSED;

   d. 20% paid monthly during the construction administration phase; and

3. **M&V Services.** Measurement & Verification services for the project from the construction period through Year 3 is included in the price of the agreement as detailed above. The District can request additional years of M&V service beyond Year 3 before the end of that report year.

   * The District may request additional years of M&V services beyond Year 3. This schedule of costs is not included in the Total Project Cost of the energy performance contract set forth above.

Year	Measuremen & Verification Services
4	$6,500
5	$6,500
6	$6,500
7	$6,500
8	$6,500
9	$6,500
10	$6,500
11	$6,500
12	$6,500
13	$6,500
14	$6,500
15	$6,500
16	$6,500
17	$6,500
18	$6,500

Attachment 1

NOTICE TO PROCEED

Johnson Controls, Inc.
6 Aerial Way
Syosset, New York

ATTN: Danny Haffel

Re: Notice to Proceed for MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT

Dear Mr. Haffel:

This Notice to Proceed is being issued by MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT ("Customer") to Johnson Controls, Inc. ("JCI") pursuant to that certain Performance Contract entered into between Customer and JCI for the purpose of notifying JCI to commence work under such contract. This Notice to Proceed shall not relieve JCI of its responsibility to perform any and all duties, tasks and/or obligations required by the Agreement, as may be amended in writing by the parties that may be required prior to commencement of the Work.

By signing and dating this Notice to Proceed, the parties hereto agree to these terms and represent and warrant they have the authority to execute this Notice to Proceed on behalf of their respective organizations.

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT

Signature:_____

Printed Name:_____

Title:_____

Date:_____

ACKNOWLEDGED & AGREED TO:

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

Date:_____

Attachment 2

CHANGE ORDER
AIA G701 Change Order Form to be used

Attachment 3

CERTIFICATE OF SUBSTANTIAL COMPLETION

AIA G704 Form to be used

Attachment 3

CERTIFICATE OF FINAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
6 AERIAL WAY
SYOSSET, NEW YORK 11791

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT ("Customer")
385 DEPOT LANE
CUTCHOGUE NY 11935

PROJECT: MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT; Performance Contract dated _____ __, 20__ between JCI and Customer

By executing this Certificate of Final Completion, Customer acknowledges the following:

The work set forth in the Performance Contract has been reviewed and determined by Customer to be fully complete.

The Work performed under this performance contract has been reviewed and found to be complete. The date of final completion of the Project designated above is hereby established as _____. In accordance with the Agreement documents, based upon on-site observations and all data submitted in connection with the Project, the Architect certifies to Customer that to the best of the Architect's knowledge, information and belief, the Work has progressed as indicated, the quality of the Work is in accordance with the Agreement documents, and JCI is entitled to payment in accordance with the Agreement documents.

Amount Certified: _____

John A. Grill Architect, P.C.

By: _____ Date: _____

Printed Name: _____

Dated _____, 20__.

MATTITUCK-CUTCHOGUE UNION FREE SCHOOL DISTRICT

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

Attachment 4

Lighting Survey line-by-line
"Mattituck Schools lighting lxl Rev-B.xls"

Facility	Mattituck Schools
Location	Mattituck, NY

Avg. Elec. Rate (Kwh) =	$	0.130	*Estimate*
Avg. Demand Rate (KW) =	$	10.00	***applied for 9.5 Months*** (demand not applied to Exterior fixtures since run-time will occur after peak period)
Utility =	PSEG Long Island		

"Adaptable Controls" is the synergy name for a motion sensor that can be adjusted via remote control, allowing the high mode, setting the low mode, DUAL time-delay for inactivity, first from high mode to low mode and then a cut-off setting. Also includes sensor sensitivity adjustment, built-in photocell and adjustable fade down and ramp up times.

