ENERGY SAVINGS PLAN (ESP) FOR AN ENERGY SAVINGS IMPROVEMENT PROGRAM (ESIP)

Manasquan Public School District
June 23, 2022

PREPARED FOR

Dr. Peter Crawley

School Business Administrator / Board Secretary

Manasquan Public School District

169 Broad Street

Manasquan, NJ 08736

Phone: 732-528-8800 x1921

Email: pcrawley@manasquan.k12.nj.us

PREPARED BY

Wayne T. Leahy

Senior Business Consultant

Honeywell Energy Services Group

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Honeywell

Non-Disclosure Statement

This proposal or qualification data includes data that shall not be disclosed outside **Manasquan Public School District** ("the District") and shall not be duplicated, used or disclosed — in whole or part — for any purposed other than to evaluate this proposal or quotation. If, however, a contract is awarded to this Offeror as a result of — or in connection with — the submission of this data, **the District** shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit **the District's** right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in all sheets.

Right to Negotiate

Honeywell has reviewed the Request for Proposals and, if selected, reserves the right to negotiate mutually acceptable terms and conditions of any resulting contract.

Budgetary Proposal

Notwithstanding any other provision of this document, this budgetary proposal is provided for information and planning purposes only, is non-binding, and does not constitute an offer capable of acceptance. Honeywell will be pleased to provide a firm price proposal upon request, subject to its internal approval requirements.

Honeywell reserves the right, in its discretion, to increase the price(s) set forth in this Proposal in the event that tariffs (or similar governmental charges) imposed by the United States or other countries result in any increase in the costs that Honeywell used to determine such price(s).

Equitable Extension of Time

Notwithstanding anything to the contrary, in light of the COVID-19 pandemic, the effects of which cannot be foreseen, the parties agree that Honeywell shall be entitled to an equitable extension of time to deliver or perform its work and appropriate additional compensation to the extent Honeywell's delivery or performance, or the delivery or performance of its suppliers and/or subcontractors, is in any way delayed, hindered or otherwise affected by the COVID-19 pandemic.

General Disclaimer about Pre-Contract Information

HONEYWELL MAKES NO REPRESENTATION OR WARRANTY REGARDING ANY FINANCIAL PROJECTIONS, DATA OR INFORMATION PROVIDED, EXCEPT AS MAY BE EXPRESSLY SET FORTH IN A DEFINITIVE AGREEMENT.

Municipal Advisor Disclaimer

HONEYWELL BUILDING SOLUTIONS, A STRATEGIC BUSINESS UNIT OF HONEYWELL INTERNATIONAL INC. ("HONEYWELL"), IS NOT A MUNICIPAL ADVISOR AND CANNOT GIVE ADVICE WITH RESPECT TO MUNICIPAL SECURITIES OR MUNICIPAL FINANCIAL PRODUCTS TO YOU ABSENT YOUR BEING REPRESENTED BY, AND RELYING UPON THE ADVICE OF, AN INDEPENDENT REGISTERED MUNICIPAL ADVISOR. HONEYWELL IS NOT SUBJECT TO A FIDUCIARY DUTY WITH REGARD TO YOU OR THE PROVISION OF INFORMATION TO YOU. INFORMATION ABOUT MUNICIPAL SECURITIES AND/OR MUNICIPAL FINANCIAL PRODUCTS, IF ANY, IS PROVIDED FOR EDUCATIONAL PURPOSES ABOUT POSSIBLE FINANCING OPTIONS AND IS NOT THE PROVISION OF ADVICE OR A RECOMMENDATION TO PURSUE ANY PARTICULAR FINANCING OPTION. CONSULT WITH YOUR INDEPENDENT REGISTERED MUNICIPAL ADVISOR ABOUT THE FINANCING OPTION APPROPRIATE FOR YOUR SITUATION.

To ensure compliance with requirements imposed by the IRS under Circular 230, we inform you that any U.S. federal tax advice contained in this communication (including any attachments), unless otherwise specifically stated, was not intended or written to be used, and cannot be used, for the purpose of (1) avoiding penalties under the Internal Revenue Code or (2) promoting, marketing or recommending to another party any matters addressed herein. The information contained herein is general in nature and based on authorities that are subject to change. Honeywell Building Solutions, a strategic business unit of Honeywell International Inc., recommends that you consult your tax adviser to understand its applicability to specific situations.

Honeywell

June 23, 2022

Dr. Peter Crawley
School Business Administrator / Board Secretary
Manasquan Public School District
169 Broad Street
Manasquan, NJ 08736

Subject: Energy Savings Plan through the Energy Savings Improvement Program

Dear Dr. Crawley:

The team at Honeywell understands that you seek a dependable, experienced, and responsive Energy Services Company for the development and implementation of your Energy Savings Improvement Program (ESIP) project.

With an unmatched New Jersey ESIP project delivery track record, we look forward to the possibility of working with your team to develop customized facility improvements desired by the Manasquan Public School District for the benefit of its students, faculty, administration, and community.

Honeywell offers the following benefits for consideration by your team:

- ✓ **custom-tailored approach** to fulfill desired facility improvement goals
- ✓ **conservative energy cost approach** to ensure project scope expectations are met
- ✓ **solar energy procurement** to reduce energy costs and enhance environment stewardship
- ✓ **experience in blending ESSER funding** into ESIP projects if desired
- ✓ **no cost overruns or change orders** since Honeywell assumes price risk
- ✓ **student engagement** through project interaction experiences and outreach activities

This response is organized as prescribed by your RFP document. For additional convenience, we have enabled a clickable Table of Contents for rapid navigation to and from each proposal section.

Cordially,

Wayne T. Leahy
Senior Business Consultant
609-533-1275
wayne.leahy@honeywell.com

Honeywell

SECTION A
TABLE OF CONTENTS

Certificate of Secretary

CERTIFICATE OF SECRETARY

I, Robert Littlehale, do hereby certify as the duly elected and qualified Assistant Secretary of Honeywell International Inc., a corporation organized and existing under and by virtue of the laws of the State of Delaware, that, Wayne T. Leahy, Senior Business Consultant for the Building Solutions business unit of Honeywell International Inc., has the authority to sign the RFP Response and related documents submitted to Manasquan Public School District for a guaranteed energy savings contract in response to Request for Proposals released May 5, 2022, on behalf of Honeywell International Inc.

IN WITNESS WHEREOF, I have affixed my name as Assistant Secretary and have caused the corporate seal of this corporation to be hereunto affixed this 17th day of June 2022.

Robert Littlehale
Assistant Secretary

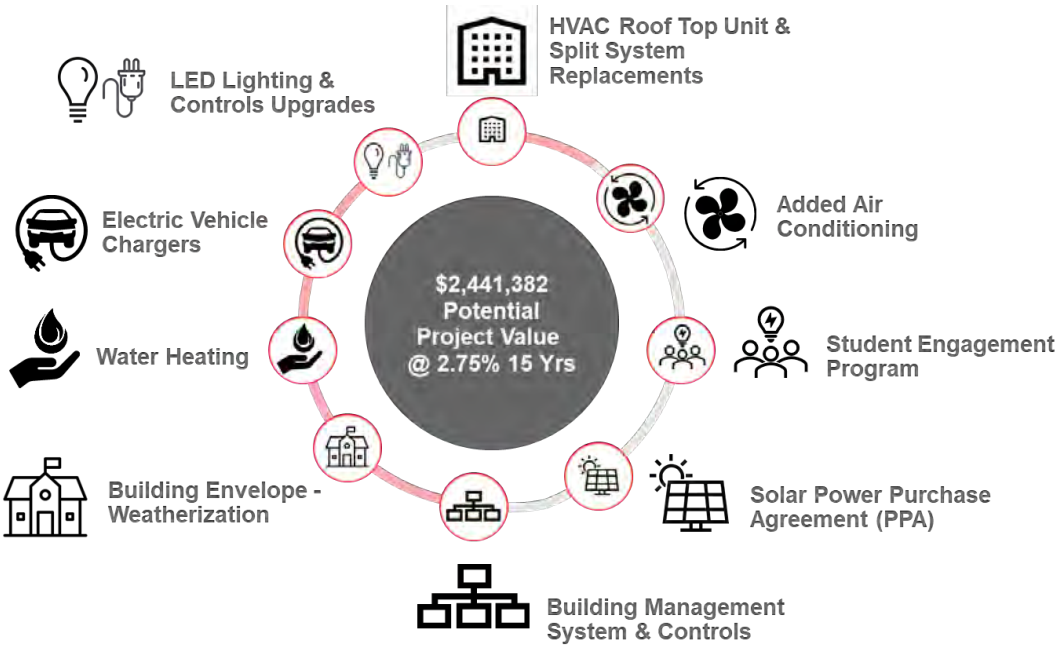
SECTION B
EXECUTIVE SUMMARY

Section B. Executive Summary

We commend Manasquan Public School District for committing to improving building systems while reducing its energy consumption and carbon footprint. The Energy Savings Improvement Program (ESIP) is an impactful financing mechanism that will facilitate the design, funding, and implementation of your facility improvement initiatives.

Honeywell has developed a proposal which we feel best addresses your needs and priorities as we understand them today. However, the project outlined within this RFP response is not your final project. Rather, it represents only the potential of what an ESIP project might accomplish as identified during this preliminary phase. Reflected below are the highlights of our recommendations for Manasquan Public School District. Please see Section G, Form II, and Payback by ECM Summary tables for complete details.

Figure 1. Manasquan Public School District Project Highlights & Potential



Highlights of the Energy Conservation Measures

Improved Classroom Conditions, Ventilation & Air Quality for Students and Staff

- **Interior LED Lighting upgrade** to more efficient and improved lighting quality throughout the District
- **Lighting Controls installation** to reduce lighting run-time throughout the District
- **Building Management System upgrades** to enhance the functionality of current systems

Infrastructure Renewal and Improved Efficiency

- **6 HVAC Rooftop Units (RTUs) replacements** at the Elementary School
- **4 HVAC Split System replacements** at the Elementary School and Administrative Building
- **4 HVAC Units installations added** at the Industrial Arts Building
- **1 Domestic Water Heater replacement** at the High School
- **Comprehensive Building Envelope improvements** at all District buildings

Carbon Reduction and Energy Savings

- Facilitate the **design and installation of Solar Energy Systems** at the High School, Elementary School, and new Field House totaling approximately 920 kW DC in size through a Power Purchase Agreement
- **Installation of 1 Electric Vehicle (EV) Charging Station** at the High School and the Elementary School providing the opportunity to charge 4 electric vehicles simultaneously

Community Education and Engagement

- Student Engagement Program
- Media and Communications Outreach

Overview of Preliminary Energy Savings Plan Options

The table below provides an overview of the financing, as well as the energy and operational savings, for three potential project scenarios. The first option presented assumes a project financed over a 15-year term at a 5.0% financing rate as required by your RFP. Honeywell offers a second project option with an indicative 15-year term finance rate of 2.75% for your consideration. The third option assumes a project financed over a 19-year term at a 3.0% interest rate that encompasses the most extensive improvements across District buildings.

Manasquan Public School District	15 Years 5.0% Rate	15 Years 2.75% Rate	19 Years 3.00% Rate
Total Honeywell Project Value	$2,049,228	$2,441,382	$2,738,116
Total Energy and Operational Savings	$3,040,062	$3,049,932	$3,651,182
Potential Rebates Directly to the District	$46,210	$75,835	$73,309
Positive Cash Flow to the District	$104,531	$107,173	$148,514

Your Project, Your Options, Our Experience

Honeywell has the expertise and proven track record of implementing successful ESIP projects as demonstrated by a portfolio of K-12 customers across our state. This experience will ensure that your Honeywell Team has the know-how to develop and implement the ESIP project that Manasquan Public School District deems most beneficial to its students and staff.

Solar Energy Generation – More Value

The District can benefit from the inclusion of utilizing solar power to demonstrate sustainability while lowering its utility costs. Honeywell identified the opportunity to install 920 kW DC of solar energy rooftop systems at the High School, Elementary School, and new Field House. Honeywell offers to assist in the design and procurement of the customized solar solution. Since Power Purchase Agreements (PPAs) **are required under New Jersey law to be procured separately** from the ESIP project, Honeywell offers to prepare the Solar PPA RFP and evaluate responses. As provided to other ESIP customers, Honeywell offers to expedite the solar PPA procurement process immediately upon selection by the District to provide energy cost savings as soon as possible during ESIP implementation.

Figure 2. Recent NJ PPA Results & Savings Percentage

Selected Solar PPA Reference Projects	Total Array Size (KW dc)	$/kwh	% reduction from average rate of $0.12/kwh
Upper Township School District	2,839	$0.0490	59%
Old Bridge Township School District	5,055	$0.0350	71%
East Brunswick Township School District	2,394	$0.0580	52%
Hudson County	1,933	$0.0590	51%
Rumson Board of Education	486	$0.0479	60%
North Hunterdon Regional High School District	1,607	$0.0090	93%
Newton Board of Education	321	$0.0195	84%
Piscataway BOE	1,791	$0.0000	100%
Watchung Hills Regional HS	1,800	($0.0050)	104%

Project Financing – ESSER Experience

To date, Honeywell has successfully included over $40.4M of Elementary and Secondary School Emergency Relief (ESSER) monies to fund a portion or the entirety of energy savings projects for our customers who desired this financing approach. Honeywell recognizes that Manasquan Public School District has many needs and opportunities to invest their ESSER allocations. However, we felt this financing option warranted mentioning.

Student Engagement Program – Honeywell Futureshaper

Honeywell proposes an educational partnership program with the Manasquan Public School District. The Honeywell Futureshaper Program could serve as the framework for this learning environment with the District.

The overarching tenets of the Futureshaper Program include:

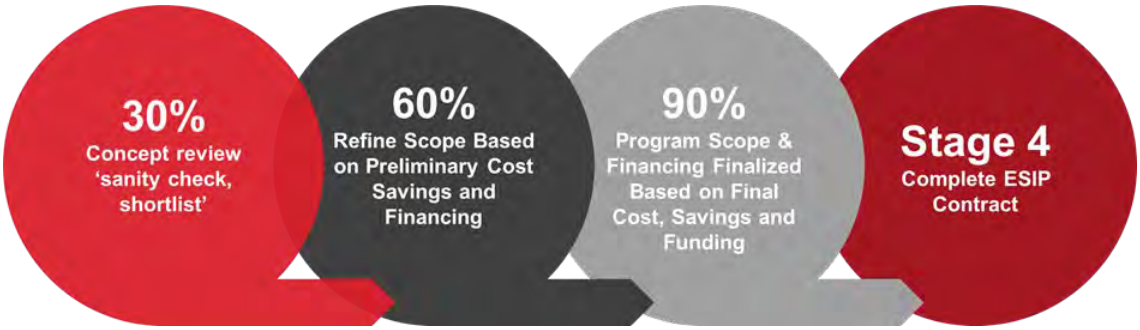
- Collaboration with District administration and faculty to create opportunities for student involvement in the development and implementation of the Energy Savings Improvement Program (ESIP) project at Manasquan Public School District.
- Enable students to interact with select aspects of the District's "live" project with consideration and analysis of real project data. Students can experience actual engineering methodology, design, and analysis practices as well as project construction scheduling, management, and quality control.
- Showcasing science, technology, engineering, and mathematics (STEM) positions within Honeywell and providing the opportunity for students to meet and interact with Honeywell's diverse workforce.
- Presenting an overview of the genesis of innovative products and services developed and delivered by Honeywell to solve real world challenges.

Methodical Process to Achieve Your Goals

As the State of New Jersey's most experienced Energy Services Company, we know what it takes to get your project identified in the most expeditious and accurate way possible. Over the course of the ESIP projects we have implemented, we have fine-tuned a phased approach process that yields maximized results by identifying the solution that best achieves our customer's requirements.

Highly interactive/transparent milestone process:

- Conduct technical, financial, and legal workshops
- Collaboratively finalize scope based on defined goals, priorities, and your feedback
- Facilitate the development and implementation of Solar Energy installations
- Identify energy reduction and deferred maintenance opportunities
- Identify opportunities for grants and rebates
- Finalize contract document and arrange financing

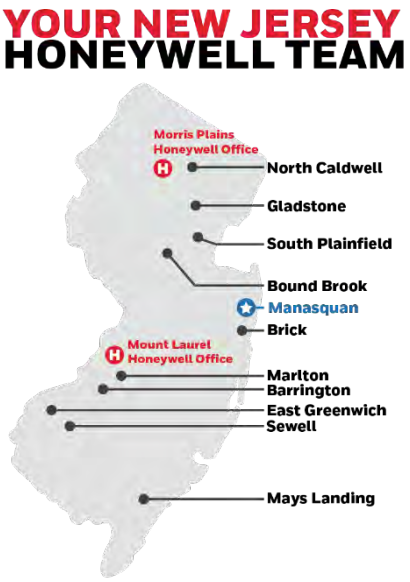


Construction Management

Honeywell is pleased to have NEW ROAD Construction Management Co. Inc. as a member of the Honeywell project implementation delivery team for your ESIP project. NEW ROAD is a leading provider of construction management (CM) services for the NJ K-12 market. NEW ROAD's CM contributions to the District's 2017 and 2019 referendum projects, as well as the current Field House project, will bring additional value to the District's ESIP project. NEW ROAD's familiarity with the District and the Borough of Manasquan, will be an asset to the delivery of your ESIP project.

Superior Delivery Team Resources

We feel it is a significant benefit to Manasquan Public School District that Honeywell's entire project design, installation, and direct management teams are all local to New Jersey. This will provide peace of mind to the District that Honeywell can support your project locally. Our assigned Project Manager, Wyatt Ferguson, lives in Bound Brook, which is relatively close to the District. We have aligned and committed our resources to design and implement your ESIP project to meet District goals.



Honeywell promises **NO CHANGE ORDERS** and we have a track record of completed projects that showcase our customer commitment to never substitute quality for cost. Honeywell can demonstrate that no change orders have taken place in any of our ESIP projects. The Corporation, as well as the personnel working on your project, understand this commitment and have successfully delivered on it time and time again.

New Jersey ESIP Experience Matters – Strongest Track Record of Success

Our people and our company understand the unique attributes of the New Jersey ESIP legislation and what it takes to deliver the Manasquan Public School District project while achieving the results you expect. Our company can boast of implementing more New Jersey ESIP projects than our competition.

As Honeywell employees, we are proud and thankful for all our ESIP customers who have trusted us with the implementation of these uniquely important projects. For your consideration, the following table lists some of our references:

Honeywell ESIP Customer	Project $	Project Status	Pre-ESIP Utility Spend	Annual Energy Savings	% Energy Savings
Northern Highland Regional HS	$3,596,457	Complete	$508,581	$252,321	51% Incudes PPA Savings
Bloomfield School District	$5,965,940	Complete	$1,387,943	$387,951	24%
City of Perth Amboy	$2,398,207	Complete	$845,885	$187,473	23%
Old Bridge Township Public Schools	$15,160,251	Complete	$2,342,993	$1,087,415	46% Includes PPA Savings
City of Newark	$14,898,000	Construction	$2,753,923	$915,218	33%
West Orange School District	$10,825,346	Complete	$2,230,689	$659,752	30%
Somerset County Vo-Tech	$2,063,519	Complete	$588,555	$194,223	33%

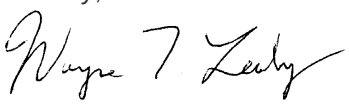
Honeywell ESIP Customer	Project $	Project Status	Pre-ESIP Utility Spend	Annual Energy Savings	% Energy Savings
Upper Township Board of Education	$5,517,037	Complete	$552,605	$354,631	64% Includes PPA Savings
Mountain Lakes Board of Education	$2,390,463	Complete	$564,056	$177,373	31%
Denville Township Schools	$1,855,328	Complete	$321,827	$108,890	34%
School District of the Chathams	$5,014,158	Complete	$901,268	$311,135	35%
Great Meadows School District	$2,561,470	Complete	$344,921	$165,540	48%
Hillsborough School District	$15,154,752	Complete	$1,755,960	$834,099	47%
Verona Public School District	$3,145,042	Complete	$614,094	$198,418	32%
Parsippany Troy Hills School District	$13,920,401	Complete	$1,853,152	$421,061	34%
Elizabeth Board of Education	$10,033,644	Complete	$3,533,898	$858,265	24%
Bridgewater-Raritan-Regional District	$8,563,325	Complete	$1,807,540	$592,025	30%
NH Voorhees Regional HS District	$7,559,572	Complete	$1,273,624	$602,161	47%
Phillipsburg School District	$7,132,145	Complete	$1,246,624	$421,061	34%
Camden County Technical Schools	$6,999,998	Complete	$1,617,166	$526,478	33%
Robbinsville Public School District	$4,492,914	Complete	$945,110	$240,849	25%
Lower Cape May Regional District	$3,455,546	Complete	$571,555	$215,614	38%
Hanover Township Schools	$2,855,936	Complete	$502,793	$129,950	26%
Town of Kearny	$1,575,032	Complete	$313,729	$76,233	24%
High Point Regional HS	$1,315,119	Complete	$494,071	$167,096	34%
Frankford Township Schools	$763,494	Complete	$212,934	$42,645	20%

Why Honeywell? Least Risk, Most Experience, Strongest Track Record

Honeywell has a simple philosophy – to deliver the best value to our customers. That is why more public entities in New Jersey have chosen Honeywell for their ESIP projects than any other company. Our capabilities translate into innovative solutions, high quality construction, optimal energy savings, and swift project implementation while garnering student and community engagement. Our experience, performance, creativity, and expertise will enable you to fully leverage all available savings and access funding sources to provide for the most comprehensive project scope achievable.

Our goal is clear – deliver the best value possible to Manasquan Public School District by improving the performance and efficiency of your school facilities. Honeywell would be proud to partner with the District to deliver noteworthy enhancements to the learning environment for the benefit of its students, faculty, administration, and community.

Sincerely,



Wayne T. Leahy, Senior Business Consultant

When Choosing an ESCO Partner

A technical solution is only one part of the equation. Consider these factors when deciding which firm to engage as your long-term partner:

The financial capacity of the company backing the savings guarantee.

Honeywell is a strong Fortune 100 firm with $34 billion in annual revenue.

The accuracy of the projected savings.

Year after year, Honeywell has met or exceeded annual savings guarantees more than 99% of the time.

New Jersey Past performance. Honeywell has performed wide-ranging upgrades with thousands of public entities, both local and county, in hundreds of school districts across the United States. Within New Jersey, no other Energy Service Company has come close to our availability of references and documented level of success implementing ESIP projects.

SECTION C
PROPOSER'S BACKGROUND & QUALIFICATIONS

Section C. Proposer's Background & Qualifications

Section C-1 General Information

FORM I

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
GENERAL INFORMATION: CONTRACTOR
Manasquan Public School District
ENERGY SAVING IMPROVEMENT PROGRAM

1. Name of firm: Honeywell International Inc.
2. Address: 115 Tabor Road, Morris Plains, NJ 07950
3. Contact person for this project (name & title): Wayne T. Leahy
4. Telephone number of contact person: 609-533-1275
5. Email Address of contact person: wayne.leahy@honeywell.com
6. Lead personnel for this project (persons who will have supervisory or other responsibility for the work to be performed). Please list all personnel below:

Name	Title
Wayne T. Leahy	Senior Business Consultant
Sean Yates	Regional Sales Manager
Paul Peters, PE, SDE	Solution Development Engineer
Ali Raza	Building Controls Solution Engineer
Pik Luen (Emily) Li	Solution Development Engineer
Chris Christensen	Cyber Business Development Manager
Robert Letso	Project Manager
Wyatt Ferguson	Project Manager
Marco Clerx	M&V Field Leader
Frank Capitummino, CEM	M&V Specialist
Karin O'Boyle	Contract Manager
Lisa Montalto	Financing Director
Karen Harmon	Service Operations Manager
Lisa Naccarato	HSE Regional Leader

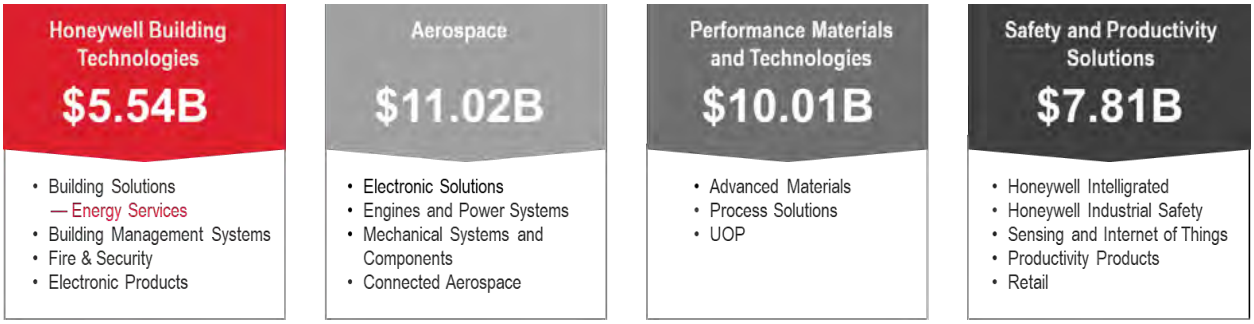
Section C-2 Supplemental ESCO Information

a. Describe your firm's core business and organizational structure.

A. Core Business And Organizational Structure

Honeywell International Inc (Honeywell) is a Fortune 100 software-industrial company that delivers industry specific solutions that include control technologies for buildings, homes, and industry; performance materials globally; and aerospace and automotive products and services. Our technologies help everything from buildings, aircraft, cars, homes, manufacturing plants, supply chains, and workers become more connected to make our world smarter, safer, and more sustainable. Our company has a 135-year legacy of innovation specializing in developing, designing, building, owning, and financing comprehensive infrastructure projects for state and local government, higher education, industrial, federal, and commercial customers across the globe. We are a $34.4 billion diversified technology leader headquartered in Charlotte, NC, and incorporated in the State of Delaware. Honeywell operates worldwide from 990 locations in over 100 countries, including more than 121 locations nationwide.

Figure 3. Highlights Honeywell's Business Segments



Honeywell has an enviable record of achievement. Our strong management team, financial track record, and large intellectual property portfolio are recognized by industry experts, leading publications, and associations around the world. Recent recognitions include:

HONEYWELL ACCOLADES

2022
World's Most Admired Companies
Fortune

2022
World's Most Ethical Companies | 7 Time Honoree
Ethisphere

2022
Top 100 Global Innovator 2022 | 11 Time Honoree
Clarivate

2021
World's Most Innovative Companies
Fast Company

2021
Top 100 Women In Technology | CDTO-Sheila Jordan
Technology Magazine

2020
Cybersecurity Excellence Awards GOLD
Cybersecurity Insiders

2020
Global Industrial Enterprise Performance Management Technology Innovation Leadership Award
Frost & Sullivan

2019
Great Immigrants Recipient | CEO-Darius Adamczyk
Carnegie

2019
World's Most Reputable Companies For Corporate Responsibility
Forbes

2019
Fortress Cyber Security Award | Hardware & Infrastructure
Fortress Cyber Security

2017
Internet Of Things 50: 15 Coolest Industrial IoT Companies
CRN

HONEYWELL BUILDING TECHNOLOGIES

A $5.5-billion business, Honeywell Building Technologies (HBT) is a world leader in the industrial internet of things and application of machine learning to building management systems. Our systems are found in more than 10 million buildings. The HBT portfolio includes energy services, building products, and solutions, as well as building management systems.

HONEYWELL ENERGY SERVICES GROUP (HESG)

Part of the HBT division, the Honeywell Energy Services Group has been a leader in Energy Performance Contracting services for over 40 years and represents a strategic area of focus for Honeywell. With the award of our very first Energy Services Contract in 1979, Honeywell pioneered and revolutionized the performance contracting business, coining the concept of "guaranteed savings" under a U.S. Department of Energy grant in 1984. Upon Honeywell's entry into the energy market, many companies have followed, but few can rival the strength of the Honeywell brand or our 'iron-clad' 100% energy savings guarantee. Just within the last five years, we have implemented performance contracts totaling close to $1.2 billion.

Our energy guarantee is a **first-party guarantee**, not a "savings assurance" guarantee held by a third party. That means WE (Honeywell International) take the risk for your project and will do what's necessary to ensure your project's success.

Honeywell International Inc. has been a highly regarded and valued client of Federal Insurance Company since 1997. Federal Insurance Company is rated A++ /XV in the Best's Key Rating Guide and is listed in the Department of Treasury's List of Approved Sureties. Honeywell has a current bond capacity of $150,000,000 per single event, $750,000,000 aggregate. Our bonding agent is Rosenberg & Parker, Inc. Rosenberg & Parker has over 50 years of experience in this field and their team is well versed in all aspects of surety.

Rosenberg & Parker, Inc.
595 East Swedesford Road, Suite 350
Wayne, PA 19087
Tel.: 1-800-394-9200
Fax: (610) 667-5200

Honeywell is rated "A" by Standard and Poor's and "A2" by Moody's—classified by Wall Street analysts as "Investment Grade." Our ratings have been at these levels for many years. We remain well capitalized and have the financial strength to stand behind our project work and guarantees.

Financial protection relative to Honeywell's performance on any future contract is never an issue. Honeywell is financially stable and has the bonding capacity to exceed the size of the potential program to be implemented for the Board.

Honeywell's Energy Performance Contracting Business

Honeywell evaluates, designs, and implements facility improvements focused on creating innovative solutions for our clients by upgrading infrastructure, reducing utility consumption and cost, and lowering Greenhouse Gas (GHG) emissions. Since 1979, we have designed energy and infrastructure renewal solutions at more than 7,000 facilities and guaranteed over $6 billion in energy and operational savings. Our team is recognized as a leader in delivering comprehensive, technically complex, guaranteed energy saving projects of superior customer value with long-term performance. Since the beginning, we have focused our business on solutions that help our customers to manage your energy expenses, eliminate energy waste, and modernize your facilities. Honeywell's strong financial position and our 40 years of experience with energy guarantees ensure that our customers always achieve the guaranteed savings and results that they expect.

By integrating energy supply and demand strategies, Honeywell can help reduce your operational and maintenance costs, allowing you to maximize savings that you can reinvest into facility improvements or apply directly to your bottom line. Energy costs are one of your largest expenses and one of the most difficult to predict. Honeywell can help. Our people are energy experts who have helped customers around the world to realize billions of dollars in energy savings—savings that can be redirected toward facility and operational improvements. From 2015–2019, Honeywell performed 265 significant Energy Savings Performance Contracts (ESPCs) across the globe. **In New Jersey, we have helped dozens of public entities to save hundreds of millions of dollars in energy costs, and we are responsible for more ESCO implemented ESIP projects in New Jersey than any other ESCO since the program was established.** We are proud that we have been chosen by more public entities as ESIP project partners than any other vendor.

We will utilize our expertise and understanding of the shifting energy marketplace to develop a comprehensive strategy that actively monitors and controls your energy supply, energy-using assets, and the real-time interaction between energy supply and demand. Honeywell can help you manage energy use across your entire enterprise and fund energy-efficient improvements with energy savings that are guaranteed through an energy performance contract. Our comprehensive and integrated approach will ensure that you will generate the best return on investment by maximizing energy savings throughout your building portfolio.

As a global leader in energy, Honeywell is proud of our 135-year history delivering technologically advanced energy solutions and sustainable technologies. It is ingrained in our culture to lead and continuously improve.

Honeywell will work with your teams to help create the organizational transformation to an energy culture in which every member of your school's staff is aware of their role in eliminating energy waste, has the tools to achieve the best possible energy performance, and are accountable at every level for energy as much as they are for safety, quality, and productivity.

Participating Division or Branch Offices

Honeywell has six locations within the state of New Jersey. Honeywell's Morris Plains office is approximately 15 miles from the District and will assist in the design, monitoring and verification, project management, and ongoing service phases of the project. Additional project resources can be secured from several other office locations throughout the region as needed. This is a long-term partnership between the Manasquan Public School District and Honeywell. We draw on as many resources as possible to best suit the changing needs of the project.

"Honeywell Project Team" Local Experience

If selected as your energy partner, our New Jersey-based Honeywell team will be involved with the development and installation of the District project. The District can be assured that our account managers, engineers, project managers, installers, and subcontractors will work together as an effective team to meet or exceed your project goals. Honeywell's extensive performance contracting and service experience will enable us to plan and deliver a successful program of superior value for the District.

The primary contact for your project is Wayne Leahy. Wayne is primarily responsible for leading a team in developing a comprehensive technical and financial solution for the District's requirements as identified in the RFP and subsequent fact finding. During the development stage, Wayne will be responsible for communications with the District and coordination of Honeywell's Solution Development team. Wayne will also be responsible for coordinating financing, rebate applications, and contract development. A complete list of project team members and their resumes are included in the following Section C-3.

The following individuals have the right to negotiate and contractually bind the company.

Wayne T. Leahy
Sr. Business Consultant
Honeywell Building Solutions
115 Tabor Road
Morris Plains, NJ 07950
Phone: 609-533-1275
Email: wayne.leahy@honeywell.com

Karin O'Boyle
Contract Management Specialist
Honeywell Building Solutions
1985 Douglas Drive North, Suite HBT
Golden Valley, MN 55422
Phone: 763-954-4504
Email: Karin.O'Boyle@honeywell.com

PUBLIC SECTOR EXPERIENCE

Honeywell has extensive experience developing effective energy solutions in the public sector, including public schools, higher education institutions, and state and local government customers. This expertise has been developed by Honeywell's design and implementation of more than 7,000 energy performance contracts in buildings like those of the District.

Honeywell has worked on thousands of public buildings by designing, manufacturing, installing, and supporting technology solutions and services, including energy management and temperature control systems, security systems, life safety systems, process controls, and services that improve communications between schools and the parents, guardians, and citizens they serve. Millions of customers throughout the world trust Honeywell to provide an efficient, comfortable, and safe working and learning environment.

ENERGY EXPERTISE

Honeywell's energy experts have expertise in a wide range of systems and technologies and can offer a broad range of services to maximize energy savings and eliminate energy waste. We currently employ more than 300 energy efficiency measures that we are continuously updating and adding to as new technologies are developed or enhanced. These measures will be assessed based on the value they present to you. The list provided in the table below is not intended to be all-inclusive and merely presents a general overview of our extensive capabilities.

Energy Saving Systems and Technologies	
Facility Modernization	
▪ Engineering Analysis ▪ Remote Diagnostics ▪ Co-generation Solutions ▪ Mechanical Heating, Cooling, and Ventilating Equipment Retrofits ▪ Control and Automation Systems ▪ Metering & Specialized Sub-Metering Solutions ▪ Whole Building Commissioning	▪ Life Safety and Security ▪ Indoor Air Quality Solutions ▪ Renewable Energy Solutions-Solar, Wind, Geothermal ▪ Lighting System Retrofits and Service ▪ Steam System and Trap Analysis & Maintenance ▪ Air Balancing ▪ Green Power Solutions (Biomass)
Portfolio Management	
▪ Management & Technical Staff Training ▪ Maintenance Planning ▪ Performance Monitoring Services ▪ Security Systems and Services ▪ Control and Automation Systems and Maintenance Services	▪ Mechanical Maintenance Services ▪ Facility Management Services ▪ Fire Alarm Systems and Services ▪ Energy Portfolio Management ▪ E-Business Supply- Chain Purchasing Assistance

Energy Saving Systems and Technologies	
Energy Asset Management – Efficiency and Demand Reduction Technology/Services	
▪ Air Compressor Replacement/Upgrade ▪ Air Conditioning Unit Replacement ▪ Air Management Systems ▪ Air Systems Balancing ▪ Boiler Combustion Controls ▪ Boiler Heat Recovery ▪ Boiler Controls ▪ Boiler/Burner Replacement ▪ Building Envelope Improvements ▪ Chiller Optimization and Control ▪ Chiller Replacement ▪ Combustion Analyses ▪ Construction Management ▪ Conversion to HID ▪ Day Light Control ▪ Domestic Hot and Cold Water ▪ Dust Collection Systems ▪ Economizer Control ▪ Electrical Load Management Optimization ▪ Electrical Distribution Systems ▪ Street Lighting Retrofits ▪ Waste/Trash Management ▪ CHP and Central Plant (Biomass) ▪ Fans and Blowers ▪ Fire Alarm and Security Systems Installation and Integration ▪ Fluorescent Lamp and Ballast Replacement ▪ Fleet Fuel Conversion ▪ Fleet Fuel Conversion	▪ Exit Sign Conversion ▪ Fans and Blowers ▪ Fire Alarm and Security Systems Installation and Integration ▪ Fluorescent Lamp and Ballast Replacement ▪ High Efficiency Motors ▪ Humidity Control/Dehumidification ▪ Implementation of Improvements Recommendations ▪ Irrigation System Controls ▪ Irrigation Systems Greywater Conversions ▪ Incandescent to Fluorescent Lighting ▪ Individual Room Lighting Control Industrial HVAC ▪ Large Scale Lighting Control ▪ Parking/Street Lighting ▪ PLC Systems ▪ Steam Systems ▪ Energy Information and Control System ▪ Energy Recovery ▪ Renewable technology ▪ Microgrids ▪ Fans and Blowers ▪ Fire Alarm and Security Systems Installation and Integration ▪ Fluorescent Lamp and Ballast Replacement ▪ Fleet Fuel Conversion ▪ Heating, Ventilating and Air Conditioning System Modifications ▪ High Efficiency Motors
Supply Management - Supply Technology and Services	
▪ Grant and Utility Rebate Analysis ▪ Energy Data Management ▪ Power Factor Correction ▪ Electric Utility Rate Negotiations ▪ Electric Utility Rate Analyses ▪ Generation and Co-generation ▪ Energy Risk Assessment and Planning ▪ Utility Supply and Demand Services ▪ Greenhouse Gas Inventory (GHG)	▪ Financial Analysis ▪ Renewable Technology Application ▪ Utility Sales Tax Studies ▪ Gas Utility Rate Negotiations ▪ Gas Utility Rate Analyses ▪ Energy Audits ▪ Energy Supply Options Analysis and Recommendation ▪ REC and Carbon Monetization ▪ ZREC/LREC Bid submission

We have skilled and experienced people working on great teams and generating industry-leading results. Our teams typically have members from every level of the organization focused on improving processes to maximize customer results.