Existing Performance

Variables Highlighted

Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	Fixture: E Qty	Fixture: P Qty	Fixture: Ht	Fixture Watts: E Watts	Fixture Watts: P Watts	Fixture Watts: High Trim %	Fixture Watts: High Mode Watts	Fixture Watts: Low trim %	Fixture Watts: Low Mode Watts	Estimated Hours for Energy Savings: E Hours	Estimated Hours for Energy Savings: % Time High Mode	Estimated Hours for Energy Savings: % Time Low Mode	Estimated Hours for Energy Savings: % Time Off	Estimated Hours for Energy Savings: P Hours High	Estimated Hours for Energy Savings: P Hours Low	Estimated Hours for Energy Savings: P Hours Off	SAVINGS: kWh Savings from Retrofit	SAVINGS: kWh Savings from Controls	SAVINGS: Total kWh Saved	SAVINGS: Existing kW	SAVINGS: Post kW	SAVINGS: Total kW Saved
Admin - Exterior	1	E	Exterior	EXTERIOR RIGHT SIDE	1X70HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	221	-	221	0.1	0.0	0.1
Admin - Exterior	2	E	Exterior	EXTERIOR RIGHT SIDE	1X150HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1		188	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	594	-	594	0.2	0.0	0.1
Admin - Exterior	3	E	Exterior	EXTERIOR REAR	1X150HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1		188	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	594	-	594	0.2	0.0	0.1
Admin - Exterior	4	E	Exterior	EXTERIOR REAR	1X150HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1		188	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	594	-	594	0.2	0.0	0.1
Admin - Exterior	5	E	Exterior	EXTERIOR LEFT SIDE	1X150HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1		188	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	594	-	594	0.2	0.0	0.1
Admin - Exterior	6	E	Exterior	EXTERIOR LEFT SIDE	1X250HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	1	1	20	295	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	1,024	-	1,024	0.3	0.0	0.3
Admin - Exterior	7	E	Exterior	EXTERIOR POLES FRONT	1X70HPS	40W LED Modular Area/Parking Fixture M1	1	1		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	221	-	221	0.1	0.0	0.1
Cutchogue ES - Exterior	8	E	Exterior	EXTERIOR POLES FRONT	2X250HPS	(2) 80W LED Modular Area/Parking Fixture M1	9	9	25	590	160	100%	160	0%	0	4,015	100%	0%	0%	4,015	-	-	15,538	-	15,538	5.3	1.4	3.9
Cutchogue ES - Exterior	9	E	Exterior	EXTERIOR POLES SIDE LOT	1X250HPS	80W LED Modular Area/Parking Fixture M1	3	3	20	295	80	100%	80	0%	0	4,015	100%	0%	0%	4,015	-	-	2,590	-	2,590	0.9	0.2	0.6
Cutchogue ES - Exterior	10	E	Exterior	EXTERIOR POLES SIDE LOT	2X250HPS	(2) 80W LED Modular Area/Parking Fixture M1	8	8	20	590	160	100%	160	0%	0	4,015	100%	0%	0%	4,015	-	-	13,812	-	13,812	4.7	1.3	3.4
Cutchogue ES - Exterior	11	E	Exterior	EXTERIOR FRONT OF BUILDING	1X250HPS	80W LED Modular Area/Parking Fixture M1	4	4	20	295	80	100%	80	0%	0	4,015	100%	0%	0%	4,015	-	-	3,453	-	3,453	1.2	0.3	0.9
Cutchogue ES - Exterior	12	E	Exterior	EXTERIOR FRONT OF BUILDING (1)	1X70HPS	No Retrofit	2	2		95	95	100%	95	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.2	0.2	-
Cutchogue ES - Exterior	13	E	Exterior	EXTERIOR FRONT OF BUILDING (2)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Cutchogue ES - Exterior	14	E	Exterior	EXTERIOR FRONT OF BUILDING (3)	NO LIGHT	No Retrofit	4	4		0	0	100%	0	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	-	-	-
Cutchogue ES - Exterior	15	E	Exterior	EXTERIOR FRONT OF BUILDING (4)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Cutchogue ES - Exterior	16	E	Exterior	EXTERIOR FRONT OF BUILDING (4)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	3	3		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	662		662	0.3	0.1	0.2
Cutchogue ES - Exterior	17	E	Exterior	EXTERIOR FRONT OF BUILDING (5)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	1	1		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	221	-	221	0.1	0.0	0.1
Cutchogue ES - Exterior	18	E	Exterior	EXTERIOR FRONT OF BUILDING (5)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Cutchogue ES - Exterior	19	E	Exterior	EXTERIOR FRONT OF BUILDING (6)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Cutchogue ES - Exterior	20	E	Exterior	EXTERIOR FRONT OF BUILDING (6)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	1,349	-	1,349	0.4	0.0	0.3
Cutchogue ES - Exterior	21	E	Exterior	EXTERIOR FRONT OF BUILDING (9)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2

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E Existing P Proposed

Variables Highlighted

							Fixture			Fixture Watts						Estimated Hours for Energy Savings							SAVINGS					
Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	E Qty	P Qty	Ht	E Watts	P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Cutchogue ES - Exterior	22	E	Exterior	EXTERIOR FRONT OF BUILDING (9)	1X200INCA	18W LED A21 Bulb	2	2		200	18	100%	18	0%	0	4,015	100%	0%	0%	4,015	-	-	1,461	-	1,461	0.4	0.0	0.4
Cutchogue ES - Exterior	23	E	Exterior - em	EXTERIOR TO GYM - CLASS 135 (6)	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	1	1		0	3	100%	3	0%	0	20	100%	0%	0%	20	-	-	(0)	-	(0)	-	0.0	(0.0)
Cutchogue ES - Exterior	24	E	Exterior	EXTERIOR TO GYM - CLASS 135 (6)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Cutchogue ES - Exterior	25	E	Exterior	EXTERIOR TO GYM - CLASS 135 (5)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	3	3		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	2,024	-	2,024	0.6	0.1	0.5
Cutchogue ES - Exterior	26	E	Exterior	EXTERIOR TO GYM - CLASS 135 (5)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	4	4		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	1,205	-	1,205	0.4	0.1	0.3
Cutchogue ES - Exterior	27	E	Exterior	EXTERIOR TO GYM - CLASS 135 (4)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	5	5		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	1,506	-	1,506	0.5	0.1	0.4
Cutchogue ES - Exterior	28	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (5)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	4	4		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	883	-	883	0.4	0.2	0.2
Cutchogue ES - Exterior	29	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (5)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Cutchogue ES - Exterior	30	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (8)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Cutchogue ES - Exterior	31	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (6)	1X200INCA	18W LED A21 Bulb	2	2		200	18	100%	18	0%	0	4,015	100%	0%	0%	4,015	-	-	1,461	-	1,461	0.4	0.0	0.4
Cutchogue ES - Exterior	32	E	Exterior - em	EXTERIOR CLASS 135 -CLASS 110 (7)	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	1	1		0	3	100%	3	0%	0	20	100%	0%	0%	20	-	-	(0)	-	(0)	-	0.0	(0.0)
Cutchogue ES - Exterior	33	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (4)	1X250HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2	20	295	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	2,208	-	2,208	0.6	0.0	0.6
Cutchogue ES - Exterior	34	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (9)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	1	1		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	221	-	221	0.1	0.0	0.1
Cutchogue ES - Exterior	35	E	Exterior	EXTERIOR CLASS 135 -CLASS 110 (9)	1X200INCA	18W LED A21 Bulb	2	2		200	18	100%	18	0%	0	4,015	100%	0%	0%	4,015	-	-	1,461	-	1,461	0.4	0.0	0.4
Cutchogue ES - Exterior	36	E	Exterior - em	EXTERIOR COURTYARD B	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	1	1		0	3	100%	3	0%	0	20	100%	0%	0%	20	-	-	(0)	-	(0)	-	0.0	(0.0)
Mattituck HS/MS - Exterior	37	E	Exterior	EXTERIOR COURTYARD B	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Mattituck HS/MS - Exterior	38	E	Exterior	EXTERIOR COURTYARD B	1X70MH	30W LED Self-Ballasted Acorn Retrofit Lamp	3	3		95	30	100%	30	0%	0	4,015	100%	0%	0%	4,015	-	-	783	-	783	0.3	0.1	0.2
Mattituck HS/MS - Exterior	39	E	Exterior	EXTERIOR COURTYARD A	1X3LEDEXIT	No Retrofit	2	2		3	3	100%	3	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.0	0.0	-
Mattituck HS/MS - Exterior	40	E	Exterior	EXTERIOR COURTYARD A	1X3LEDEXIT	No Retrofit	4	4		3	3	100%	3	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.0	0.0	-
Mattituck HS/MS - Exterior	41	E	Exterior	EXTERIOR COURTYARD A	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Mattituck HS/MS - Exterior	42	E	Exterior	EXTERIOR COURTYARD A	1X150HPS	40W LED 14" Full Cut-Off Wall Pack Fixture	2	2		188	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	1,188	-	1,188	0.4	0.1	0.3
Mattituck HS/MS - Exterior	43	E	Exterior	EXTERIOR COURTYARD A	2X120HAL	No Retrofit	1	1	20	240	240	100%	240	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.2	0.2	-
Mattituck HS/MS - Exterior	44	E	Exterior	EXTERIOR COURTYARD A	1X70MH	40W LED Self-Ballasted Acorn Retrofit Lamp	4	4		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	883	-	883	0.4	0.2	0.2

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E=Existing P=Proposed

Variables Highlighted

							Fixture			Fixture Watts						Estimated Hours for Energy Savings							SAVINGS					
Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	E Qty	P Qty	Ht	E Watts	P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Mattituck HS/MS - Exterior	45	E	Exterior	EXTEROR POLES	1X70MH	30W LED Self-Ballasted Acorn Retrofit Lamp	8	8		95	30	100%	30	0%	0	4,015	100%	0%	0%	4,015	-	-	2,088	-	2,088	0.8	0.2	0.5
Mattituck HS/MS - Exterior	46	E	Exterior	EXTERIOR POLES DOUBLES	1X250HPS	80W LED Modular Area/Parking Fixture M1	12	12	20	295	80	100%	80	0%	0	4,015	100%	0%	0%	4,015	-	-	10,359	-	10,359	3.5	1.0	2.6
Mattituck HS/MS - Exterior	47	E	Exterior	EXTERIOR LIBRARY AREA (3)	2X250HPS	(2) 80W LED Modular Area/Parking Fixture M1	3	3	20	590	160	100%	160	0%	0	4,015	100%	0%	0%	4,015	-	-	5,179	-	5,179	1.8	0.5	1.3
Mattituck HS/MS - Exterior	48	E	Exterior	EXTERIOR LIBRARY AREA (3)	1X70MH	40W LED Self-Ballasted Acorn Retrofit Lamp	8	8		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	1,767	-	1,767	0.8	0.3	0.4
Mattituck HS/MS - Exterior	49	E	Exterior - em	EXTERIOR LIBRARY AREA (1)	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	1	1		0	3	100%	3	0%	0	4,015	100%	0%	0%	4,015	-	-	(12)	-	(12)	-	0.0	(0.0)
Mattituck HS/MS - Exterior	50	E	Exterior	EXTERIOR LIBRARY AREA (1)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	3	3		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	662	-	662	0.3	0.1	0.2
Mattituck HS/MS - Exterior	51	E	Exterior	EXTERIOR GYM LOBBY - CLASS S104 (2)	1X70HPS	40W LED Self-Ballasted Acorn Retrofit Lamp	2	2		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	442	-	442	0.2	0.1	0.1
Mattituck HS/MS - Exterior	52	E	Exterior	EXTERIOR GYM LOBBY - CLASS S104 (2)	1X70HPS	40W LED 12" Square Garage Canopy Fixture Surface or Pendant Mount	2	2		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	442	-	442	0.2	0.1	0.1
Mattituck HS/MS - Exterior	53	E	Exterior	EXTERIOR GYM LOBBY - CLASS S104 (5)	1X70HPS	40W LED 12" Square Garage Canopy Fixture Surface or Pendant Mount	1	1		95	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	221	-	221	0.1	0.0	0.1
Mattituck HS/MS - Exterior	54	E	Exterior	EXTERIOR GYM LOBBY - CLASS S104 (4)	1X40LEDF	No Retrofit	2	2		40	40	100%	40	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.1	0.1	-
Mattituck HS/MS - Exterior	55	E	Exterior - em	EXTERIOR GYM LOBBY - CLASS S104 (4)	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	12	12		0	3	100%	3	0%	0	4,015	100%	0%	0%	4,015	-	-	(145)	-	(145)	-	0.0	(0.0)
Mattituck HS/MS - Exterior	56	E	Exterior	EXTERIOR GYM LOBBY - CLASS S104 (6)	1X70MH	30W LED Self-Ballasted Acorn Retrofit Lamp	22	22		95	30	100%	30	0%	0	4,015	100%	0%	0%	4,015	-	-	5,741	-	5,741	2.1	0.7	1.4
Mattituck HS/MS - Exterior	57	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (4)	1X75INCA	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		67	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	189	-	189	0.1	0.0	0.0
Mattituck HS/MS - Exterior	58	E	Exterior - em	EXTERIOR CLASS S109 - CAFETERIA (4)	NO LIGHT	New LED Exit Sign w/ Battery Backup and Combo	5	5		0	3	100%	3	0%	0	4,015	100%	0%	0%	4,015	-	-	(60)	-	(60)	-	0.0	(0.0)
Mattituck HS/MS - Exterior	59	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (7)	1X70MH	30W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	12	12		95	30	100%	30	0%	0	4,015	100%	0%	0%	4,015	-	-	3,132	-	3,132	1.1	0.4	0.8
Mattituck HS/MS - Exterior	60	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (7)	1X120INCA	20W LED Self-Ballasted Acorn Retrofit Lamp	1	1		120	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	402	-	402	0.1	0.0	0.1
Mattituck HS/MS - Exterior	61	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (8)	1X120INCA	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		120	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	402	-	402	0.1	0.0	0.1
Mattituck HS/MS - Exterior	62	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (9)	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Mattituck HS/MS - Exterior	63	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (9)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		189	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Mattituck HS/MS - Exterior	64	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (10)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2
Mattituck HS/MS - Exterior	65	E	Exterior	EXTERIOR CLASS S109 - CAFETERIA (6)	1X250HPS	80W LED Modular Area/Parking Fixture M1	3	3	20	295	80	100%	80	0%	0	4,015	100%	0%	0%	4,015	-	-	2,590	-	2,590	0.9	0.2	0.6
Mattituck HS/MS - Exterior	66	E	Exterior	EXTERIOR CLASS S113-129 (12)	1X75INCA	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		67	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	189	-	189	0.1	0.0	0.0
Mattituck HS/MS - Exterior	67	E	Exterior	EXTERIOR CLASS S113-129 (13)	1X150HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	1	1		188	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	675	-	675	0.2	0.0	0.2