Additionally, the Honeywell's Solution Development Engineers (SDEs) are registered Professional Engineers (PE), Certified Energy Managers (CEM), and/or LEED Accredited Professionals. Honeywell's SDE team is experienced in the energy field and required to complete annual training and participate in industry events to fine tune their capabilities and customer value.

Industry Accreditations

NATIONAL ASSOCIATION OF ENERGY SERVICE COMPANIES (NAESCO)

Honeywell is an active member and one of the earliest charter members of the National Association of Energy Service Companies (NAESCO), the country's premier energy services trade organization. Honeywell is an Accredited Energy Service Provider. As a senior and respected member of this prestigious association, Honeywell has worked diligently to promote customer interests in legislative and policy-making bodies nationwide, including but not limited to advising on enabling legislation and the development of measurement and verification (M&V) protocols. Many of Honeywell's energy professionals have participated in national speaking engagements for NAESCO events as well.

AMERICAN COLLEGE & UNIVERSITY PRESIDENTS CLIMATE COMMITMENT

Honeywell is also an official Platinum sponsor of the American College and University Presidents Climate Commitment (ACUPCC). Partnering with the CCI, the ACUPCC strives to increase the number of large-scale energy-saving retrofits for campus buildings.

The ACUPCC provides a framework and support for America's Colleges and Universities to implement comprehensive plans in pursuit of climate neutrality. As part of the program, ACUPCC signatories can take advantage of the benefits of CCI's Energy Efficiency Building Retrofit Program (EEBRP), including project support and CCI's established relationships with private sector financial institutions, energy services companies (ESCOs), and product manufacturers.

DEPARTMENT OF ENERGY/DEFENSE

We have also been designated as a pre-qualified ESCO and a Super ESCO by the U.S. Departments of Energy and Defense (DOE and DOD), holding multiple Indefinite Delivery, Indefinite Quantity (IDIQ) contracts with the DOE, U.S. Air Force, U.S. Army, and MEDCOM organizations.

ENERGY SERVICES COALITION

Honeywell is an active member of the Energy Services Coalition (ESC). We work closely with State Energy Offices around the country to support the adoption of standards and best practices for performance contracting. Activities through this organization also include outreach and education to interested market sectors and end-user groups, driving utility company demand-side management programs and new technology review.

AMERICAN WATER WORKS ASSOCIATION

The AWWA has more than 60,000 members representing every part of the water profession and is the largest association of water professionals in the world, connecting utilities, equipment manufacturers and consultants, and professionals together. Honeywell is proud to have individual active members.

U.S. GREEN BUILDING COUNCIL

We are a member of the U.S. Green Building Council (USGBC), a community of professionals who share the similar goal of advancing sustainable building practices. Many of the engineers and professionals on your Honeywell team are LEED® Accredited Professionals, with certifications and expertise in new construction and existing buildings. The LEED® (Leadership in Energy and Environmental Design) Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Honeywell LEED® Accredited Professionals bear the distinction through rigorous study and examination.

LEADERSHIP IN ENERGY & ENVIRONMENTAL DESIGN (LEED) EB RATINGS INTERACTION

At the core of the LEED Rating System is a holistic process of evaluation, decision-making, and design involving all disciplines of the design team, the building owner, and tenants, as well as operation and maintenance staff. The LEED process, energy auditing, and performance contracting are complimentary and easily integrated with one another. The energy audit will be performed in conjunction with the LEED assessment. These tools, developed side-by-side, will form the basis of a single, integrated action plan that can incorporate interaction with carbon footprint calculations and protocols. Honeywell has LEED Accredited Professionals assigned to the Board project team.

MILITARY TIMES "BEST FOR VETS" EMPLOYER 2019

Honeywell is a Military Times "Best for Vets" Employer 2019. Each year, Military Times invites companies to fill out a nearly 100-question survey that results in the rankings that "evaluate companies' culture, veteran recruiting, veteran policies and accommodations for members of the National Guard and reserves." Honeywell was named a "Best for Vets" employer because of its military recruiting efforts, percentage of new hires with previous military service, and company policies towards National Guard and reserve service. U.S. Veterans Magazine also named Honeywell to its 2020 Best of the Best Top Veteran Friendly Companies.

B. Vendor Neutrality

Honeywell takes a **vendor-neutral** approach to selecting products and services, although we do manufacture several products designed to improve comfort, efficiency, and security. Honeywell will strive to evaluate all options and, when possible, leverage existing investments the District has made in technology by upgrading and expanding these systems to improve facility control and improve comfort and efficiency in the learning and working environment while reducing energy consumption and operating costs and eliminating energy waste. Honeywell is open to evaluating equipment by vendors the District would like for us to consider. During the design phase, we will weigh and consider products and technologies with vendor neutrality to ensure the best solution for your needs. This will allow us to design and install solutions based upon quality, application, lifecycle, efficiency, maintainability, and code requirements to improve facility control, improve comfort and efficiency in the learning and working environment, while reducing energy consumption waste and operating costs and eliminating energy waste.

1. Honeywell is a major manufacturer of temperature control and building automation systems and products. We have extensive knowledge and expertise in this area to help our performance contracting clients.
2. Honeywell manufacturers the following equipment related to energy savings retrofits:
   - Butterfly Valves
   - Dampers and Valve Actuators
   - Variable Frequency
   - Drives
   - Controllers
   - Sensors
   - Electronic Air Cleaners
   - Burners
   - UV Systems
   - Transformers
   - Pressure Regulating Valves
   - Lighting Controls
   - Energy Management Controls
   - Dampers
   - Hydronic Control Valves
   - Thermostats
   - Economizer Modules
   - Switches
   - Gas Controls
   - Thermocouples
   - Relays
   - Mixing Valves
   - Building Automation Systems
   - Timers
   - Workstations

Equipment Selections. Honeywell will install the best quality products for the District. We want the products we install to last well into the future and therefore balance the life cycle cost of the equipment. Honeywell has extensive knowledge and experience developing energy efficient products. We manufacture some of them and realize that the success of any performance contract is based on high quality products that have staying power. Some vendors can cut costs by installing less costly equipment, but that in the long-term cost more since their life cycle is more limited. We will balance the long-term goals of the District with the longevity and efficiency of the equipment to provide the best possible program that delivers the most value to your District.

C. Public Utility Or Fossil Fuel Supplier Statement

Honeywell is not affiliated with a public utility or a fossil fuel supplier. However, we will investigate for the District the possibility of switching to a “Green” supplier of electricity to achieve additional LEED status. Should Honeywell be selected as your ESCO, we will investigate further the opportunity to switch electricity supply companies.

D. Energy-Savings Related Services

We are one of the leading energy efficiency companies in the world, a leader in providing energy efficiency products and services, and are on the cutting edge of rolling out innovative, smart grid technologies, micro grid solutions and alternative energy sources such as renewable Green Diesel, Green Jet, and cellulosic bio-fuels.

Just like the District, environmental responsibility is of paramount importance to our company. Being a steward of the environment ensures economic sustainability for our shareholders and employees and enables the continued development of products and services that meet the demands of an expanding global economy. From our technologies and services to the way we manage our own operations, we are a global leader in energy efficiency and renewable energy. Approximately 50% of our annual revenue comes from products and services in the energy efficiency and renewable energy markets.

Building Technologies creates products, software, and technologies found in more than 10 million buildings worldwide.

Commercial building owners and occupants use our technologies to ensure their facilities are safe, energy efficient, sustainable, and productive.

BUSINESSES

- Building Management Systems
- Building Products
- Building Solutions
- Greater China / APAC (Regional Operation)
- Latin America (Regional Operation)

TECHNOLOGIES

- Building Comfort and Control Systems
- Fire Alarm Systems and Detection
- Smart City Command and Control Solutions
- Video Management and Security
- Air and Water Purification
- Access and Intrusion Control

E. Open Protocol System Architecture Utilization

Honeywell will provide a web-based open protocol vendor agnostic Building Management System (BMS) if the financial performance of the ESIP project is viable in accordance with the law. The BMS will provide building operators with the ability to view simple, user-friendly graphical depictions of the mechanical systems and associated environmental conditions within each of the buildings included in the program. Navigation through the BMS will be configured in a pictorial manner in which viewing the conditions within a specific room of a specific building would be as straight forward as mouse clicking on a picture of the building and then selecting the room from the building's floor plan.

The BMS will be web-based and designed to operate over the District's existing local area network (LAN). Access to the BMS will be readily available to any school operator with the appropriate security level from any workstation with a standard internet connection. The system will operate in a client-server architecture with no limit to the number of operators, meaning that any number of users can be simultaneously logged-in and actively modifying settings.

NON-PROPRIETARY COMMUNICATION. The BMS will communicate through the non-proprietary industry standard open protocol BACnet. A protocol is a set of rules that govern how communication occurs on a network. BACnet is considered an "open" protocol because it describes a set of rules that all vendors have access to and can use in the development of their products. BACnet was developed by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) to allow for interoperability between different vendor's equipment. This provides an alternative to proprietary systems. BACnet has become an American national standard, a European standard, a national standard in more than 30 countries, and an ISO global standard.

Section C-3 Project Organizational Chart and Project Team Resumes

Project Organizational Chart

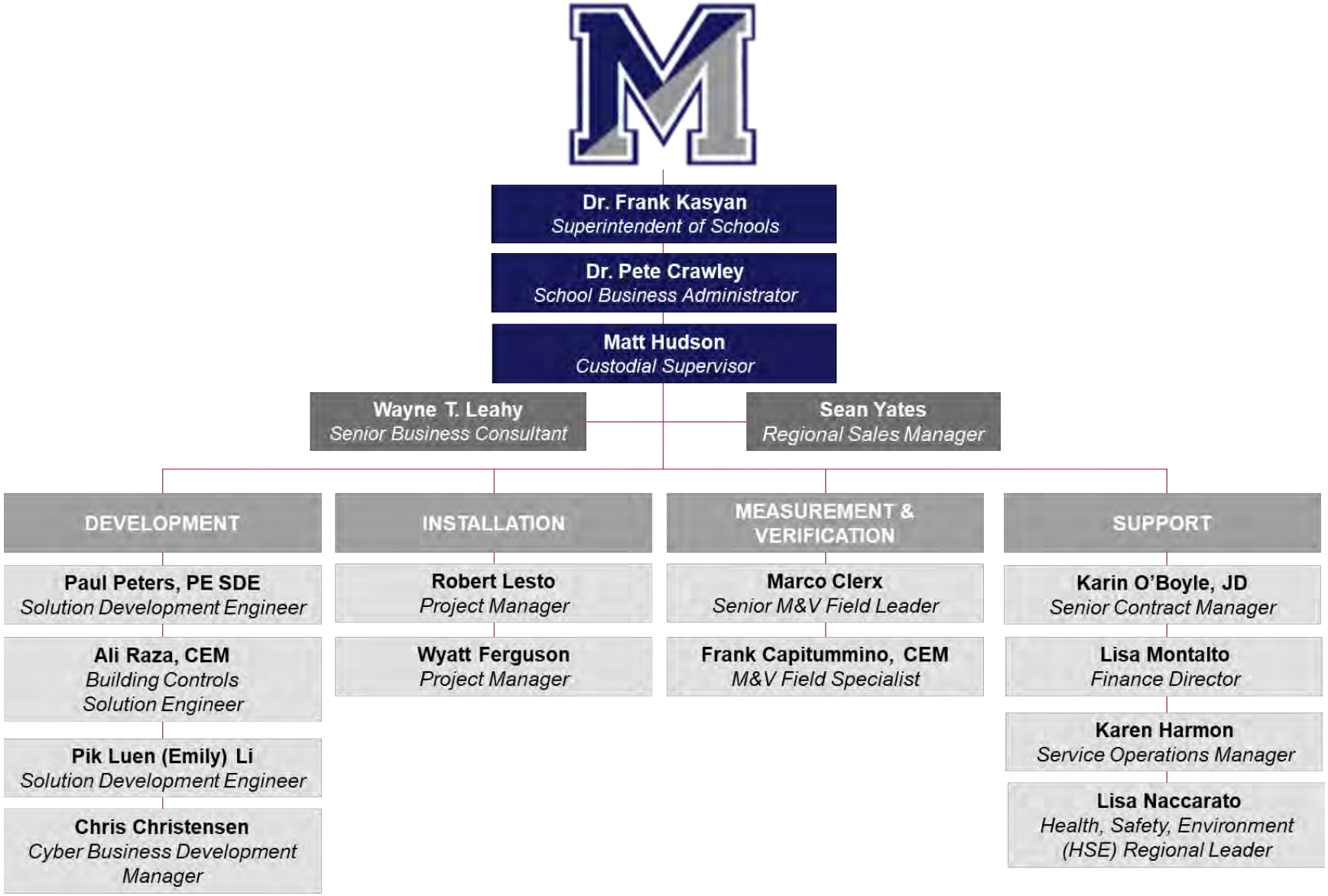
Honeywell provides insight and technical knowledge in developing the most cost-effective solution for the long term. From the design stage throughout the implementation phase, the customer is involved in the process. The following figure highlights the Honeywell Project Team.

Project Team Resumes

Honeywell has provided resumes for each individual identified as a lead person on **Form I**.

Name	Title
Wayne T. Leahy	Senior Business Consultant
Sean Yates	Regional Sales Manager
Paul Peters, PE, SDE	Solution Development Engineer
Ali Raza	Building Controls Solution Engineer
Pik Luen (Emily) Li	Solution Development Engineer
Chris Christensen	Cyber Business Development Manager
Robert Letso	Project Manager
Wyatt Ferguson	Project Manager
Marco Clerx	M&V Field Leader
Frank Capitummino, CEM	M&V Specialist
Karin O'Boyle	Contract Manager
Lisa Montalto	Financing Director
Karen Harmon	Service Operations Manager
Lisa Naccarato	HSE Regional Leader

ORGANIZATIONAL CHART



PROJECT TEAM RESUMES

WAYNE T. LEAHY

Business Consultant

CAREER SUMMARY: Wayne Leahy will be the primary point of contact during all ESIP project activities. He will advocate customer requirements to ensure the EISP project satisfies all customer demands, goals and outcomes.

With over 22 years of energy performance contracting experience, Wayne assumes responsibility for leading the Honeywell team during the end-to-end activities required to identify, scope, design, finance, construct, commission, and monitor the comprehensive ESIP project.

WORK EXPERIENCE

- Penn State University, Altoona Campus (GESA) $3.5M
- Atlantic City Conv Center (Solar PPA) $21.8M
- Farm Show Complex & Expo Center (GESA) $3.6M
- Delaware Tech Community College, All Campus (EPC) $7.1M
- Penn State University, Chemistry R&D Building (GESA) $5.1M
- City of Sumter (EPC) $1.3M

RELEVANT EXPERIENCE

- HONEYWELL, INC., Business Consultant | 2019 – Present
- Constellation New Energy, Business Development Manager | 2 years
- Pepco Energy Services, Client Services & Business Development | 11 years
- Enron Energy Services, Sales Manager | 3 years
- SYCOM Enterprises, Sales Manager | 6 years
- Carrier Corporation, Marketing Representative | 5 years

EDUCATION

Bachelor of Industrial Engineering, Georgia Tech

Master of Science Industrial Engineering, Georgia Tech

PROFESSIONAL AFFILIATIONS

- Member, New Jersey Association of School Business Officials (NJASBO) including Middlesex, Mercer and Passaic County Chapters

SEAN YATES

Regional Sales Manager, Northeast

CAREER SUMMARY

Sean brings over 20 years of experience to the energy industry. He works alongside the customer and the Honeywell Account Executive during projects, to pursue new sources of funding and provide overall project support to ensure the Honeywell team meets the customer's project objectives. Sean also works with Honeywell's project design, delivery, and support teams to develop and execute the technical and financial solutions of the project, including technical assistance in the utilization of any federal or state grants, including all compliance and performance reporting requirements. Sean is based out of the Honeywell Morris Plains, New Jersey, office.

RELEVANT EXPERIENCE

- Bridgewater Raritan School District (ESIP) | $8M
- Camden County Technical Schools (ESIP) | $7M
- Elizabeth BOE (ESIP & Performance Contract) | $15M
- Hanover Township Schools (ESIP) | $2.8M
- High Point Regional School District (ESIP) | $1.4M
- Ramapo Indian Hills Regional Township (ESIP) | $1.4M
- City of Newark (ESIP) | $15M
- North Hunterdon–Voorhees Regional HS District (ESIP) | $7.6M
- Phillipsburg Board of Education (ESIP) | $7.2M
- Robbinsville School District (ESIP) | $4.5M
- Lower Cape May Regional School District (ESIP) | $2.8M
- Upper Township School District (ESIP) | $5.5M

WORK HISTORY

Honeywell International, Inc., Regional Sales Manager **|** 2002 – Present

- Honeywell Energy Services Group (HESG) Regional Sales Manager | Current
- General Manager, Northeast Region | 2 years
- Sales Leader, Northeast Region | 3 years
- HESG Energy Account Executive | 5 years
- Account Executive, New Jersey Territory | 8 years

Andover Controls, Account Executive **|** 3 years

EDUCATION

Bachelor of Science, Mechanical Engineering, Rutgers University

PROFESSIONAL AFFILIATIONS

- Member, Somerset County Sustainability Committee
- Member, Energy Services Coalition

PAUL PETERS, PE

Solution Development Engineer

CAREER SUMMARY: Paul Peters has 25 years of energy engineering and facilities experience in the energy field. Paul's expertise is in the facilities management and energy fields and has a strong enthusiasm for his role. Paul will be a member of our engineering team performing in all phases of the process from site surveys to energy calculation, to design solutions. Responsible for quantifying costs, energy savings, operational, environmental impacts of Energy Conservation Measures. He will serve as the lead technical resource during the contracting process.

RELEVANT EXPERIENCE

- The County of Hudson (ESIP) $28.2M
- West Morris Regional High School District (ESIP) $3.2M
- Educational Services Commission of NJ (ESIP) $4.3M
- Denville Township Schools (ESIP) $1.9M
- Bloomfield Board of Education (ESIP) $6M
- West Orange Board of Education (ESIP) $10.8M
- School District of the Chathams (ESIP) $5.0M
- Somerset County Vocational / Technical School (ESIP) $2.0M
- Hillsborough Township Public Schools (ESIP)15.1M
- Hanover Township Schools (ESIP) $2.9M
- Parsippany Troy Hills School District (ESIP) 13.4M
- Verona School District (ESIP) $3.2M
- Great Meadows Regional School District (ESIP) $2.6M
- Mountain Lakes School District (ESIP) $2.3M
- Bridgewater – Raritan School District (ESIP) $8.5M
- Camden County Technical Schools (ESIP) $7.0M
- Elizabeth BOE (ESIP & Performance Contract $12.5M
- Hanover Township Schools (ESIP) $2.8M
- Frankford Township School District (ESIP) $800 Thousand
- High Point Regional School District (ESIP) $1.3M
- Ramapo Indian Hills Regional Township (ESIP) $1.5M
- North Hunterdon–Voorhees Regional HS District (ESIP) $7.6M
- Phillipsburg Board of Education (ESIP) $7.1M
- Robbinsville School District (ESIP) $4.5M
- High Point RSD 2012 -(ESIP) $1.6M
- Lower Cape May RHD 2014 - (ESIP) $2.3M
- Upper Township School District (ESIP) - $5.7M
- Northern Highlands RHS 2016 -(ESIP) $3.6M

EDUCATION

Bachelor of Science, Mechanical Engineering, Rutgers University

Master of Business Administration, Finance, Farleigh Dickinson University

CERTIFICATIONS/ LICENSES/ REGISTRAIONS

- Certified Energy Manager
- Certified Energy Procurement Professional
- Certified Indoor Air Quality Professional
- LEED Accredited Professional
  Licensed Professional Engineer, State of New Jersey
- United States Navy, Certified Nuclear Propulsion Plant Operator MM-3385

WORK HISTORY

HONEYWELL, INC., Solution Development Engineer **|** 2007 – Present
University of Medicine and Dentistry of NJ, Energy Engineer | 2005 – 2007

Energy Education, Inc., Energy Engineer | 2003 – 2005

Covanta Energy Inc. | 1982 – Present

- Facilities Business Manager | 1998 – 2002 & 1992 – 1998

ALI RAZA, CEM

Solutions Development Engineer

CAREER SUMMARY: Ali Raza has 12 years of energy engineering and facilities experience in the energy field and he is a 4-year member of the Honeywell team. Ali's expertise is in the design engineering and energy fields and has a strong enthusiasm for his role. Ali serves as a technical expert during the sales process; Provide guidance to the proposal development team. Expert in securing funds by taking advantage of incentives through various state, federal, and utility programs. Ali also holds a master's degree in Industrial Engineering.

Responsible for quantifying costs, energy savings, determining operational, environmental and code related impacts of proposed improvements directly through customer site surveys.

Determine baseline energy consumption of existing electrical and mechanical equipment.

Renewable simulation modeling and scope of work creation

Calculate project energy savings and generate financial reports for customer proposals.

WORK EXPERIENCE

- City of Rochester Public Schools, Rochester, NY / 2012 / $3.5M
- University of Buffalo, Buffalo, NY / 2012 / $1.5M
- Genesee Brewing Company, Rochester, NY/ 2014 / $5.0M
- Rochester District Heat, Rochester, NY /2015/$3M
- Berry Plastics Macedon, NY / 2016 / $750 K
- Rochester Gas & Electric, Rochester, NY/2013/$2.0M
- Borg Warner, Ithaca, NY/2016 /$500K

RELEVANT EXPERIENCE

HONEYWELL, INC., Solutions Development Engineer | 2016 – Present

EMCOR Services, Energy Services Manager | 2014 – 2016

Labella Associates, Mechanical Engineer | 2010– 2014

Clark Patterson Lee, Mechanical Engineer | 2009– 2010

EDUCATION

Bachelor of Science in Mechanical Engineering, Saginaw Valley State University, MI

Master of Science in Industrial, State University of New York Buffalo, NY

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Certified Energy Manager

PROFESSIONAL AFFILIATIONS

- American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) member
- Association of Energy Engineers (AEE) Member

EMILY LI

Solution Development Engineer

CAREER SUMMARY: As a solution development engineer, Emily will be responsible for evaluating existing baseline energy consumption data, benchmark buildings, perform preliminary utility analysis, responsible for quantifying project costs, calculating energy savings, determining operational, environmental and code related impacts of proposed improvements, developing HVAC, building automation and control, motors, variable frequency drives, kitchen equipment, lighting, boilers, chillers, building envelope, renewable, swimming pool, water conservation, and retro-commissioning solutions.

RELEVANT EXPERIENCE

- Bogota School District (ESIP) – $2.5M
- Watchung Hills Regional HS District (ESIP) – $6.2M

WORK HISTORY

HONEYWELL, INC | 2021 – Present

- Solution Development Engineer

EDUCATION

Rutgers, the State University of New Jersey, Bachelor of Science in Mechanical Engineering

CHRIS CHRISTENSEN, JD

Cyber Business Development Manager

CAREER SUMMARY

Chris Christensen brings more than 15 years of Cyber Business Development experience to their role as Cyber Business Development Manager. Chris specializes in securing Operational Technology (OT) and Industrial Control Systems (ICS) Chris passionately believes that cybersecurity is everyone's shared responsibility and through awareness, education, accountability and positive reinforcement, everyone in an organization can work together to create a safer workplace and more secure society at large.

Chris currently reports out of Honeywell's office in Michigan

RELEVANT EXPERIENCE

- Northumberland County Public Schools – VA | 1.2M
- Brigham & Woman's Hospital – MA | 1.1M
- Saint Elizabeth's Hospital – DC | 650K
- The United States Department of Housing and Urban Development (HUD) – DC | 4.5M
- Washington DC Tech Center – MD | 3M
- State of Main – ME | 3.2M

WORK HISTORY

Honeywell International, Inc., Sr Demand Generation Rep Cybersecurity Business Solutions **|** June 2019 – Present

Michigan Department of Technology Management and Budget (DTMB),

- Director of Infrastructure protection in Cybersecurity & Infrastructure **|** May 2014 – May 2019
- Director of Research & Technology Implementation | February 2014 – March 2017
- Chief of Staff to DTMB / State Budget Director | December 2012 – February 2014

RCF Holdings, Principal **|** 2009 – Present

EDUCATION

Juris Doctor – Class or 2009, Thomas M Cooley Law School – Lansing, Michigan

Bachelor of Science in Psychology - Class of 2004, University of Utah – Salt Lake City, Utah

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Certified Information Systems Security Professional (CISSP) – completed course, SANS Training
- Hacker Tools, Techniques, Exploits and Incident Handling – completed course, SANS Training
- Comprehensive Cyberterrorism Defense – University of Arkansas & DHS certified Example:

PROFESSIONAL AFFILIATIONS

- InfraGard President and – Board Member 2019 – Current,
- Michigan Homeland Protection Board – Board Member 2015 – 2019
- Governing Advisory Board – Board Member 2014 – 2019

PUBLICATIONS & AWARDS

- 2015 Michigan Cyber Disruption Response Plan
- 2017 Tech Century
- 2019 Security Management, Smarter Access at the State
- 2015 Michigan Excellence in Technology Best Public-Private Collaboration
- 2016 Symantec Government Symposium Cyber Award
- 2017 CSO 50 Award
- 2018 Leadership and Teamwork Coins of Excellence

ROBERT LETSO

Project Manager

CAREER SUMMARY: Mr. Letso will be the primary customer contact throughout the project, providing overall project management including master scheduling, management of all contracts and financials to ensure that the contractors and Honeywell team meet the customer's goals and objectives. Bob will also work with Honeywell project design, and support teams to develop and execute the technical and construction solutions for the project.

His responsibilities include overall Honeywell project team leadership and project scheduling and execution.

25+ years Energy Field Related Experience

RELEVANT EXPERIENCE

- Bridgewater – Raritan School District (ESIP) $8.5 Million
- Elizabeth BOE (ESIP) $10 Million
- Hanover Township Schools (ESIP) $2.8 Million
- High Point Regional School District (ESIP) $1.3 Million
- Ramapo Indian Hills Regional Township (ESIP) $1.5 Million
- North Hunterdon–Voorhees Regional HS District (ESIP) $7.6 Million
- Phillipsburg Board of Education (ESIP) $7.1 Million
- Robbinsville School District (ESIP) $4.5 Million
- Hillsborough School District (ESIP) $15 Million

WORK HISTORY

HONEYWELL, INC | 1995 – Present

- Project Manager | 13 years
- Application Engineer | 2 years
- Trend Application Engineer/Project Manager | 11years

EDUCATION

Bachelor of Science, Mechanical Engineering, New Jersey Institute of Technology

PROFESSIONAL AFFILIATIONS

- Member of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)

WYATT FERGUSON

Project Manager

CAREER SUMMARY

Wyatt brings more than 15 years of project management experience leading projects for educational and municipal clients. His responsibilities include overall Honeywell project team leadership and project scheduling and execution. During his career, Wyatt has managed more than $42.5M in energy related projects.

Wyatt will be one of the primary customer contacts throughout the project, providing overall project management including master scheduling and management of all contracts and financials to ensure that the contractors and Honeywell team meet the customer's goals and objectives. Wyatt will also work with Honeywell project design and support teams to develop and execute the technical and construction solutions for the project.

Wyatt currently reports out of Honeywell's office in Morris Plains, New Jersey.

RELEVANT EXPERIENCE

- East Orange School District, ESIP, East Orange, NJ – Project Manager | May 2019 – Present | $17.7M
- East Brunswick Public School District, ESIP, East Brunswick, NJ – Project Manager | Jan. 2019 – Jan. 2022 | $8.4M
- Rumson School District, ESIP, Rumson, NJ – Project Manager | 2019 | $1.5M
- West Morris Regional High School District, ESIP, Chester, NJ – Project Manager | 2018 – 2019 | $3.1M
- City of Perth Amboy, ESIP, Perth Amboy, NJ – Project Manager | 2017 | $2.3M
- Bloomfield Public School District, ESIP, Bloomfield, NJ – Project Manager | Jan. 2017 – Jan. 2019 | $6.7M
- Northern Highlands Regional High School, ESIP, Allendale, NJ – Project Manager | May 2017 – June 2019 | $3.6M

WORK HISTORY

Honeywell International, Inc., Project Control Specialist **|** Aug. 2020 – Present

- Project Supervisor | Dec. 2016 – Aug. 2020

Sheela Inc., Field Engineer/Assistant Project Manager **|** March 2015 – Dec. 2016

Ferguson A/C Inc., Technical Project Leader | 2003 – March 2016

NJIT Conference Center, Conference Services Manager | Jan. 2012 – Jan. 2015

EDUCATION

- Bachelor of Science, Mechanical Engineering, New Jersey Institute of Technology, 2016
- Associate Degree, Liberal Arts and Sciences/Liberal Studies, Raritan Valley Community College, 2011

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- National Registry of Emergency Medical Technicians (EMT), Jan. 2019
- OSHA 30-Hour Training

MARCO CLERX,
PE, CEM, CMVP, CBXXP, CEEP, DGCP

Measurement & Verification Leader

CAREER SUMMARY: Marco leads the design and application of integrated processes and tools to be implemented by the three regional M&V teams serving the Americas. He provides at-large guidance and training to M&V leaders and key specialists to ensure that energy saving projects include practical performance M&V plans that support the financial guarantees and meet with the client's expectations for shared risk allocation and reasonable balance of cost versus rigor of determining cost avoidance.

RELEVANT EXPERIENCE

- Inter-American Development Bank (IDB) MD $12M
- City of Worcester, MA $26.6M
- Arnot Ogden Medical Center Wood Chip Biomass Boiler, NY $4.1M
- Perris Solar PV Power-Purchase, CA $5.8M
- Lakeside Inn & Casino Air Distribution, NV $1.1M
- Ponca City Water Meter Accuracy, OK $15.8M
- Great Neck Schools $11.8M
- Merrill Schools Corn Biomass Boiler, MI $0.96M
- Rowlett Water Meter Accuracy, TX $5.2M
- Poway Schools Cogeneration, CA $7.9 M

WORK HISTORY

Honeywell International, Inc., Measurement & Verification Leader | 14 years

Energy Investment, Inc, Group Manager | 2 years

Engineered Automation Systems, Inc, Project Manager | 4 years

Malcolm Lewis Associates/Engineers, Staff Engineer | 4 years

Lawrence Berkeley Laboratory, Windows & Daylighting Group, | 1 year

EDUCATION

Master of Science, Mechanical Engineering, University of California

Bachelor of Science, Mechanical Engineering, Loyola Marymount University

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Professional Engineer - CA, CT, MA (Mechanical;#40256), RI
- Certified Energy Manager
- Certified M&V Professional
- Certified Building Commissioning Professional
- Certified Energy Procurement Professional
- Distributed Generation Certified Professional
- Certified Green Building Engineer
- Certified Business Energy Professional

PROFESSIONAL AFFILIATIONS

- ASHRAE / Associate
- AEE / Senior Member

FRANK CAPITUMMINO, CEM, CMVP

Measurement & Verification Field Specialist

CAREER SUMMARY: Frank has over 32 years' experience in M&V and is responsible for quality assurance, risk mitigation, energy audit, and analysis advice to Honeywell customers.

Frank's primary responsibilities are to ensure energy saving projects includes performance M&V plans support the financial guarantees. He will also assist the account management team in developing specific M&V plans and cost estimating, present energy cost avoidance results to customers, and assist with contract retention strategies.

RELEVANT EXPERIENCE

- Parsippany-Troy Hills Schools, NJ $13,100,000
- City of Newark NJ $14,900,000
- West Orange BOE, NJ $10,800,000
- Old Bridge BOE, NJ $9,200,000
- Bridgewater-Raritan Schools, NJ $8,500,000
- School District of the Chathams, NJ $5,000,000

WORK HISTORY

HONEYWELL, INC. | 1987 – Present

- HBS / MVS /11 years
- Honeywell DMC / Program Supervisor / 11 years
- Honeywell DMC / IS Supervisor / 2 years
- Honeywell DMC / Program Coordinator, Auditor Supervisor, Auditor / 8 years

Walworth Co/Aloyco Plant, Quality Assurance Engineer | 2011 – 2014

EDUCATION

Bachelor of Science, Chemical Engineering, NJ Institute of Technology

CERTIFICATIONS/ LICENSES/ REGISTRAIONS

- Association of Energy Engineers
- Certified Energy Manager
- Certified M&V Professional
- Green Belt Certified

KARIN O'BOYLE, JD

Senior Contract Manager

CAREER SUMMARY: Karin O'Boyle joined Honeywell in December 2017 and brings 20 years of experience in contract negotiations. Karin provides process development and leadership relative to contracting and risk management. Her responsibilities include assisting with project development; supporting delivery teams in drafting and reviewing project contracts and amendments in accordance with established Honeywell policies and procedures; negotiating the terms of the performance contracting agreement with the client's attorney; and providing additional support and assistance for delivery and measurement and verification team as necessary. She provides technical resources and support to Honeywell Energy Performance Contracting teams nationwide.

RELEVANT EXPERIENCE

Karin has reviewed various contract amendments, bids, and proposals, including for the following projects:

- City of Laredo, TX | $10M
- Indian River State College | $7.7M
- Florida A&M University | $8.1M
- Miami Dade County Internal Services Department | $12.2M
- City of Palm Bay, FL | $4.3M
- Town of York | $7.6K
- Oakridge Schools | $9.6K
- Ypsilanti Community Schools | $1.8M
- North Hunterdon-Vorhees | $2.7M
- Middlesex County Vocational Tech. Schools | $4.4M
- Dutchess BOCES | $2.4M
- Floral Park-Bellerose | $2.1M
- Schenectady CSD | $9.3M
- City of Van Wert | $9.5K
- City of Granbury | 1.3M
- Caroline County | $1.1M
- Southside Regional Jail Authority | $9.1K
- City of Huntington | $2.4M

WORK HISTORY

Honeywell International, Inc., Senior Contract Manager | 2017 – Present
3M Company| 2011 – 2017

- Contract Manager, Traffic Safety Division | 2015 to 2017 (2 years)
- Contract Specialist, Government Contract Compliance | 2011 to 2015 (4 years)

Thomson Reuters, Contract Attorney | 2001 – 2011 (10 years)

EDUCATION

Juris Doctor, Georgetown University Law Center

Bachelor of Arts, Economics, University of Minnesota

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Law License: Minnesota (#0213275)

LISA MONTALTO

Finance Director

CAREER SUMMARY: Lisa Montalto brings over 35 years of relevant experience to her role as Finance Director. In this role, Lisa is responsible for assisting in project financing and maintaining financial relationships with customers and third-party financing institutions. She is also responsible for ensuring financial compliance on projects, identifying financing options, soliciting competitive financing packages and reviewing the options with customers to select the most attractive financing package. Lisa will collaborate with the customer to obtain financing which best meets the project's and customer's unique needs.

RELEVANT EXPERIENCE

- City of Somerville, MA | Phase II: $7.8M
- City of Gardner, MA | $6.6M
- Town of Randolph, MA | $7.6M
- Town of Leicester, MA | $2.2M
- Town of Malden, MA | $7.6M
- City of New Haven, CT | $3.6M
- Town of Branford, CT | $5.8M
- Town of Enfield, CT | $8.8M
- Town of Stratford, CT | $10.4M
- Town of Tolland, CT | $10.4M
- Hudson County, NJ | $24.5M
- Passaic County, NJ | $11.1M
- City of Newark, NJ | $14.9M
- Upper Township SD, NJ | $5.5M
- City of Perth Amboy, NJ | $2.3M
- Town of Mamaroneck, NY | $5M
- City of Palm Bay, FL | $4.3M
- Miami-Dade County Internal Service, FL | $12.2M
- Cambrian College, ON | $8.5M
- City of Charlottetown, PEI | $7.2M

WORK HISTORY

Honeywell International, Inc., Finance Director | 2007 – Present

Banc of America Leasing, Vice President / Group Operations Leader | 1995 – 2007

EDUCATION

Bachelor of Arts, English, Caldwell University, Caldwell, NJ

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Six Sigma Green Belt certification

KAREN HARMON

Service Operations Manager

CAREER SUMMARY: Karen Harmon manages a $3 million + service contract portfolio across multiple vertical markets and leads the technical team to ensure productivity, process compliance, contract delivery, retention and profitability. Her duties include account activity analysis relevant to profitability, variance, budget and scope of work and focuses on customer relationship management/retention. Karen identifies and develops new service contract opportunities and negotiates contracts including risk review, proposal generation, and presentation.

RELEVANT EXPERIENCE

- Annual ESPC (Government) | $1,500,000.00
- Project Management and Service Teams | $5,000,000.00
- Managed commercial, industrial, healthcare, and government service accounts | $3,950,000.00
- Project Manager | $1,200,000.00

WORK HISTORY

Honeywell International, Inc., Sr. Service Supervisor | 2014 – Present

- Technical Resource Manager | 2011-2014

Roth Bros, Director of Operations | 2005-2011

Johnson Controls, Service / Sales Ops. & Area Administrative Supervisor | 1998-2005

EDUCATION

Master of Business Administration, University of Phoenix, AZ

Bachelor of Arts, Business Marketing, University of Phoenix, AZ

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- East Ohio Gas Co. – Energy-Economics-Environment
- Professional Writers Association
- Copywriter – AWAI Verified

LISA NACCARATO

Senior Health, Safety, and Environmental Manager

CAREER SUMMARY

Lisa Naccarato brings more than 25 years of Health, Safety, and Environmental (HSE) experience to their role as a Senior HSE Manager. In her role, Lisa has provided support in large, multi-national companies at six sites, from chemical manufacturing and petroleum refining to discrete manufacturing and field services. Lisa's experience includes regulatory interactions, stakeholder relationships and culture change, and the resolution of complex HSEPS issues and driving process improvement across multiple sites.