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Existing / Proposed

Variables Highlighted

Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	Fixture E Qty	Fixture P Qty	Fixture Ht	Fixture Watts E Watts	Fixture Watts P Watts	Fixture Watts High Trim %	Fixture Watts High Mode Watts	Fixture Watts Low trim %	Fixture Watts Low Mode Watts	Estimated Hours for Energy Savings E Hours	Estimated Hours for Energy Savings % Time High Mode	Estimated Hours for Energy Savings % Time Low Mode	Estimated Hours for Energy Savings % Time Off	Estimated Hours for Energy Savings P Hours High	Estimated Hours for Energy Savings P Hours Low	Estimated Hours for Energy Savings P Hours Off	SAVINGS kWh Savings from Retrofit	SAVINGS kWh Savings from Controls	SAVINGS Total kWh Saved	SAVINGS Existing kW	SAVINGS Post kW	SAVINGS Total kW Saved
Mattituck HS/MS - Exterior	68	E	Exterior	EXTERIOR CLASS S113-129 (14)	1X400HPS	100W LED Modular Area/Parking Fixture M2	1	1	20	465	100	100%	100	0%	0	4,015	100%	0%	0%	4,015	-	-	1,465	-	1,465	0.5	0.1	0.4
Mattituck HS/MS - Exterior	69	E	Exterior	EXTERIOR CLASS S113-129 (10)	1X150HPS	100W LED Modular Area/Parking Fixture M2 with Adaptable Controls	3	3		188	100	100%	100	0%	0	4,015	100%	0%	0%	4,015	-	-	1,060	-	1,060	0.8	0.3	0.3
Mattituck HS/MS - Exterior	70	E	Exterior	EXTERIOR AUD ENTRY INSIDE	1X250HPS	80W LED Modular Area/Parking Fixture M1	1	1	20	295	80	100%	80	0%	0	4,015	100%	0%	0%	4,015	-	-	863	-	863	0.3	0.1	0.2
Mattituck HS/MS - Exterior	71	E	Exterior	EXTERIOR AUD ENTRY INSIDE	2X13CFLSI	No Retrofit	2	2		26	26	100%	26	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.1	0.1	-
Mattituck HS/MS - Exterior	72	E	Exterior	EXTERIOR AUD ENTRY INSIDE	1X100MV	No Retrofit	1	1		125	125	100%	125	0%	0	4,015	100%	0%	0%	4,015	-	-	-	-	-	0.1	0.1	-
Mattituck HS/MS - Exterior	73	E	Exterior	AUX GYM	1X70HPS	20W LED Low Profile Flood Type Wall Pack Fixture w/ Integrated Photocell	2	2		95	20	100%	20	0%	0	4,015	100%	0%	0%	4,015	-	-	602	-	602	0.2	0.0	0.2
Mattituck HS/MS	74	1	Gymnasium	AUX GYM	1X250MH	16,000 Lumen High Bay with Adaptable Controls. Wire Guard	8	8	20	295	123	80%	98	30%	37	3,200	40%	40%	20%	1,280	1,280	640	4,403	1,783	6,187	2.4	0.8	1.6
Mattituck HS/MS	75	1	Gymnasium	AUX GYM	1X250MH	16,000 Lumen High Bay with Adaptable Controls. Wire Guard	4	4	20	295	123	80%	98	30%	37	3,200	40%	40%	20%	1,280	1,280	640	2,202	882	3,083	1.2	0.4	0.8
Mattituck HS/MS	76	1	Exit Sign	AUX GYM	1X3LEDEXIT	No Retrofit	5	5		3	3	100%	3	0%	0	8,760	100%	0%	0%	8,760	-	-	-	-	-	0.0	0.0	-
Mattituck HS/MS	77	1	Open Office	GUIDANCE	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	3	3		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	371	81	452	0.3	0.1	0.2
Mattituck HS/MS	78	1	Open Office	GUIDANCE	2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	5	5		59	25	100%	25	0%	0	2,400	70%	0%	30%	1,680	-	720	408	90	498	0.3	0.1	0.2
Mattituck HS/MS	79	1	Open Office	107	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	6	6		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	742	162	904	0.5	0.2	0.3
Mattituck HS/MS	80	1	Open Office	107	2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		59	25	100%	25	0%	0	2,400	70%	0%	30%	1,680	-	720	82	18	100	0.1	0.0	0.0
Mattituck HS/MS	81	1	Private Office	107A	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	4	4		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	494	108	602	0.4	0.2	0.2
Mattituck HS/MS	82	1	Private Office	GUIDANCE OFFICE A	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	1	1		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	124	27	151	0.1	0.0	0.1
Mattituck HS/MS	83	1	Private Office	GUIDANCE OFFICE B	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	1	1		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	124	27	151	0.1	0.0	0.1
Mattituck HS/MS	84	1	Private Office	OFFICE D	2x4 Layin Prismatic Fixture, Fluorescent, (3) 48" T-8 lamps, Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	1	1		89	38	100%	38	0%	0	2,400	70%	0%	30%	1,680	-	720	124	27	151	0.1	0.0	0.1
Mattituck HS/MS	85	1	Private Office	OFFICE E	2x4 Layin Prismatic Fixture, Fluorescent, (2) 48", T-8 lamps Instant Start Ballast, NLO (0.85 < BF < 0.95)	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		59	25	100%	25	0%	0	2,400	70%	0%	30%	1,680	-	720	82	18	100	0.1	0.0	0.0
Mattituck HS/MS	158	2	Gymnasium	Main Gym-756	2'x4' 6L T5HO HIGH BAY w/ WIRE GUARD & Bi-Level Control	No Retrofit	36	36	20	320	320	80%	256	30%	96	3,200	40%	40%	20%	1,280	1,280	640	-	20,644	20,644	11.5	9.2	2.3
Mattituck HS/MS	163	2	Gymnasium	Wrestling Gym	1X250MH	No Retrofit	20	20	20	295	295	80%	236	30%	89	3,200	40%	40%	20%	1,280	1,280	640	-	10,573	10,573	5.9	4.7	1.2
Mattituck HS/MS	23	2	Hallway Type A	Hallway S202-211-610	2L RLRB F17T8 w/ 2'x2' REF - High Power	Relamp only to TWO 2' LED tubes on existing HBF electronic ballast	8	8		30	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	26	-	26	0.2	0.2	0.0