Lisa currently reports out of Honeywell's office in Spokane Valley, Washington.

RELEVANT EXPERIENCE

Senior Health, Safety, and Environmental (HSE) Manager, Energy Group

Provide direction, oversight and guidance that assists the Americas Projects & Services Energy Group's 200+ field operations personnel in managing the risks associated with all operational aspects in supporting over 100M annualized in federal and public energy contracts. Lead a team of 5 EHS professionals and multiple contract safety officers to drive EHS compliance and performance across the Energy business contracts.

Regional Health, Safety, and Environmental (HSE) Manager, Americas

Provide direction, oversight and guidance that assists the Americas businesses consisting of multiple manufacturing locations, offices and 200+ field operations personnel in managing the health, safety, and environmental risks associated with all operational aspects. Served as Honeywell Aerospace Federal Solutions team environmental, safety and health "key" leadership member in its bid for the Hanford Tank Closure contract.

Environmental, Health and Safety Manager

Led the Health, Safety, Environmental and Security program at a complex manufacturing site and directed operational, technical, budgetary ($2M), and organizational aspects of EHS performance to ensure compliance. Achieved internal Honeywell Operating System Silver level maturity in the ESH program. Managed the site Wastewater Treatment (WWT) Plant, including permitting obligations and regulatory agency interaction. Standardized compliance tracking activities and increased compliance through the implementation of a Compliance Operating System. Site process recognized for excellence by business leadership.

WORK HISTORY

Honeywell International, Inc., Senior Health, Safety, and Environmental Manager, Energy Group |Jan. 2021 – Present

- Regional Health, Safety, and Environmental Manager, Americas | Sept. 2018 – Jan. 2021
- Health, Safety, and Environmental Manager | June 2012 – Sept. 2018

Ascend Performance Materials, Environmental, Safety, Health, and Security (ESSH) Lead (Manager) | Oct. 2006 – May 2012

EDUCATION

- Master of Public Health, Environmental Health Sciences, University of South Carolina, 1995
- Bachelor of Science, Biology, University of South Carolina, 1991

CERTIFICATIONS/ LICENSES/ REGISTRATIONS

- Green Belt, Lean Six Sigma, 2004 & 2013

SECTION D

ANNUAL REPORT / FINANCIAL STATEMENTS

Section D. Annual Report / Financial Statements

Honeywell is rated “A” by Standard and Poor’s and “A2” by Moody’s, classified by Wall Street analysts as “Investment Grade.” Honeywell’s ratings have been at these levels for many years. Honeywell remains well capitalized and has the financial strength to stand behind its project work and guarantees.

Our shares are traded on the New York Stock Exchange under the symbol HON, as well as on the London, Chicago and Pacific Stock Exchanges. Honeywell is also a component of the Standard & Poor’s 500 Index. Our DUNS number is 13-969-1877.

Included on the following pages is a copy of our most recent financial statements. These statements present pertinent financial information for the last three fiscal years and denote longevity consistent with our solid financial strength and history. Honeywell’s financial documents are the responsibility of the Company’s management and are audited in accordance with generally accepted standards by PricewaterhouseCoopers LLP.

PricewaterhouseCoopers LLP
400/500 Campus Drive
Florham Park, NJ 07932
973-236-4000

For additional information, relative to Honeywell’s financial stability, we invite you to visit our website at www.honeywell.com/investor relations.

Banking Reference:
Mary Painter
JPMorgan Chase Bank
300 South Riverside, IL 1-0239
Chicago, IL 60606
Phone: 312-954-0147
Fax: 312-256-9303

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF OPERATIONS

	Years Ended December 31,		
	2021	2020	2019
	(Dollars in millions, except per share amounts)		
Product sales	$25,643	$24,737	$27,629
Service sales	8,749	7,900	9,080
Net sales	**34,392**	**32,637**	**36,709**
Costs, expenses and other			
Cost of products sold	18,344	17,638	19,269
Cost of services sold	5,050	4,531	5,070
	23,394	**22,169**	**24,339**
Selling, general and administrative expenses	4,798	4,772	5,519
Other (income) expense	(1,378)	(675)	(1,065)
Interest and other financial charges	343	359	357
	27,157	**26,625**	**29,150**
Income before taxes	7,235	6,012	7,559
Tax expense	1,625	1,147	1,329
Net income	**5,610**	**4,865**	**6,230**
Less: Net income attributable to the noncontrolling interest	68	86	87
Net income attributable to Honeywell	**$ 5,542**	**$ 4,779**	**$ 6,143**
Earnings per share of common stock—basic	**$ 8.01**	**$ 6.79**	**$ 8.52**
Earnings per share of common stock—assuming dilution	**$ 7.91**	**$ 6.72**	**$ 8.41**

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	Years Ended December 31,		
	2021	2020	2019
	(Dollars in millions)		
Net income	$ 5,610	$ 4,865	$ 6,230
Other comprehensive income (loss), net of tax			
Foreign exchange translation adjustment	**302**	**(211)**	**143**
Actuarial gains (losses) recognized	256	91	162
Prior service credit (cost) recognized	7	47	1
Prior service credit recognized during year	(87)	(82)	(79)
Actuarial (gains) losses recognized during year	5	41	16
Foreign exchange translation and other	5	(23)	(14)
Pensions and other postretirement benefit adjustments	**186**	**74**	**86**
Changes in fair value of available for sale investments	(3)	4	—
Cash flow hedges recognized in other comprehensive income	17	10	103
Less: Reclassification adjustment for gains (losses) included in net income	20	54	92
Changes in fair value of cash flow hedges	**(3)**	**(44)**	**11**
Other comprehensive income (loss), net of tax	482	(177)	240
Comprehensive income	**6,092**	**4,688**	**6,470**
Less: Comprehensive income attributable to the noncontrolling interest	64	89	82
Comprehensive income attributable to Honeywell	**$ 6,028**	**$ 4,599**	**$ 6,388**

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED BALANCE SHEET

	December 31,	
	2021	2020
	(Dollars in millions)	
ASSETS		
Current assets:		
Cash and cash equivalents	$ 10,959	$ 14,275
Short-term investments	564	945
Accounts receivable, less allowances of $177 and $202, respectively	6,830	6,827
Inventories	5,138	4,489
Other current assets	1,881	1,639
Total current assets	**25,372**	**28,175**
Investments and long-term receivables	1,222	685
Property, plant and equipment—net	5,562	5,570
Goodwill	17,756	16,058
Other intangible assets—net	3,613	3,560
Insurance recoveries for asbestos related liabilities	322	366
Deferred income taxes	489	760
Other assets	10,134	9,412
Total assets	**$64,470**	**$64,586**
LIABILITIES		
Current liabilities:		
Accounts payable	$ 6,484	$ 5,750
Commercial paper and other short-term borrowings	3,542	3,597
Current maturities of long-term debt	1,803	2,445
Accrued liabilities	7,679	7,405
Total current liabilities	**19,508**	**19,197**
Long-term debt	14,254	16,342
Deferred income taxes	2,364	2,113
Postretirement benefit obligations other than pensions	208	242
Asbestos related liabilities	1,800	1,920
Other liabilities	7,087	6,975
Redeemable noncontrolling interest	7	7
SHAREOWNERS' EQUITY		
Capital—common stock issued	958	958
—additional paid-in capital	8,141	7,292
Common stock held in treasury, at cost	(30,462)	(27,229)
Accumulated other comprehensive income (loss)	(2,895)	(3,377)
Retained earnings	42,827	39,905
Total Honeywell shareowners' equity	**18,569**	**17,549**
Noncontrolling interest	673	241
Total shareowners' equity	**19,242**	**17,790**
Total liabilities, redeemable noncontrolling interest and shareowners' equity	**$64,470**	**$64,586**

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF CASH FLOWS

	Years Ended December 31,		
	2021	2020	2019
	(Dollars in millions)		
Cash flows from operating activities:			
Net income	$ 5,610	$ 4,865	$ 6,230
Less: Net income attributable to the noncontrolling interest	68	86	87
Net income attributable to Honeywell	**5,542**	**4,779**	**6,143**
Adjustments to reconcile net income attributable to Honeywell to net cash provided by operating activities:			
Depreciation	674	644	673
Amortization	549	358	415
(Gain) loss on sale of non-strategic businesses and assets	(102)	3	1
Repositioning and other charges	569	575	546
Net payments for repositioning and other charges	(692)	(833)	(376)
Pension and other postretirement income	(1,114)	(798)	(516)
Pension and other postretirement benefit payments	(43)	(47)	(78)
Stock compensation expense	217	168	153
Deferred income taxes	178	(175)	179
Reimbursement receivables charge	—	509	—
Other	(28)	(338)	(287)
Changes in assets and liabilities, net of the effects of acquisitions and divestitures:			
Accounts receivable	(8)	669	11
Inventories	(685)	(67)	(100)
Other current assets	(276)	191	(430)
Accounts payable	744	15	118
Accrued liabilities	513	555	445
Net cash provided by (used for) operating activities	**6,038**	**6,208**	**6,897**
Cash flows from investing activities:			
Expenditures for property, plant and equipment	(895)	(906)	(839)
Proceeds from disposals of property, plant and equipment	27	57	43
Increase in investments	(2,373)	(3,236)	(4,253)
Decrease in investments	2,525	3,508	4,464
Receipts from Garrett Motion Inc.	586	—	—
Receipts (payments) from settlements of derivative contracts	192	(149)	102
Cash paid for acquisitions, net of cash acquired	(1,326)	(261)	(50)
Proceeds from sales of businesses, net of fees paid	203	—	—
Net cash provided by (used for) investing activities	**(1,061)**	**(987)**	**(533)**
Cash flows from financing activities:			
Proceeds from issuance of commercial paper and other short-term borrowings	5,194	10,474	14,199
Payments of commercial paper and other short-term borrowings	(5,190)	(10,400)	(14,199)
Proceeds from issuance of common stock	229	393	498
Proceeds from issuance of long-term debt	2,517	10,125	2,726
Payments of long-term debt	(4,917)	(4,308)	(2,903)
Repurchases of common stock	(3,380)	(3,714)	(4,400)
Cash dividends paid	(2,626)	(2,592)	(2,442)
Other	(81)	(59)	(79)
Net cash provided by (used for) financing activities	**(8,254)**	**(81)**	**(6,600)**
Effect of foreign exchange rate changes on cash and cash equivalents	(39)	68	16
Net increase (decrease) in cash and cash equivalents	(3,316)	5,208	(220)
Cash and cash equivalents at beginning of period	14,275	9,067	9,287
Cash and cash equivalents at end of period	$ 10,959	$ 14,275	$ 9,067

HONEYWELL INTERNATIONAL INC.
CONSOLIDATED STATEMENT OF SHAREOWNERS' EQUITY

	Years Ended December 31,					
	2021		2020		2019	
	Shares	$	Shares	$	Shares	$
	(in millions, except per share amounts)					
Common stock, par value	957.6	958	957.6	958	957.6	958
Additional paid-in capital						
Beginning balance		7,292		6,876		6,452
Issued for employee savings and option plans		184		248		271
Stock-based compensation expense		217		168		153
Impact of Quantinuum contribution		448		—		—
Ending balance		8,141		7,292		6,876
Treasury stock						
Beginning balance	(260.8)	(27,229)	(246.5)	(23,836)	(228.0)	(19,771)
Reacquired stock or repurchases of common stock	(15.8)	(3,380)	(20.7)	(3,714)	(26.5)	(4,400)
Issued for employee savings and option plans	3.8	147	6.4	321	8.0	335
Ending balance	(272.8)	(30,462)	(260.8)	(27,229)	(246.5)	(23,836)
Retained earnings						
Beginning balance		39,905		37,693		33,978
Net income attributable to Honeywell		5,542		4,779		6,143
Dividends on common stock		(2,620)		(2,567)		(2,428)
Ending balance		42,827		39,905		37,693
Accumulated other comprehensive income (loss)						
Beginning balance		(3,377)		(3,197)		(3,437)
Foreign exchange translation adjustment		302		(214)		143
Pensions and other postretirement benefit adjustments		186		74		86
Changes in fair value of available for sale investments		(3)		4		—
Changes in fair value of cash flow hedges		(3)		(44)		11
Ending balance		(2,895)		(3,377)		(3,197)
Noncontrolling interest						
Beginning balance		241		212		178
Acquisitions, divestitures, and other		397		(6)		(3)
Net income attributable to noncontrolling interest		68		86		87
Foreign exchange translation adjustment		(4)		3		(5)
Dividends paid		(33)		(54)		(45)
Contributions from noncontrolling interest holders		4		—		—
Ending balance		673		241		212
Total shareowners' equity	**684.8**	**19,242**	**696.8**	**17,790**	**711.1**	**18,706**
Cash dividends per share of common stock		**$ 3.770**		**$ 3.630**		**$ 3.360**

SECTION E
PRESENTATION OF COMPLETED ENERGY CONSERVATION PROJECTS

Section E. Presentation of Completed Energy Conservation Projects

Summary

The Honeywell project references listed in the table below are from our large portfolio to demonstrate prior relevant work experience in the development and implementation of performance-based ESIP-type energy efficiency, conservation, and renewables projects.

Within the last 5 (five) years, Honeywell successfully implemented, monitored, and **completed all projects on time**. The secondary references also represent various project types that reflect our experience, expertise, resources, and capabilities in the energy efficiency and conservation industry.

All projects were under full compliance of the NJ ESIP Legislation and have calculated and verified savings.

Primary Project References	Secondary Project References
Rumson School District	Parsippany-Troy Hills School District
West Morris Regional High School	Hillsborough Township School District
School District of the Chathams	West Orange School District
Old Bridge	

Each of these references had unique needs regarding energy and mechanical retrofits, lighting retrofits, energy management, indoor air quality, and ongoing support services.

Honeywell performed design, build, M&V and technical support services for these projects. Our extensive in-house capabilities enable us to customize solutions to our customers' needs and maintain the highest standards for quality control.

The project references demonstrate our experience directly relevant to the District in the following areas:

- NJ ESIP projects
- Similarity to building type, size, and scope
- Similarity to potential projects
- Demonstrated capability to implement required ECM
- Demonstrated guaranteed performance
- Geographic location, the references supported and implemented directly through the Northeast

For each of these projects, Honeywell performed the following phases of contract execution:

- Energy Audit/Feasibility Studies
- Energy Savings Plan Development
- Design and Implementation
- Commissioning and M&V
- Operations and Maintenance
- Savings

The table below provides a comprehensive list of Honeywell's NJ-specific ESIP projects demonstrating our extensive experience successfully supporting the state's energy-saving goals.

Honeywell NJ ESIP Customer	Project Status	Honeywell Project $	Annual Guaranteed Savings
Elizabeth Public Schools	Construction	$75,015,212	$2,812,504
Montclair Public Schools	Construction	$9,925,101	$839,636
Piscataway Township Schools	Construction	$15,448,119	$718,429
East Orange School District	Construction	$17,688,752	$1,458,617
Middlesex County Vocational Technical Schools	Construction	$4,484,292	$363,103
Morris County Vo-Tech	Construction	$960,711	$75,136
Rumson BOE	Construction	$1,596,190	$117,910
Montville BOE	Construction	$2,626,632	$204,819
East Brunswick School District	Construction	$8,362,083	$709,597
The County of Hudson	Construction	$28,205,454	$1,464,786
The County of Passaic	Construction	$11,161,693	$695,775
City of Newark	Construction	$14,898,000	$915,218
Educational Services Commission of NJ	Complete	$4,331,431	$252,067
West Morris Regional High School District	Complete	$3,185,639	$206,049
Northern Highland Regional HS	Complete	$3,596,457	$252,321
Bloomfield School District	Complete	$5,965,940	$387,951
City of Perth Amboy	Complete	$2,398,207	$187,473
Old Bridge Township Public Schools	Complete	$15,160,251	$1,087,415
West Orange School District	Complete	$10,825,346	$659,752
Somerset County Vo-Tech	Complete	$2,063,519	$194,223
Upper Township Board of Education	Complete	$5,517,037	$354,631
Denville Township Schools	Complete	$1,855,328	$108,890
School District of the Chathams	Complete	$5,014,158	$311,135
Great Meadows School District	Complete	$2,561,470	$165,540
Hillsborough Township School District	Complete	$15,154,752	$834,099
Verona Public School District	Complete	$3,145,042	$198,418
Parsippany Troy Hills School District	Complete	$13,920,401	$691,066
Elizabeth Board of Education	Complete	$10,033,644	$858,265
Bridgewater-Raritan-Regional District	Complete	$8,563,325	$592,025
NH Voorhees Regional HS District	Complete	$7,559,572	$602,161

Honeywell NJ ESIP Customer	Project Status	Honeywell Project $	Annual Guaranteed Savings
Phillipsburg School District	Complete	$7,132,145	$421,061
Camden County Technical Schools	Complete	$6,999,998	$526,478
Robbinsville Public School District	Complete	$4,492,914	$240,849
Lower Cape May Regional District	Complete	$3,455,546	$215,614
Hanover Township Schools	Complete	$2,855,936	$129,950
Mountain Lakes Board of Education	Complete	$2,390,463	$177,373
High Point Regional HS	Complete	$1,315,119	$167,096
Frankford Township Schools	Complete	$763,494	$42,645
Total Project Costs and Annual Guaranteed Savings		**$326,219,980**	**$19,037,338**

RUMSON SCHOOL DISTRICT

60 Forrest Avenue Rumson, NJ 07760

PROJECT DESCRIPTION

The Rumson School District project is a solution consisting of new boiler replacements, domestic hot water system, LED lighting and motor replacements in addition to an enterprise building management system which replaced and leveraged an existing JCI system. Additionally, the program provided RFP development and evaluation support for a 399 kW DC Solar PPA which utilized one school's roof to provide 70% of the electricity for the 2 buildings. The savings from the Solar PPA helped fund the improvements.

Rumson Schools utilized the Energy Saving Improvement Program to reduce the work requested in a subsequent bond referendum project which was successfully approved.

HONEYWELL PROJECT ROLE

Honeywell acted as the general contractor for this energy performance contract, providing energy auditing, design engineering, project management, and commissioning. Honeywell then implemented numerous upgrades and improvements to various school buildings and facilities, including improvements to air-handling units, upgrades to building boilers and chiller systems, and ventilation improvements.

PROJECT SCOPE

- LED Lighting Retrofit
- Boiler Replacements
- Domestic Hot Water Replacement
- Building Management Installation
- Variable Frequency Drives
- Energy Efficient Motors
- Building Envelope Improvements
- Solar Power Purchase Agreement

CLIENT NAME

Rumson School District

CONTACT INFORMATION

Name: Denise McCarthy
Title: Business Administrator
Phone: (732) 842-3293

AWARD DATE

May 2019

CONSTRUCTION & IMPLEMENTATION

June 2019 – June 2020

PROJECT COST

$1,596,190

SOURCE OF FUNDS

Energy Savings Improvement Program

TOTAL FACILITY AREA

2 Buildings

WEST MORRIS REGIONAL HIGH

10 South Four Bridges Road Chester, NJ 07930

PROJECT DESCRIPTION: The Boilers in the Mendham Location were in dis-repair and the control systems throughout the district were proprietary and inconsistent with the ability to control temperatures and schedules. Utilizing the savings from LED lighting and Building Envelope improvements, the district was able to replace the boilers, upgrade the control systems, and even re-design the lighting throughout the district, which consisted of two high school buildings with over 415,000 square feet.

Honeywell Project Role: General contractor for energy performance contract work, investment grade energy auditing, design engineering, project management, commissioning, measurement & verification, and warranty services.

PROJECT SCOPE

- Lighting Upgrades – LED Retrofit
- Vending Misers
- De-Stratification Fans
- Boiler Replacements & Boiler Burner Controls
- Premium Efficiency Motors and VFDs
- Building Management System Upgrades with open protocol architecture
- Building Envelope Improvements

DURATION

Guarantee Commencement: April 2018 – March 2019

PROJECT COST

- $3,185,639

GUARANTEE PERIOD

- 15-yr Municipal Lease Purchase

OF BUILDINGS

- 2 High School Buildings

GUARANTEE VS. ACHIEVED SAVINGS

- $206,049 Annually

CONTACT INFORMATION

Mr. L. Douglas Pechanec
Business Administrator

- (908) 879-6404
- dpechanec@wmrhsd.org

SCHOOL DISTRICT OF THE CHATHAMS

50 Meyersville Road Chatham, NJ 07928

PROJECT DESCRIPTION: This project includes roof top units, and boiler replacements lighting replacement, district-wide open protocol building management system, building envelop solutions, plug load control in school buildings totaling 450,000 square feet.

Honeywell Project Role: General contractor for energy performance contract work, investment grade energy auditing, design engineering, project management, commissioning, measurement & verification, and warranty services.

PROJECT SCOPE

- Building Envelope
- Plug Load
- Energy Efficient Motors
- Pipe Insulation
- Steam Trap Retrofits
- Variable Frequency Drives
- Roof Top Units
- Building Control Systems
- Demand Response
- High Efficiency Boiler Replacements
- High Efficiency Hot Water Heaters

DURATION

- Guarantee Commencement: April 2016 – April 2017

PROJECT COST

- $5,014,158

GUARANTEE PERIOD

- 15-yr Municipal Lease Purchase

OF BUILDINGS

- Multiple totaling 450,000 sq. ft.

GUARANTEE VS. ACHIEVED SAVINGS

- $311,135 Annually

CONTACT INFORMATION

Mr. Peter Daquila

Business Administrator

(973) 457-2500

pdquila@chatham-nj.org

OLD BRIDGE BOARD OF EDUCATION

4207 Highway 516 Matawan, NJ 07747

PROJECT DESCRIPTION: Old Bridge Township Public Schools is a 42-square mile suburban school district located in central New Jersey. The district has a pre-kindergarten annex, twelve elementary schools' grades K-5, two middle schools grades 6-8, and a single campus high school with a separate facility for 9th graders.

The boilers in 13 of 20 buildings were reaching the end of their useful life and was leading to increased energy use and high repair costs. Our LED lighting upgrade and major controls upgrade provided enough savings to replace boilers, transformers and roof top units. The installation of a 3.4 MW Solar Power Purchase Agreement also enabled the District to replace 8 roofs on various schools that were at the end of their useful life as well. 20 school buildings consisting of over 1,396,019 square feet.

PROJECT SCOPE

- Task 1Lighting Upgrades – LED Retrofit
- Vending Misers
- Plug Load Power Management via Wi-Fi
- De-Stratification Fans
- Boiler Replacements & Boiler Burner Controls
- Rooftop Unit Retro-Commissioning
- Premium Efficiency Motors and VFDs
- Task 2Building Management System Upgrades / Pneumatic to DDC Conversion
- Building Envelope Improvements
- 3.4 MW Solar Power Purchase Agreement
- Computer Power Management
- High Efficiency Transformers
- Roof Replacement

DURATION

- Guarantee Commencement: December 2016 – November 2018

PROJECT COST

- $15,160,251

GUARANTEE PERIOD

- 15-yr Municipal Lease Purchase

OF BUILDINGS

- 20 School Buildings

GUARANTEE VS. ACHIEVED SAVINGS

- $ 1,087,415 Annually

CONTACT INFORMATION

Mr. Joseph J. Marra
Business Administrator
(732) 290-3952
jmarra@obps.org

PARSIPPANY TROY-HILLS BOARD OF EDUCATION

292 Parsippany Road Parsippany, NJ 07054

PROJECT DESCRIPTION: The Automation and control systems throughout the district were in disrepair leading to increased energy use and high repair costs. Honeywell provided LED lighting upgrades and major controls upgrades which provided enough savings to replace boilers and windows as well as retrofit the football stadium lights. The project consisted of upgrades to 14 school buildings consisting of over 980,000 square feet.

Honeywell Project Role: General contractor for energy performance contract work, investment grade energy auditing, design engineering, project management, commissioning, measurement & verification and warranty services.

PROJECT SCOPE

- Lighting Upgrades – LED Retrofit
- Plug Load Management via Wi-Fi
- Boiler Replacements & Boiler Burner Controls
- Domestic Hot Water Replacements
- Roof Top Unit (RTU) Replacement
- Central AHU (HVAC-1D) & Chiller Replacements
- Premium Efficiency Motors and VFDs
- Walk-In Compressor Controllers
- Pipe Insulation
- Steam Trap Replacement, etc.

DURATION

- Guarantee Commencement: August 2014 – November 2015

PROJECT COST

- $13,920,401

GUARANTEE PERIOD

- 15-yr Municipal Lease Purchase

OF BUILDINGS

- 14 School Buildings

GUARANTEE VS. ACHIEVED SAVINGS

- $691,066 Annually

CONTACT INFORMATION

Mrs. Robin Tedesco,
Interim Business Administrator/Board Secretary
(973) 263-7200

HILLSBOROUGH TOWNSHIP BOARD OF EDUCATION

379 South Branch Road Hillsborough, NJ 08844

PROJECT DESCRIPTION: In August of 2014, Honeywell entered in a $15M energy savings improvement program for Hillsborough Township Public Schools to help boost energy efficiency, reliability, and comfort in the district's facilities. The upgrades are expected to reduce the school district's annual operating costs by approximately $1M, while promoting a better learning environment for students and faculty. The work, which includes a variety of heating, cooling, and energy-management upgrades, is expected to cut the district's energy use and costs almost 50%.

Honeywell implemented a CHP system at Hillsborough High School and Hillsborough Middle School that will help heat the buildings more efficiently and effectively, and supply some of the energy needed to operate the facilities. It also provides some back-up power in the event of an outage; important since the high school may serve as a community shelter. Honeywell also updated existing lighting systems in the district's buildings and parking lots with efficient, long-lasting LED technology, and replace old boilers with energy-saving units, among other improvements. The ECMs help fund the installation of air-conditioning equipment as well, which will make classrooms more comfortable.

PROJECT SCOPE

- Task Lighting Upgrades and Parking Lot Lights
- Destratification Fans
- Boiler Replacements & Boiler Burner Controls
- Domestic Hot Water Replacement
- Roof Top Unit (RTU) Replacement
- Condensing Unit Replacements
- Variable Frequency Drives and Motor Replacements
- Walk-In Freezer/Cooler Controls
- Kitchen Hood Control
- Variable Refrigerant Volume (VRV) Cooling
- Building Management System (BMS) Integration
- Building Envelope Improvements (BEI)
- Window Replacements, etc.

DURATION

- Guarantee Commencement: August 2014 – November 2015

PROJECT COST

- $15,154,752

GUARANTEE PERIOD

- 17-Year Municipal Lease Purchase

GUARANTEE VS. ACHIEVED SAVINGS

- $834,099 Annually

CONTACT INFORMATION

Mr. Aiman Mahmoud
Business Administrator
(908) 240-6597
amahmoud.htps.us

WEST ORANGE PUBLIC SCHOOLS

179 Eagle Rock Avenue West Orange, NJ 07052

PROJECT DESCRIPTION: The West Orange Public Schools project includes roof top units, and boiler replacements lighting replacement, district-wide open protocol building management system, roof replacements, Combined Heat and Power, Generators, and 12 school buildings totaling 1.0 Million square feet.

Honeywell Project Role: General contractor for energy performance contract work, investment grade energy auditing, design engineering, project management, commissioning, measurement & verification, and warranty services.

PROJECT SCOPE

- Combined Heat and Power
- New Generators
- Roof Replacements
- Energy Efficient Motors
- Pipe Insulation
- Steam Trap Retrofits
- Variable Frequency Drives
- Roof Top Units
- Building Control Systems
- Demand Response
- High Efficiency Boiler Replacements
- High Efficiency Hot Water Heaters

DURATION

- Guarantee Commencement: March 2016 - November 2017

PROJECT COST

- $10,825,436

GUARANTEE PERIOD

- 15 Year Municipal Lease Purchase

OF BUILDINGS

- 12 School Buildings

GUARANTEE VS. ACHIEVED SAVINGS

- $659,752 Annually

CONTACT INFORMATION

Mr. Robert Csigi
Director of Facilities
(973) 669-5400
rcsigig@westorangeschools.org

SECTION F
PROJECT
QUALIFICATIONS CRITERIA

Section F. Project Qualifications Criteria

Section F-1 Security Bond

Honeywell International Inc. has been a highly regarded and valued client of Federal Insurance Company since 1997. Federal Insurance Company is rated A++ /XV in the Best's Key Rating Guide and is listed in the Department of Treasury's List of Approved Sureties. Honeywell has a current bond capacity of $150,000,000 per single event, $750,000,000 aggregate. Our bonding agent is Rosenberg & Parker, Inc. Rosenberg & Parker has over 50 years' experience in this field and are well versed in all aspects of surety.

Rosenberg & Parker, Inc.
595 East Swedesford Road, Suite 350
Wayne, PA 19087
Phone: 800-394-9200
Fax: 610-667-5200

Financial protection relative to Honeywell's performance on any future contract is never an issue. Honeywell is a financially stable, successful company that has the bonding capacity to exceed the size of a potential program to be implemented for the District.

As required in the RFP, Honeywell is providing a security bond in an amount equal to five percent (5%) of the proposed initial investment in the project, as calculated at the time this proposal is submitted.

This is provided on the following pages.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, HONEYWELL INTERNATIONAL INC.
115 Tabor Road, Morris Plains, NJ 07950
as Principal, and FEDERAL INSURANCE COMPANY
202B Hall's Mill Road, P.O. Box 1650, Whitehouse Station, NJ 08889-1650
as Surety, are hereby held and firmly bound unto MANASQUAN PUBLIC SCHOOL DISTRICT BOARD OF EDUCATION
169 Broad Street, Manasquan, NJ 08736
as Owner, in the penal sum of Five Percent of the Base Bid Plus the Total Amount of All Additive Alternates----------
(5%) DOLLARS,
for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, this 23rd day of June, 2022.

The condition of the above obligation is such that, whereas the Principal has submitted to
MANASQUAN PUBLIC SCHOOL DISTRICT BOARD OF EDUCATION
a certain bid, attached hereto and hereby made a part hereof to enter into a contract in writing, for
Energy Savings Plan through an Energy Savings Improvement Program

NOW, THEREFORE,

(a) If said Bid shall be rejected, or in the alternate,

(b) If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached hereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid,

then this obligation shall be void, otherwise the same shall remain in force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims thereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligation of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the Owner may accept such bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officer, the day and year first set forth above.

Attest/Witness

Witness Kyle Koziol, Witness

HONEYWELL INTERNATIONAL INC.

By: Paul B. Piazza, Assistant Treasurer

FEDERAL INSURANCE COMPANY

By: Jonathan F. Black, Attorney-in-Fact

CONSENT OF SURETY

MANASQUAN PUBLIC SCHOOL DISTRICT BOARD OF EDUCATION
169 Broad Street
Manasquan, NJ 08736

FEDERAL INSURANCE COMPANY duly qualified to transact business in the State of New Jersey agrees that if HONEYWELL INTERNATIONAL INC. is the successful Bidder for Energy Savings Plan through an Energy Savings Improvement Program it as surety, will provide the Bidder with bonds in such form and sum as required in the advertisement or in the specifications.

Signed, sealed and dated this 23rd day of June, 2022

FEDERAL INSURANCE COMPANY

By: _____
Jonathan F. Black, Attorney-in-Fact

CHUBB

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that **FEDERAL INSURANCE COMPANY**, an Indiana corporation, **VIGILANT INSURANCE COMPANY**, a New York corporation, **PACIFIC INDEMNITY COMPANY**, a Wisconsin corporation, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Jonathan F. Black, Denise M. Bruno, Julia R. Burnet, Elizabeth P. Cervini, James M. DiSciullo, Stephanie S. Helmig, Melissa J. Hinde, Joyce M. Houghton, David A. Johnson, David C. Rosenberg, Harry C. Rosenberg, John E. Rosenberg and Matthew J. Rosenberg of Wayne, Pennsylvania

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business, and any instruments amending or altering the same, and consents to the modification or alteration of any instrument referred to in said bonds or obligations.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** have each executed and attested these presents and affixed their corporate seals on this **14th** day of **May, 2021.**

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney, Vice President

STATE OF NEW JERSEY
County of Hunterdon SS.

On this **14th** day of **May, 2021,** before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal

KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 16, 2024

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

(i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
(ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this 23rd Day of June, 2022

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903- 3493 Fax (908) 903- 3656 e-mail: surety@chubb.com

Combined: FED-VIG-PI-WFIC-AAIC (rev. 11-19)

CHUBB

SURETY DISCLOSURE STATEMENT AND CERTIFICATION
NEW JERSEY PUBLIC WORKS SURETY BONDS
(pursuant to N.J.S.A. 2A: 44-143)

Federal Insurance Company, **Vigilant Insurance Company** and/or **Pacific Indemnity Company**, the Surety(ies) on the attached bond, hereby certify(ies) the following:

1) The Surety meets the applicable capital and surplus requirements of R.S. 17:17-6 or R.S. 17:17-7 as of the Surety's most current annual filing with the New Jersey Department of Banking and Insurance.

2) The capital (where applicable) and surplus, as determined in accordance with the applicable laws of the State of New Jersey, of the Surety participating in the issuance of the attached bond is in the following amount(s) as of the calendar year ended December 31st, 2020.

Surety Company	Capital	Surplus
Federal Insurance Company	$ 20,980,000	$ 4,324,172,000
Vigilant Insurance Company	$ 4,500,000	$ 349,615,000
Pacific Indemnity Company	$ 5,535,000	$ 3,540,137,000

which amounts have been certified as indicated by the certified public accountants, Ernst & Young LLP, 787 Seventh Avenue, New York, NY 10019, and are included in the Annual Statements on file with the New Jersey Department of Banking and Insurance, 20 West State Street, CN- 325, Trenton, NJ 08625-0325.

3) (a) With respect to each Surety participating in the issuance of the attached bond that has received from the United States Secretary of the Treasury a certificate of authority pursuant to 31 U.S.C. § 9305, the underwriting limitation established therein and the date as of which that limitation was effective are as follows:

Surety Company	Limitation Per Bond	Effective Date
Federal Insurance Company	$ 414,198,000	July 1, 2021
Vigilant Insurance Company	$ 34,962,000	July 1, 2021
Pacific Indemnity Company	$ 354,014,000	July 1, 2021

(b) With respect to each Surety participating in the issuance of the attached bond that has not received such a certificate of authority from the United States Secretary of the Treasury, the underwriting limitation of that surety as established pursuant to R.S.17:18-9 and the date on which such limitation was so established are as follows:

Not Applicable

4) The amount of the bond to which this statement and certification is attached is X Five Percent of the Base Bid Plus the Total Amount of All Additive Alternates (5%)----------.

5) If, by virtue of one or more contracts of reinsurance, the amount of the bond indicated under Item (4) above, exceeds the total underwriting limitation of all sureties on the bond as set forth in Item (3) above, then for each such contract of reinsurance:

(a) The name and address of each reinsurer under the contract and the amount of the reinsurer's participation in the contract is as follows:

Not Applicable and;

(b) Each surety that is party to any such contract of reinsurance certifies that each reinsurer listed under Item (5) (a) satisfies the credit for reinsurance requirement established under P.L. 1993, c.243 (C.17:51B-1 et seq.) and any applicable regulations in effect as of the date on the bond to which this statement and certification is attached shall have been filed with the appropriate public agency.

CERTIFICATE

I, Stephen M. Haney, as Vice President of **Federal Insurance Company**, a corporation domiciled in Indiana, **Vigilant Insurance Company**, a corporation domiciled in New York, and **Pacific Indemnity Company**, a corporation domiciled in Wisconsin, do hereby certify that, to the best of my knowledge, the foregoing statements made by me are true, and acknowledge that, if any of those statements are false, this bond is voidable.

By:

Stephen M. Haney, Vice President

Form 15-10-0200-A (Rev.07-21)

State of New Jersey
Department of Banking and Insurance

CERTIFICATE OF AUTHORITY

Date: **May 01, 2021**

NAIC Company Code: **20281**

THIS IS TO CERTIFY THAT THE **FEDERAL INSURANCE COMPANY,** HAVING COMPLIED WITH THE LAWS OF THE STATE OF NEW JERSEY, AND ANY SUPPLEMENTS OR AMENDMENTS THERETO WITH RESPECT TO THE TRANSACTION OF THE BUSINESS OF INSURANCE, IS LICENSED TO TRANSACT IN THIS STATE UNTIL THE 1st DAY OF MAY, 2022, THE LINES OF INSURANCE SPECIFICALLY DESIGNATED BELOW:

01 - Fire and Allied Lines
10 - Aircraft Physical Damage
11 - Other Liability
12 - Boiler and Machinery
13 - Fidelity and Surety
14 - Credit
15 - Burglary and Theft
16 - Glass
17 - Sprinkler Leakage and Water Damage
18 - Livestock
19 - Smoke or Smudge
02 - Earthquake
20 - Physical Loss to Buildings
21 - Radioactive Contamination
22 - Mechanical Breakdown/Power Failure
26 - Accident and Health
03 - Growing Crops
04 - Ocean Marine
05 - Inland Marine
06 - Workers Compensation and Employers Liability
07 - Automobile Liability Bodily Injury
08 - Automobile Liability Property Damage
09 - Automobile Physical Damage

MARLENE CARIDE
COMMISSIONER OF BANKING AND INSURANCE
COMPANY NAME: FEDERAL INSURANCE COMPANY
NAIC COMPANY CODE: 20281

STATUTORY HOME ADDRESS:
ONE AMERICAN SQUARE
202 N ILLINOIS STREET SUITE 2600
INDIANAPOLIS, IN 46282

SPECIAL CONDITIONS:

FEDERAL INSURANCE COMPANY

STATEMENT OF ASSETS, LIABILITIES AND SURPLUS TO POLICYHOLDERS

Statutory Basis

June 30, 2021

(in thousands)

ASSETS		*LIABILITIES AND SURPLUS TO POLICYHOLDERS*	
Cash and Short Term Investments	$ (478,871)	Outstanding Losses and Loss Expenses	$ 8,263,552
United States Government, State and Municipal Bonds	4,389,402	Reinsurance Payable on Losses and Expenses	1,077,866
Other Bonds	5,706,329	Unearned Premiums	2,316,422
Stocks	672,610	Ceded Reinsurance Premiums Payable	272,879
Other Invested Assets	1,433,819	Other Liabilities	542,800
TOTAL INVESTMENTS	11,723,289	TOTAL LIABILITIES	12,473,519
Investments in Affiliates		Capital Stock	20,960
Great Northern Ins. Co	410,707	Paid-In Surplus	2,711,474
Vigilant Ins. Co.	352,263	Unassigned Funds	2,091,579
Chubb Indemnity Ins. Co	182,598		
Chubb National Ins. Co	188,572	SURPLUS TO POLICYHOLDERS	4,824,033
Other Affiliates	98,853		
Premiums Receivable	1,605,574		
Other Assets	2,735,696		
TOTAL ADMITTED ASSETS	$ 17,297,552	TOTAL LIABILITIES AND SURPLUS	$ 17,297,552

Investments are valued in accordance with requirements of the National Association of Insurance Commissioners. At June 30, 2021, investments with a carrying value of $508,673,712 were deposited with government authorities as required by law.