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E=Existing P=Proposed

Variables Highlighted

Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	Fixture E Qty	Fixture P Qty	Ht	Fixture Watts E Watts	Fixture Watts P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	Estimated Hours for Energy Savings E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	SAVINGS kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Mattituck HS/MS	23	2	Hallway Type A	Hallway S202-211-610	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	21	21		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	874	-	874	0.8	0.5	0.3
Mattituck HS/MS	24	2	Hallway Type A	Hallway S202-211-610	2L RLRB U6T8 - Low Power	Relamp only to TWO U-lamp LED tubes on existing LBF electronic ballast	5	5		38	33	100%	33	0%	0	3,200	100%	0%	0%	3,200	-	-	80	-	80	0.2	0.2	0.0
Mattituck HS/MS	26	2	Hallway Type A	Hallway-611	2L RLRB U6T8 - Low Power	Relamp only to TWO U-lamp LED tubes on existing LBF electronic ballast	5	5		38	33	100%	33	0%	0	3,200	100%	0%	0%	3,200	-	-	80	-	80	0.2	0.2	0.0
Mattituck HS/MS	29	2	Hallway Type A	Hallway-611	2L RLRB U6T8 - Low Power	Relamp only to TWO U-lamp LED tubes on existing LBF electronic ballast	5	5		38	33	100%	33	0%	0	3,200	100%	0%	0%	3,200	-	-	80	-	80	0.2	0.2	0.0
Mattituck HS/MS	34	2	Hallway Type A	Hallway 208-208-615	NEW 1'x8' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	11	11		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	458	-	458	0.4	0.3	0.1
Mattituck HS/MS	54	2	Hallway Type A	624 Hallway 213B-214-624	NEW 1'x8' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	8	8		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	333	-	333	0.3	0.2	0.1
Mattituck HS/MS	56	2	Hallway Type A	625 Hallway adj. Elevator-625	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	2	2		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	83	-	83	0.1	0.1	0.0
Mattituck HS/MS	57	2	Hallway Type A	626 Hallway S212-S213-626	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	5	5		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	208	-	208	0.2	0.1	0.1
Mattituck HS/MS	58	2	Hallway Type A	626 Hallway S212-S213-626	2L RLRB F17T8 w/ 2'x2' REF - High Power	Relamp only to TWO 2' LED tubes on existing HBF electronic ballast	1	1		30	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	3	-	3	0.0	0.0	0.0
Mattituck HS/MS	78	2	Hallway Type A	Hallway	NEW 1'x8' 2L WRAP - High Power	Relamp only to TWO low wattage 4' LED tubes on existing HBF electronic ballast	2	2		46	37	100%	37	0%	0	3,200	100%	0%	0%	3,200	-	-	58	-	58	0.1	0.1	0.0
Mattituck HS/MS	93	2	Hallway Type A	Hallway 92-Cafeteria-717	NEW 1'x8' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	8	8		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	333	-	333	0.3	0.2	0.1
Mattituck HS/MS	101	2	Hallway Type A	Hallway in Tech Dept-725	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	8	8		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	499	-	499	0.5	0.3	0.2
Mattituck HS/MS	121	2	Hallway Type A	Hallway S106-S110-735	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	26	26		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	1,082	-	1,082	1.0	0.7	0.3
Mattituck HS/MS	123	2	Hallway Type A	Hallway adj. 119-736	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	15	15		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	624	-	624	0.6	0.4	0.2
Mattituck HS/MS	145	2	Hallway Type A	Hallway Main Office to 111-748	NEW 1'x8' 2L WRAP - Normal Power	Relamp only to TWO low wattage 4' LED tubes on existing NBF electronic ballast	2	2		43	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	90	-	90	0.1	0.1	0.0
Mattituck HS/MS	146	2	Hallway Type A	Hallway Main Office to 111-748	NEW 1'x8' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	14	14		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	582	-	582	0.5	0.4	0.2
Mattituck HS/MS	154	2	Hallway Type A	Boys/Girls Room Foyer-754	NEW 1'x4' 1L WRAP - Low Power	Relamp only to low wattage 4' LED tube on existing LBF electronic ballast	2	2		21	13	100%	13	0%	0	3,200	100%	0%	0%	3,200	-	-	54	-	54	0.0	0.0	0.0
Mattituck HS/MS	155	2	Hallway Type A	Main Entrance-755	2L RLRB F32T8 w/ 2'x4' REF - High Power	Relamp only to TWO low wattage 4' LED tubes on existing HBF electronic ballast	12	12		46	37	100%	37	0%	0	3,200	100%	0%	0%	3,200	-	-	346	-	346	0.6	0.4	0.1
Mattituck HS/MS	162	2	Hallway Type A	Gym Foyer to New Gym-759	2L RLRB F17T8 w/ 2'x2' REF - High Power	Relamp only to TWO 2' LED tubes on existing HBF electronic ballast	4	4		30	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	13	-	13	0.1	0.1	0.0
Mattituck HS/MS	165	2	Hallway Type A	Hallway Off Main Entrance to Girls	NEW 1'x16' 4L WRAP - High Power	Relamp only to FOUR low wattage 4' LED tubes on existing HBF electronic ballast	1	1		88	74	100%	74	0%	0	3,200	100%	0%	0%	3,200	-	-	45	-	45	0.1	0.1	0.0
Mattituck HS/MS	173	2	Hallway Type A	Foyer To Gym-766	NEW 1'x4' 1L WRAP - Low Power	Relamp only to low wattage 4' LED tube on existing LBF electronic ballast	1	1		21	13	100%	13	0%	0	3,200	100%	0%	0%	3,200	-	-	27	-	27	0.0	0.0	0.0
Mattituck HS/MS	174	2	Hallway Type A	Hallway Off Main Entrance to Boys	NEW 1'x16' 4L WRAP - High Power	Relamp only to FOUR low wattage 4' LED tubes on existing HBF electronic ballast	1	1		88	74	100%	74	0%	0	3,200	100%	0%	0%	3,200	-	-	45	-	45	0.1	0.1	0.0
Mattituck HS/MS	181	2	Hallway Type A	Foyer to Outside-769	NEW 1'x4' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	42	-	42	0.0	0.0	0.0