STATE OF PENNSYLVANIA

COUNTY OF PHILADELPHIA

John Taylor, being duly sworn, says that he is Senior Vice President of Federal Insurance Company and that to the best of his knowledge and belief the foregoing is a true and correct statement of the said Company's financial condition as of the 30 th day of June, 2021

Sworn before me this October 11, 2021

Senior Vice President

Notary Public

September 19, 2023
My commission expires

Commonwealth of Pennsylvania - Notary Seal
Jaime L. Yates, Notary Public
Philadelphia County
My commission expires September 19, 2023
Commission number 1357070
Member, Pennsylvania Association of Notaries

Section F-2 Certificate of Insurance

Honeywell will provide evidence of insurance in the form of an industry standard ACORD certificate.

Honeywell has provided below our Certificate of Insurance (COI) as verification that we comply with the Insurance and Worker's Compensation requirements. The COI provides evidence of insurance coverage by providing our insurance broker name, insurance company name, coverage types, policy numbers, coverage term, and dollar amounts.

The District will be named as additional insured on the policies listed in the RFP and will be provided with a COI upon contract execution.

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
03/24/2022

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

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

PRODUCER	CONTACT NAME:	
Aon Risk Services Northeast, Inc. New York NY Office One Liberty Plaza 165 Broadway, Suite 3201 New York NY 10006 USA	PHONE (A/C. No. Ext): (866) 283-7122	FAX (A/C. No.): 800-363-0105
	E-MAIL ADDRESS:	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Honeywell International Inc. 855 S. Mint Charlotte NC 28202 USA	INSURER A: XL Specialty Insurance Co	37885
	INSURER B: XL Insurance America Inc	24554
	INSURER C: Greenwich Insurance Company	22322
	INSURER D:	
	INSURER E:	
	INSURER F:	

COVERAGES **CERTIFICATE NUMBER:** 570092137348 **REVISION NUMBER:**

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
C	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: X POLICY PRO-JECT LOC OTHER:			RGC943763009	04/01/2022	04/01/2023	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$5,000,000 $5,000,000 $50,000 $5,000,000 $5,000,000 Included
C	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY			RAC943764209 AOS	04/01/2022	04/01/2023	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000
C	UMBRELLA LIAB X OCCUR X EXCESS LIAB CLAIMS-MADE DED RETENTION			RAO943764509 Excess Auto	04/01/2022	04/01/2023	EACH OCCURRENCE AGGREGATE	$4,000,000
B A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		RWD943540309 AOS RWC943540209 AK, WI	04/01/2022 04/01/2022	04/01/2023 04/01/2023	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	$5,000,000 $5,000,000 $5,000,000
A	Excess WC			RWE943540409 AZ, OH, WA SIR applies per policy terms & conditions	04/01/2022	04/01/2023	EL Each Accident EL Disease - Ea Emp EL Annual Aggregate	$5,000,000 $5,000,000 $5,000,000

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

Evidence of Coverage. Blanket Additional Insured where required by written contract endorsement is included on the General Liability and Automobile Liability policies. Blanket Contractual Liability is included on the General Liability and Auto policies per the policy coverage forms. A Waiver of Subrogation where required by written contract is included on applicable policies shown above. Honeywell will provide the General Liability ISO endorsement form numbers where required by written contract upon request.

CERTIFICATE HOLDER	CANCELLATION
Honeywell International Inc. 855 S. Mint Charlotte NC 28202 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE Aon Risk Services Northeast, Inc.

Holder Identifier : 15M

Certificate No : 570092137348

ACORD 25 (2016/03) The ACORD name and logo are registered marks of ACORD

AGENCY CUSTOMER ID: 570000054391
LOC #:

ADDITIONAL REMARKS SCHEDULE

Page _ of _

AGENCY	NAMED INSURED
Aon Risk Services Northeast, Inc.	Honeywell International Inc.
POLICY NUMBER: See Certificate Number: 570092137348	
CARRIER: See Certificate Number: 570092137348 / NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

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

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	OTHER							
A				RWE943540509 Excess WC - NM SIR applies per policy terms & conditions	04/01/2022	04/01/2023		
A	Archit&Eng Prof			RGO9435408 Claims Made	04/01/2013	04/01/2023	Aggregate	$5,000,000
	Excess WC Limits							
	are Statutory in							
	AZ, OH, WA, & NM							

ACORD 101 (2008/01)

Section F-3 State of New Jersey Public Works Registration

Certificate Number
604863

Registration Date: 06/02/2022
Expiration Date: 06/01/2024

State of New Jersey

Department of Labor and Workforce Development

Division of Wage and Hour Compliance

Public Works Contractor Registration Act

Pursuant to N.J.S.A. 34:11-56.48, et seq. of the Public Works Contractor Registration Act, this certificate of registration is issued for purposes of bidding on any contract for public work or for engaging in the performance of any public work to:

Honeywell International Inc.

2022

Responsible Representative(s):
Doug Wright, President
Alastair Reynolds, Vice-President
Derek Skelton, General Manager

Responsible Representative(s):
Laura Laltrello, Vice-President
Matthew Drobish, Manager
Darius Adamczyk, Chairman

Robert Asaro-Angelo, Commissioner
Department of Labor and Workforce Development

NON TRANSFERABLE

This certificate may not be transferred or assigned and may be revoked for cause by the Commissioner of Labor and Workforce Development.

Section F-4 State of New Jersey Business Registration Certificate

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

Taxpayer Name:	HONEYWELL INTERNATIONAL INC.
Trade Name:	ADI GLOBAL DISTRIBUTION
Address:	101 COLUMBIA RD MORRISTOWN, NJ 07960-4640
Certificate Number:	0073401
Effective Date:	August 19, 1985
Date of Issuance:	August 25, 2021

For Office Use Only:

20210825150427681

Section F-5 State of New Jersey Department of Treasury Notice of Classifications

HONEYWELL INTERNATIONAL INC
115 TABOR ROAD
MORRIS PLAINS, NJ 07950

State of New Jersey

DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION
33 WEST STATE STREET - P.O. BOX 034
TRENTON, NEW JERSEY 08625-0034

NOTICE OF CLASSIFICATION

In accordance with N.J.S.A. 18A:18A-27 et seq (Department of Education) and N.J.S.A. 52:35-1 (Department of the Treasury) and any rules and regulations issued pursuant hereto, you are hereby notified of your classification to do State work for the Department (s) as previously noted.

Aggregate Amount	Trade(s) & License(s)	Effective Date	Expiration Date
Unlimited	C043 -CONTROL SYSTEMS	04/01/2021	03/31/2023
	C098 -ENERGY MANAGEMENT SYSTEMS	04/01/2021	
	C036 -ENERGY SERVICES/ESCO	04/01/2021	
	C049 -FIRE ALARM/SIGNAL SYSTEMS	04/01/2021	
	license #: P00968		
	C032 -HVACR	04/01/2021	
	license #: 19HC00404900		
	C050 -SECURITY/INTRUSION ALARMS	04/01/2021	

Section F-6 Non-Collusion Affidavit (Exhibit A)

EXHIBIT A:

NON-COLLUSION AFFIDAVIT

TO: **Manasquan Public School District**
DATE: June 23, 2022
FROM: Honeywell International Inc.
TELEPHONE: 609-553-1275
E-MAIL: wayne.leahy@honeywell.com
FACSIMILE: 732-477-6604

In signing this proposal, we certify that we have not, either directly or indirectly, entered into any agreement or otherwise colluded in any manner with any other person, or otherwise taken any action that would restrain or impede open and free competition and competitive bidding for this project; that no attempt has been made to induce any other person or firm to submit or not to submit a proposal; that this proposal has been independently arrived at without agreement or collusion with any other Proposer, competitor, potential competitor or other person; and that this proposal has not been knowingly disclosed prior to the opening of proposals to any other Proposer, competitor or person not affiliated with Proposer.

We further certify that no requirement or commitment, direct or indirect, was made to any person, or elected official and that no undisclosed benefit of any kind was promised to anyone connected with this project.

We further certify that no person or selling agent has been employed or retained to solicit or secure the contract that is the subject of this RFP upon an agreement or understanding for a commission, percentage, brokerage or contingent fee.

We certify that the foregoing statements are true and accurate under penalty of perjury.

The undersigned, by submitting this proposal, hereby agrees with all the terms, conditions, and specifications required by the New Jersey School District Board of Education in this Request for Proposal, and declares that the attached proposal and pricing are in conformity therewith.

SIGNATURE: Wayne T Leahy
DATE: June 23, 2022
TYPE OR PRINT NAME: Wayne T. Leahy
TITLE: Senior Business Consultant
FEIN or TAX ID NUMBER: 22-2640650
ADDENDA ACKNOWLEDGED: N/A
DATE: June 23, 2022

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Section F-7 Ownership Disclosure Certification to be Submitted with Proposal (Exhibit B)

EXHIBIT B:

OWNERSHIP DISCLOSURE CERTIFICATION TO BE SUBMITTED WITH PROPOSAL

In order to conform with N.J.S.A.52:25-24.2, all corporations or partnerships shall provide the following information:

1. Name of Firm: Honeywell International Inc.
2. Type of Business Organization (Check appropriate type)

Partnership____ Corporation __X__ Sole Proprietorship ____
Limited Partnership____ Limited Liability Corporation _____ Limited Liability Partnership ____
Subchapter S Corporation _____

3. Name of State in which Incorporated: Delaware

The following individuals own ten percent (10%) or more of any class stock in the corporation or are ten percent (10%) or more Partners in the Firm:

NAME	ADDRESS	TITLE	PERCENTAGE
None			

Or, I certify that no one stockholder or partner owns 10% or more of the issued and outstanding stock or interest in the business entity.

IF ANY OF THE AFOREMENTIONED STOCKHOLDERS ARE A CORPORATION, WHEREBY THEY HOLD 10% (TEN PERCENT) OR MORE OF ANY CLASS STOCK IN BIDDING CORPORATION, THEY SHALL ALSO PROVIDE THE INFORMATION REQUESTED ABOVE.

The above information is true and correct to the best of my knowledge.

(Signature) Wayne T Leahy

(Name) Wayne T. Leahy

(Title) Senior Business Consultant

(Address) 115 Tabor Road, Morris Plains, NJ 07950

Subscribed and sworn to before me
This 7th day of June, 2022.
(Seal) Notary Public of New Jersey/
Specify Other State
My commission Expires March 24, 2026.

LINDA A. WILLIAMS
Commission # 2
Notary Public, State o
My Commission E
March 24, 20

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Section F-8 Certificate of Equal Opportunity (Exhibit C)

EXHIBIT C:

CERTIFICATE OF EQUAL OPPORTUNITY

INSTRUCTIONS

This certification is required pursuant to Executive Order 11246, Part II, 203(B), (30 C.F.R. 12319-25). Each Proposer is required to state in its Proposal whether it has participated in any previous contract or subcontract subject to the equal opportunity clause; and, if so, whether it has filed all compliance reports due under applicable filing requirements.

PROPOSER'S CERTIFICATE

Proposer's Name: Honeywell International Inc.
Address: 115 Tabor Road, Morris Plains, NJ 07950

1. Proposer has participated in previous contract or subcontract subject to the equal opportunity clause. Yes x No _____
2. Compliance reports were required to be filed in connection with such contract or subcontract. Yes x No _____
   If Yes, state what reports were filed and with what agency.
3. Proposer has filed all compliance reports due under applicable instructions. Yes x No _____
3. If answer to Item 3 is "No", please explain in detail on reverse side of this certification.

Certification: The information above is true and complete to the best of my knowledge and belief. I am aware that if any of the foregoing statements is willfully false,. I am subject to punishment.. (17 U.S.Code, Section 1001.)

(Name and Title of Signer - Please Type)
Wayne T. Leahy, Senior Business Consultant

Date: June 23, 2022
(Signature) Wayne T. Leahy

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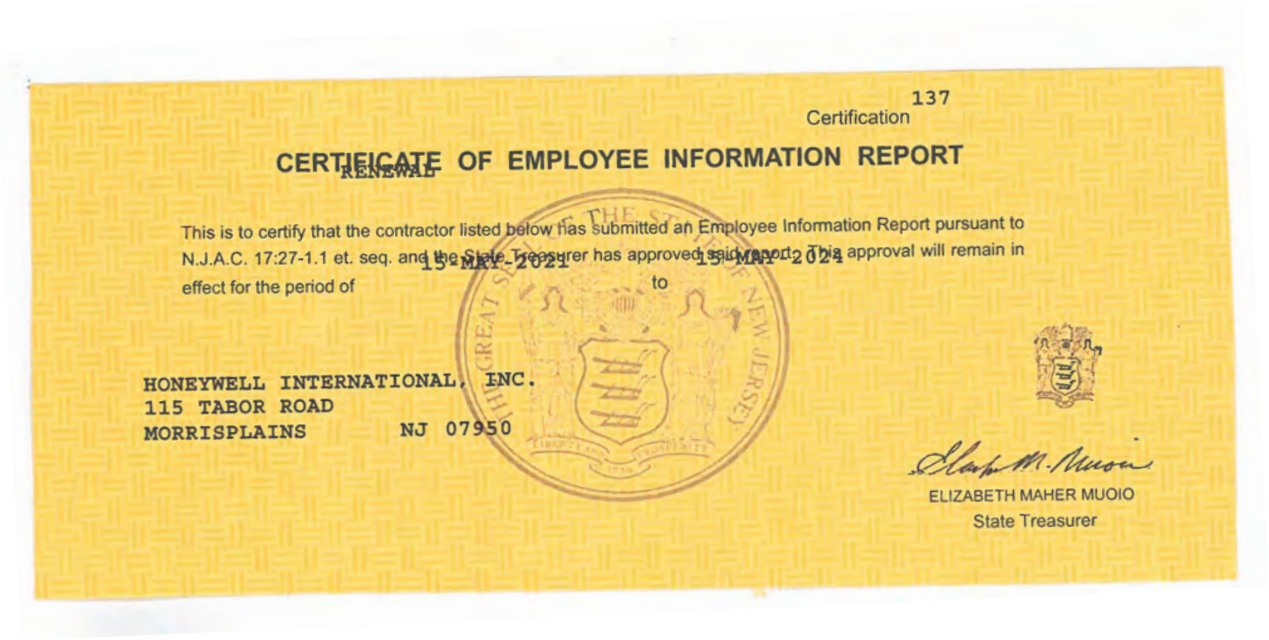

Certification 137

CERTIFICATE OF EMPLOYEE INFORMATION REPORT

RENEWAL

This is to certify that the contractor listed below has submitted an Employee Information Report pursuant to N.J.A.C. 17:27-1.1 et. seq. and the State Treasurer has approved said report. This approval will remain in effect for the period of 15-MAY-2021 to 15-MAY-2024

HONEYWELL INTERNATIONAL, INC.
115 TABOR ROAD
MORRISPLAINS NJ 07950

ELIZABETH MAHER MUOIO
State Treasurer

Section F-9 Affirmative Action Questionnaire (Exhibit D)

EXHIBIT D:

AFFIRMATIVE ACTION QUESTIONNAIRE

The following question shall be answered by all Proposers.

Do you have a Federal Letter of Affirmative Action Plan Approval from the U.S. Department of Labor's Office of Federal Contract Compliance Programs (OFCCP)?

YES_____ NO___X_____

If yes, please submit a photostatic copy of such approval. This letter cannot be more than one year old from the date of issuance.

If no, the Proposer may still submit a Proposal on the Project if the question is answered.

PROPOSER (Signature)

Wayne T Leahy

PROPOSER (Print Name)

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Section F-10 Proof of New Jersey Division of Property Management and Construction Contractor Classification as C036 Energy Services Company

HONEYWELL INTERNATIONAL INC
115 TABOR ROAD
MORRIS PLAINS, NJ 07950

State of New Jersey

DEPARTMENT OF THE TREASURY
DIVISION OF PROPERTY MANAGEMENT AND CONSTRUCTION
33 WEST STATE STREET - P.O. BOX 034
TRENTON, NEW JERSEY 08625-0034

NOTICE OF CLASSIFICATION

In accordance with N.J.S.A. 18A:18A-27 et seq (Department of Education) and N.J.S.A. 52:35-1 (Department of the Treasury) and any rules and regulations issued pursuant hereto, you are hereby notified of your classification to do State work for the Department (s) as previously noted.

Aggregate Amount	Trade(s) & License(s)	Effective Date	Expiration Date
Unlimited	C043 -CONTROL SYSTEMS	04/01/2021	03/31/2023
	C098 -ENERGY MANAGEMENT SYSTEMS	04/01/2021	
	C036 -ENERGY SERVICES/ESCO	04/01/2021	
	C049 -FIRE ALARM/SIGNAL SYSTEMS	04/01/2021	
	license #: P00968		
	C032 -HVACR	04/01/2021	
	license #: 19HC00404900		
	C050 -SECURITY/INTRUSION ALARMS	04/01/2021	

- Licenses associated with certain trades are on file with the Division of Property Management & Construction (DPMC).
- Current license information must be verified prior to bid award.
- A copy of the DPMC 701 Form (Total Amount of Uncompleted Projects) may be accessed from the DPMC website at http://www.state.nj.us/treasury/dpmc/Assets/Files/dpmc-27_03_07.pdf.