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Existing / Proposed

Variables Highlighted

Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	Fixture			Fixture Watts						Estimated Hours for Energy Savings							SAVINGS					
							E Qty	P Qty	Ht	E Watts	P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Mattituck HS/MS	187	2	Hallway Type A	Foyer to Gym-722	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	42	-	42	0.0	0.0	0.0
Mattituck HS/MS	203	B	Hallway Type A	Hallway-502	NEW 1'x4' 2L WRAP - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	42	-	42	0.0	0.0	0.0
Mattituck HS/MS	204	B	Hallway Type A	Hallway-502	NEW 1'x4' 2L WRAP - High Power	Relamp only to TWO low wattage 4' LED tubes on existing HBF electronic ballast	1	1		46	37	100%	37	0%	0	3,200	100%	0%	0%	3,200	-	-	29	-	29	0.0	0.0	0.0
Mattituck HS/MS	214	2	Hallway Type A	Hallway LC 1-300	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	3	3		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	125	-	125	0.1	0.1	0.0
Mattituck HS/MS	220	2	Hallway Type A	Hallway 215-216-301	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	6	6		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Mattituck HS/MS	231	2	Hallway Type A	Hallway 217-221-305	NEW 1'x4' 1L WRAP WIDE BASE - High Power	Relamp only to low wattage 4' LED tube on existing HBF electronic ballast	5	5		30	19	100%	19	0%	0	3,200	100%	0%	0%	3,200	-	-	184	-	184	0.2	0.1	0.1
Mattituck HS/MS	232	2	Hallway Type A	Hallway 217-221-305	NEW 1'x8' 4L WRAP WIDE BASE - High Power	Relamp only to FOUR low wattage 4' LED tubes on existing HBF electronic ballast	1	1		88	74	100%	74	0%	0	3,200	100%	0%	0%	3,200	-	-	45	-	45	0.1	0.1	0.0
Mattituck HS/MS	242	2	Hallway Type A	Hallway 223-310	NEW 1'x8' 2L WRAP WIDE BASE - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	6	6		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Mattituck HS/MS	255	2	Hallway Type A	Hallway 228-225-314	NEW 1'x4' 1L WRAP - Low Power	Relamp only to low wattage 4' LED tube on existing LBF electronic ballast	4	4		21	13	100%	13	0%	0	3,200	100%	0%	0%	3,200	-	-	109	-	109	0.1	0.1	0.0
Mattituck HS/MS	274	1	Hallway Type A	Hallway 133-129-400	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	5	5		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	208	-	208	0.2	0.1	0.1
Mattituck HS/MS	290	1	Hallway Type A	Hallway 128 G-411	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	42	-	42	0.0	0.0	0.0
Mattituck HS/MS	301	1	Hallway Type A	Hallway-421	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	1	1		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	42	-	42	0.0	0.0	0.0
Mattituck HS/MS	311	1	Hallway Type A	Hallway 116-122	2L RLRB F32T8 - Low Power	Relamp only to TWO low wattage 4' LED tubes on existing LBF electronic ballast	6	6		38	25	100%	25	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Mattituck HS/MS	312	1	Hallway Type A	Hallway 116-122-426	NEW 1'x4' 1L WRAP WIDE BASE - High Power	Relamp only to low wattage 4' LED tube on existing HBF electronic ballast	5	5		30	19	100%	19	0%	0	3,200	100%	0%	0%	3,200	-	-	184	-	184	0.2	0.1	0.1
Mattituck HS/MS	316	1	Hallway Type A	Hallway S202-S211	2L RLRB U6T8 - Low Power	Relamp only to TWO U-lamp LED tubes on existing LBF electronic ballast	5	5		38	33	100%	33	0%	0	3,200	100%	0%	0%	3,200	-	-	80	-	80	0.2	0.2	0.0
Mattituck HS/MS	314	1	Hallway Type A	Hallway adj. Boiler Room	NEW 1'x2' 1L F17T8 WRAP - Normal Power	Relamp only to 2' LED tube on existing NBF electronic ballast	5	5		17	11	100%	11	0%	0	3,200	100%	0%	0%	3,200	-	-	104	-	104	0.1	0.1	0.0
Cutchogue ES	217	1	Gymnasium	Gym-459	2'x4' 6L T5HO HIGH BAY w/ WIRE GUARD & Bi-Level Control	No Retrofit	20	20	20	320	320	80%	256	30%	96	2,800	40%	40%	20%	1,120	1,120	560	-	10,035	10,035	6.4	5.1	1.3
Cutchogue ES	218	1	Gymnasium	Gym-459	2'x4' 6L T5HO HIGH BAY w/ WIRE GUARD & Bi-Level Control	No Retrofit	4	4	20	320	320	80%	256	30%	96	2,800	40%	40%	20%	1,120	1,120	560	-	2,007	2,007	1.3	1.0	0.3
Cutchogue ES	26	1	Hallway Type A	Hallway 213 to 208-311	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	7	7		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	437	-	437	0.4	0.3	0.1
Cutchogue ES	27	1	Hallway Type A	Hallway 213 to 208-311	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	8	8		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	499	-	499	0.5	0.3	0.2
Cutchogue ES	37	1	Hallway Type A	Hallway 221 to 212	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	8	8		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	499	-	499	0.5	0.3	0.2
Cutchogue ES	38	1	Hallway Type A	Hallway 221 to 212-312	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	6	6		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	374	-	374	0.3	0.2	0.1
Cutchogue ES	50	1	Hallway Type A	Hallway 171-403	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	3	3		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	187	-	187	0.2	0.1	0.1

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E=Existing P=Proposed

Variables Highlighted

							Fixture			Fixture Watts						Estimated Hours for Energy Savings							SAVINGS					
Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	E Qty	P Qty	Ht	E Watts	P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Cutchogue ES	52	1	Hallway Type A	Hallway 173 to libra-404	2L RLRB F32T8 w/ 2'x4' REF - High Power	Relamp only to TWO low wattage 4' LED tubes on existing HBF electronic ballast	6	6		46	37	100%	37	0%	0	3,200	100%	0%	0%	3,200	-	-	173	-	173	0.3	0.2	0.1
Cutchogue ES	53	1	Hallway Type A	Hallway 173 to libra-404	2L RLRB F17T8 w/ 2'x2' REF - High Power	Relamp only to TWO 2' LED tubes on existing HBF electronic ballast	1	1		30	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	3	-	3	0.0	0.0	0.0
Cutchogue ES	58	1	Hallway Type A	Hallway 177-407	2L RLRB F32T8 w/ 2'x4' REF - High Power	Relamp only to TWO low wattage 4' LED tubes on existing HBF electronic ballast	3	3		46	37	100%	37	0%	0	3,200	100%	0%	0%	3,200	-	-	86	-	86	0.1	0.1	0.0
Cutchogue ES	60	1	Hallway Type A	Main Lobby & Hallway-408	2L RLRB F17T8 w/ 2'x2' REF - High Power	Relamp only to TWO 2' LED tubes on existing HBF electronic ballast	5	5		30	29	100%	29	0%	0	3,200	100%	0%	0%	3,200	-	-	16	-	16	0.2	0.1	0.0
Cutchogue ES	61	1	Hallway Type A	Main Lobby & Hallway-408	2L RLRB U6T8 - Low Power	Relamp only to TWO U-lamp LED tubes on existing LBF electronic ballast	3	3		36	33	100%	33	0%	0	3,200	100%	0%	0%	3,200	-	-	48	-	48	0.1	0.1	0.0
Cutchogue ES	71	1	Hallway Type A	Inner Office Hallway-411	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	4	4		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Cutchogue ES	78	1	Hallway Type A	Hallway 104 to 106-412	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	4	4		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Cutchogue ES	80	1	Hallway Type A	Hallway 110 to 116-413	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	9	9		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	562	-	562	0.5	0.3	0.2
Cutchogue ES	94	1	Hallway Type A	Hallway 118 to 123-420	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	8	8		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	499	-	499	0.5	0.3	0.2
Cutchogue ES	95	1	Hallway Type A	Hallway 118 to 123-420	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	1	1		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	62	-	62	0.1	0.0	0.0
Cutchogue ES	96	1	Hallway Type A	Hallway 118 to 123-420	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	4	4		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Cutchogue ES	108	1	Hallway Type A	Hallway 126 to 145-423	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	15	15		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	936	-	936	0.9	0.6	0.3
Cutchogue ES	109	1	Hallway Type A	Hallway 126 to 145-423	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	2	2		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	125	-	125	0.1	0.1	0.0
Cutchogue ES	140	1	Hallway Type A	Hallway 128 to 135-427	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	19	19		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	1,186	-	1,186	1.1	0.7	0.4
Cutchogue ES	141	1	Hallway Type A	Hallway 128 to 135-427	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	8	8		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	499	-	499	0.5	0.3	0.2
Cutchogue ES	199	1	Hallway Type A	Basement Hall-506	Fluorescent, (3) 24", T-8 lamp IS Ballast, LPP (BF: .85-.95)	Relamp only to THREE 2' LED tubes on existing LBF electronic ballast	11	11		39	30	100%	30	0%	0	3,200	100%	0%	0%	3,200	-	-	317	-	317	0.4	0.3	0.1
Cutchogue ES	209	1	Hallway Type A	Hallway 144 to 161-456	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	20	20		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	1,248	-	1,248	1.1	0.8	0.4
Cutchogue ES	210	1	Hallway Type A	Hallway 144 to 161-456	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	4	4		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	250	-	250	0.2	0.2	0.1
Cutchogue ES	211	1	Hallway Type A	Hallway 144 to 161-456	Fluorescent, (3) 24", T-8 lamp, IS Ballast, LPP (BF .85-.95)	Relamp only to THREE 2' LED tubes on existing LBF electronic ballast	2	2		39	30	100%	30	0%	0	3,200	100%	0%	0%	3,200	-	-	58	-	58	0.1	0.1	0.0
Cutchogue ES	214	1	Hallway Type A	Hallway 158 to 162-458	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	11	11		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	686	-	686	0.6	0.4	0.2
Cutchogue ES	215	1	Hallway Type A	Hallway 158 to 162-458	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	2	2		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	125	-	125	0.1	0.1	0.0
Cutchogue ES	227	1	Hallway Type A	Hallway adj. Gym-464	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	11	11		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	686	-	686	0.6	0.4	0.2
Cutchogue ES	228	1	Hallway Type A	Hallway adj. Gym-464	3L RLRB F32T8 - Low Power	Relamp only to THREE low wattage 4' LED tubes on existing LBF electronic ballast	6	6		57	38	100%	38	0%	0	3,200	100%	0%	0%	3,200	-	-	374	-	374	0.3	0.2	0.1

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Existing Differences

Variables Highlighted

							Fixture			Fixture Watts							Estimated Hours for Energy Savings							SAVINGS					
Bldg	ECM	Flr	Room Type	Description	Existing Fixture	Proposed Fixture	E Qty	P Qty	Ht	E Watts	P Watts	High Trim %	High Mode Watts	Low trim %	Low Mode Watts	E Hours	% Time High Mode	% Time Low Mode	% Time Off	P Hours High	P Hours Low	P Hours Off	kWh Savings from Retrofit	kWh Savings from Controls	Total kWh Saved	Existing kW	Post kW	Total kW Saved
Cutchogue ES	229	1	Hallway Type A	Hallway adj. Gym-464	Fluorescent, (3) 24", T-8 lamp, IS Ballast, LPP (BF: .85-.95)	Relamp only to THREE 2' LED tubes on existing LBF electronic ballast	2	2		39	30	100%	30	0%	0	3,200	100%	0%	0%	3,200	-	-	58	-	58	0.1	0.1	0.0
							754	754															131,279	46,462	177,741	85.2	45.2	40.0