Section F-11 Affidavit Regarding List of Debarred, Suspended, or Disqualified Contractors (Exhibit E)

EXHIBIT E:

AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED CONTRACTORS

STATE OF NEW JERSEY

COUNTY OF OCEAN

State_____ (specify, if not NJ) of full age, being duly sworn according to law on my oath depose and
Say that:

I am Wayne T. Leahy of the firm of Honeywell International Inc., the

Proposer making the Proposal for the above- named Project, and that I executed the said Proposal with full authority to do so; that said Proposer is not at the time of the making this bid included on the New Jersey State Treasurer's or any State or Federal Government's list of Debarred, Suspended or Disqualified Contractors .

Name of Proposer

By: Wayne T. Leahy

(Signature of Authorized Representative)

Subscribed and sworn to before me
this 7th day of June, 2022.
(Seal) Notary Public of New Jersey/
Specify Other State
My Commission Expires March 24 2024.

LINDA A. WILLIAMS
Commission # 2342326
Notary Public, State of New Jersey
My Commission Expires
March 24, 2026

THIS FORM SHALL BE COMPLETED, SIGNED, AND NOTARIZED

Section F-12 Proposer Certification of Qualification and Credentials (Exhibit F)

EXHIBIT F:

PROPOSER CERTIFICATION OF QUALIFICATIONS AND CREDENTIALS

STATE OF NEW JERSEY/Specify, of Other
COUNTY OF OCEAN, of the Township of Brick (City, Town, Borough) of State of NJ, of full age, being duly sworn according to law, on my oath, depose and say that:

I am Wayne T. Leahy of the firm of Honeywell International Inc.,
the Proposer submitting the Proposal herein and that I executed the said Proposal with full authority to do so. The firm of Honeywell International Inc. possesses the qualifications and credentials to fully and completely perform the contract outlined in the Request for Proposal.

Name of Proposer

By: Wayne T. Leahy, Senior Business Consultant

(Signature of Authorized Representative)

Subscribed and sworn to before me
this 7th day of June, 2022.
(Seal) Notary Public of New Jersey/
Specify Other State
My Commission Expires March 24 2024.

LINDA A. WILLIAMS
Commission # 2342326
Notary Public, State of New Jersey
My Commission Expires
March 24, 2024

THIS FORM SHALL BE COMPLETED, SIGNED, AND NOTARIZED

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Section F-13 Proposer Signature Form (Exhibit G)

EXHIBIT G:

PROPOSER SIGNATURE FORM

The undersigned duly authorized representative of Proposer, having examined these documents and having full knowledge of the conditions under which the products and services described herein must be performed, hereby represents that Proposer will fulfill the obligations contained herein in accordance with all terms, conditions, specifications and proposal criteria set forth, and that Proposer will furnish all required products and payments in strict conformity with these documents for the stated process as payment in full.

ADDENDA FORM:

The undersigned hereby acknowledges receipt of the following applicable addenda:

1. none

SUBMITTING FIRM:

Company Name: Honeywell International Inc.

Wayne T Leahy
Authorized Signature

Company Address: 115 Tabor Road, Morris Plains, NJ 07905

Printed Name: Wayne T. Leahy

Title: Senior Business consultant

Telephone: 609-533-1275

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Section F-14 Disclosure of Investment Activities in Iran (Exhibit H)

EXHIBIT H

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY

33 WEST STATE STREET, P.O. BOX 230
TRENTON, NEW JERSEY 08625-0230

DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN FORM

BID SOLICITATION #: Manasquan Public School District **VENDOR/BIDDER:** Honeywell International Inc.

PART 1
CERTIFICATION
VENDOR/BIDDER MUST COMPLETE PART 1 BY CHECKING ONE OF THE BOXES
FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of the Treasury's Chapter 25 list as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Division's website at http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf. Vendors/Bidders must review this list prior to completing the below certification. **Failure to complete the certification will render a Vendor's/Bidder's proposal non-responsive.** If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE BOX

A. X I certify, pursuant to Public Law 2012, c. 25, that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the N.J. Department of the Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). Disregard Part 2 and complete and sign the Certification below.

OR

B. I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such information will result in the proposal being rendered as nonresponsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2
PLEASE PROVIDE ADDITIONAL INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

If you checked Box "B" above, provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, engaged in the investment activities in Iran by completing the boxes below.

ENTITY NAME: None
RELATIONSHIP TO VENDOR/BIDDER:
DESCRIPTION OF ACTIVITIES:
DURATION OF ENGAGEMENT:
ANTICIPATED CESSATION DATE:
VENDOR/BIDDER CONTACT NAME:
VENDOR/BIDDER CONTACT PHONE No.:
Attach Additional Sheets If Necessary.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature — June 23, 2022 Date

Wayne T. Leahy, Senior Business Consultant
Print Name and Title

DPP Rev. 6.19.17 Page 1 of 1

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Section F-15 Political Contribution Disclosure Form (Exhibit I)

EXHIBIT I

POLITICAL CONTRIBUTION DISCLOSURE FORM

STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY

33 WEST STATE STREET, P.O. BOX 0230
TRENTON, NEW JERSEY 08625-0230

VENDOR/BIDDER CERTIFICATION AND POLITICAL CONTRIBUTION DISCLOSURE FORM
PUBLIC LAW 2005, CHAPTER 271

CONTRACT #: Manasquan Public School District **VENDOR/BIDDER:** Honeywell International Inc.

At least ten (10) days prior to entering into the above-referenced Contract, the Vendor/Bidder must complete this Certification and Political Contribution Disclosure Form in accordance with the directions below and submit it to the State contact for the referenced Contract.

NOTE that the disclosure requirements under Public Law 2005, Chapter 271 are separate and different from the disclosure requirements under Public Law 2005, Chapter 51 (formerly Executive Order 134). Although no Vendor/Bidder will be precluded from entering into a contract by any information submitted on this form, a Vendor's/Bidder's failure to fully, accurately and truthfully complete this form and submit it to the appropriate State agency may result in the imposition of fines by the New Jersey Election Law Enforcement Commission.

DISCLOSURE

The following is the required Vendor/Bidder Disclosure of all Reportable Contributions made in the twelve (12) months prior to and including the date of signing of this Certification and Disclosure to: (i) any State, county, or municipal committee of a political party, legislative leadership committee, candidate committee of a candidate for, or holder of, a State elective office, or (ii) any entity that is also defined as a "continuing political committee" under N.J.S.A. 19:44A-3(n) and N.J.A.C. 19:25-1.

The Vendor/Bidder is required to disclose Reportable Contributions by: the Vendor/Bidder itself; all persons or other business entities owning or controlling more than 10% of the profits of the Vendor/Bidder or more than 10% of the stock of the Vendor/Bidder, if the Vendor/Bidder is a corporation for profit; a spouse or child living with a natural person that is a Vendor/Bidder; all of the principals, partners, officers or directors of the Vendor\Contractor and all of their spouses; any subsidiaries directly or indirectly controlled by the Vendor/Bidder; and any political organization organized under section 527 of the Internal Revenue Code that is directly or indirectly controlled by the Vendor/Bidder, other than a candidate committee, election fund, or political party committee.

"Reportable Contributions" are those contributions that are required to be reported by the recipient under the "New Jersey Campaign Contributions and Expenditures Reporting Act," P.L. 1973, c.83 (C.19:44A-1 et seq.), and implementing regulations set forth at N.J.A.C. 19:25-10.1 et seq. As of January 1, 2005, contributions in excess of $300 during a reporting period are deemed "reportable."

Name and Address of Committee to which a Reportable Contribution was made	Date of Reportable Contribution	Amount of Reportable Contribution	Contributor's Name
Indicate "NONE" if no Reportable Contribution was made.			
NONE		$	
		$	
		$	
		$	
Attach additional sheets if necessary			

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Wayne T. Leahy — June, 23, 2022
Signature — **Date**

Wayne T. Leahy, Senior Business Consultant
Print Name and Title

DPP Rev. 7.10.17 — Page 1 of 1

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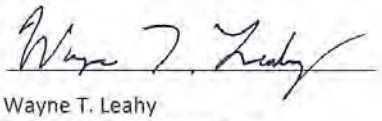
Section F-16 Federal Debarment Certification (Exhibit J)

EXHIBIT J

FEDERAL DEBARMENT CERTIFICATION

Prior to awarding any contract for public work, a person must provide written certification to the contracting agency that neither the person nor the person's affiliates are debarred at the federal level from contracting with a federal government agency. The contracting agency shall not make, negotiate, or award a contract for public work to any person that does not provide such written certification as required by this subsection. The contracting agency shall verify the certification by consulting the federal System for Award Management, or its successor, prior to awarding a contract for public work.

I confirm the above.



Wayne T. Leahy
Senior Business Consultant

Date: June 23, 2022

Mandatory Equal Employment Opportunity Language

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A 10:5-31 *et seq.*, N.J.A.C. 17:27
CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, Available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex..

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers will) which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of (the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 *et seq.*, as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division , that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2.

The contractor or subcontractor agrees that, a good faith effort shall include compliance with the following procedures:

(A). If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 *et. seq*., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities to minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B). If good faith efforts to meet targeted employment goals have not or cannot be met for each construction grade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

1. To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
2. To notify any minority and women workers who have been listed with it as awaiting available vacancies;
3. Prior to commencement of work, to request that the local construction trade union refer minority and , women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
4. To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
5. If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

6. To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

   a. If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work: of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that die individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. [if necessary, the contractor or subcontractor shall hire *or* schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below,
   b. The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in paragraph (i) above, whenever vacancies occur. At the request of the Division, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
   c. If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its tiles, and send a copy to the public agency compliance officer and to the Division.

7. To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.

(C). The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hail arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction total, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that,

in implementing the procedures of (B) above it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form A 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly project Workforce Report once a month thereafter for the duration of this contract to the Division and public agency compliance officer

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D). The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to Subchapter 10 of New Jersey Administrative Code at N.J.A.C. 17:27.

Honeywell International Inc. acknowledges the Mandatory Equal Opportunity Language Requirements.

Wayne T. Leahy
Senior Business Consultant

Acknowledged All Addenda On Proposer's Signature Form (Exhibit G)

EXHIBIT G:

PROPOSER SIGNATURE FORM

The undersigned duly authorized representative of Proposer, having examined these documents and having full knowledge of the conditions under which the products and services described herein must be performed, hereby represents that Proposer will fulfill the obligations contained herein in accordance with all terms, conditions, specifications and proposal criteria set forth, and that Proposer will furnish all required products and payments in strict conformity with these documents for the stated process as payment in full.

ADDENDA FORM:

The undersigned hereby acknowledges receipt of the following applicable addenda:

1. none

SUBMITTING FIRM:

Company Name: Honeywell International Inc.

Wayne T Leahy

Authorized Signature

Company Address: 115 Tabor Road, Morris Plains, NJ 07905

Printed Name: Wayne T. Leahy

Title: Senior Business consultant

Telephone: 609-533-1275

SECTION G
TECHNICAL ASPECTS OF PROPOSAL

Section G. Technical Aspects of Proposal

Section G-1. Technical Summary: Preliminary Energy Savings Plan

Honeywell presents three scenarios for the Board's consideration. On the following pages, we include FORMs II, III, and IV for each of these scenarios. These forms present our proposed ECMs, projected program costs, projected annual energy savings, estimated payback periods, calculated baseline information for costs and savings, and avoided greenhouse gas and other emissions associated with the proposed preliminary ESPs for each scenario. Honeywell assumed a financing rate of 1.775% for a 15-year financing term by taking the average financing rate for four (4) NJ Energy Savings Improvement Program (ESIP) projects that were financed during the year of 2021.

Client	Funding Type	Finance Value	Term	Rate
2021				
Bogota School District	Lease Purchase	$2,395,599	15 Years	2.022%
Pequannock School District	Lease Purchase	$4,792,261	15 Years	1.762%
Watchung Hills Regional High School	Lease Purchase	$6,100,492	15 Years	1.627%
Piscataway Township Schools	Lease Purchase	$15,448,119	18 Years	1.722%
Elizabeth School District (Phase 2)	Lease Purchase	$31,550,469	15 Years	1.690%
2020				
North Hunterdon School District	Lease Purchase	$3,022,255	15 Years	1.596%
Middlesex County VoTech	Lease Purchase	$4,582,700	15 Years	1.41%
Newton Schools	Lease Purchase	$2,160,355	15 Years	2.38%
Montclair BOE	Lease Purchase	$9,925,102	15 Years	1.50%
2019				
Rumson Board of Education	Lease Purchase	$1,560,082	15 Years	2.56%
Montville Township School District	Lease Purchase	$2,626,632	15 Years	2.647%
Morris County Vocational	Lease Purchase	$960,711	15 Years	2.97%
East Orange School District	County Refunding Bond	$17,688,752	19 Years	3.32%
East Brunswick School District	Refunding Bond	$8,362,083	15 Years	3.06%
2018				
Hudson County	Refunding Bond	$26,243,821	19 Years	3.76%
Passaic County	Cash - BAN	$11,161,693	n/a	n/a
Educational Services Commission	Cash	$5,383,460	n/a	n/a
West Morris Regional High School District	Lease Purchase	$3,216,767	15 Years	3.25%
2017				
Bloomfield Board of Ed	Lease Purchase	$5,965,940	15 Years	2.70%
Old Bridge School District	Lease Purchase	$ 5,879,471	15 Years	2.46%
City of Perth Amboy	Lease Purchase	$2,393,207	15 Years	2.50%

Form II: Recommended Project — Energy Conservation Measures (ECMs) Summary Form

15YR @2.75%

FORM II @ 15yr 2.75%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ENERGY CONSERVATION MEASURES (ECMs) SUMMARY FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

Proposed Preliminary Energy Savings Plan: ECMs (Base Project)	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1A LED Lighting Upgrades	$ 133,015	$ 46,086	2.89
1B Lighting Controls	$ 69,779	$ 5,252	13.29
2C Domestic Water Heater Replacement	$ 72,600	$ 555	130.77
2D Rooftop Unit Replacement	$ 992,200	$ 5,430	182.72
2G Split System Replacements	$ 268,620	$ 1,896	141.68
2I Add Cooling to Industrial Arts Building	$ 58,080	$ 372	156.19
2J Replace Univentilators in Industrial Arts Building	$ 72,600	$ 312	232.77
3A Building Management System Upgrades	$ 157,561	$ 11,181	14.09
4A Building Envelope Improvements	$ 100,775	$ 35,109	2.87
5A Permanent Load Reduction	$ -	$ -	-
7A Solar PPA	$ 0	$ 78,515	0.00
8A Sustainable Transportation - EV Chargers	$ 48,400	$ (974)	(49.70)
			-
			-
			-
			-
			-
			-
			-
Add additional lines as needed* **Project Summary:**	$ 1,973,631	$ 183,734	10.74

Optional ECMs Considered, but not included with base project at this time	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1C De-Stratification Fans w/ UV Disinfection	$ 76,230	$ 3,837	19.87
2A Boiler Replacements	$ 211,750	$ 963	219.98
2B Burner Replacements and Controls	$ 145,200	$ 1,385	104.81
2E Kitchen Hood Controllers	$ 96,800	$ 2,635	36.73
2F Premium Efficiency Motors and VFDs	$ 87,684	$ 776	113.05
2H Walk-In Compressor Controls	$ 14,520	$ 482	30.12
6A Cogeneration CHP	$ 212,960	$ 751	283.71
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-

Add additional lines as needed*

(1) The total value of Hard Costs is defined in accordance with standard AIA definitions that include: Labor Costs, Subcontractor Costs, Cost of Materials & Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead, Profit, etc.

15YR@ 5%

FORM II @ 15yr 5%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ENERGY CONSERVATION MEASUREs (ECMs) SUMMARY FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: Honeywell International

Proposed Preliminary Energy Savings Plan: ECMs (Base Project)	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1A LED Lighting Upgrades	$ 133,015	$ 46,086	2.89
1B Lighting Controls	$ 69,779	$ 5,252	13.29
2C Domestic Water Heater Replacement	$ 72,600	$ 555	130.77
2D Rooftop Unit Replacement	$ 738,100	$ 3,992	184.89
2G Split System Replacements	$ 254,100	$ 1,807	140.63
2I Add Cooling to Industrial Arts Building	$ 58,080	$ 372	156.19
2J Replace Univentilators in Industrial Arts Building	$ 72,600	$ 312	232.77
3A Building Management System Upgrades	$ 157,561	$ 11,181	14.09
4A Building Envelope Improvements	$ 100,775	$ 35,109	2.87
5A Permanent Load Reduction	$ -	$ -	-
7A Solar PPA	$ 0	$ 78,515	0.00
			-
			-
			-
			-
			-
			-
			-
			-
Add additional lines as needed* **Project Summary:**	$ 1,656,611	$ 183,181	9.04

Optional ECMs Considered, but not included with base project at this time	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1C De-Stratification Fans w/ UV Disinfection	$ 76,230	$ 3,837	19.87
2A Boiler Replacements	$ 211,750	$ 963	219.98
2B Burner Replacements and Controls	$ 145,200	$ 1,385	104.81
2E Kitchen Hood Controllers	$ 96,800	$ 2,635	36.73
2F Premium Efficiency Motors and VFDs	$ 87,684	$ 776	113.05
2H Walk In Compressor Controls	$ 14,520	$ 482	30.12
6A Cogeneration CHP	$ 212,960	$ 751	283.71
8A Sustainable Transportation - EV Chargers	$ 36,300	$ (974)	(37.27)
0	$ -	$ -	-
0	$ -	$ -	
0	$ -	$ -	-
0	$ -	$ -	
0	$ -	$ -	-
0	$ -	$ -	-

Add additional lines as needed*

(1) The total value of Hard Costs is defined in accordance with standard AIA definitions that include: Labor Costs, Subcontractor Costs, Cost of Materials & Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead, Profit, etc.

19YR @ 3%

FORM II @ 19yr 3%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ENERGY CONSERVATION MEASUREs (ECMs) SUMMARY FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: Honeywell International

Proposed Preliminary Energy Savings Plan: ECMs (Base Project)	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1A LED Lighting Upgrades	$ 133,015	$ 46,085	2.89
1B Lighting Controls	$ 69,779	$ 5,252	13.29
2A Boiler Replacements	$ 90,750	$ 1,523	59.59
2C Domestic Water Heater Replacement	$ 72,600	$ 555	130.77
2D Rooftop Unit Replacement	$ 1,028,500	$ 5,723	179.71
2G Split System Replacements	$ 274,973	$ 89	3,088.75
2I Add Cooling to Industrial Arts Building	$ 58,080	$ 372	156.19
2J Replace Univentilators in Industrial Arts Building	$ 72,600	$ 333	217.85
3A Building Management System Upgrades	$ 157,561	$ 11,181	14.09
4A Building Envelope Improvements	$ 100,775	$ 35,109	2.87
5A Permanent Load Reduction	$ -	$ -	-
6A Cogeneration CHP	$ 106,480	$ 1,595	66.75
7A Solar PPA	$ 0	$ 78,515	0.00
8A Sustainable Transportation - EV Chargers	$ 48,400	$ (974)	(49.70)
			-
			-
			-
			-
			-
Add additional lines as needed* **Project Summary:**	$ 2,213,514	$ 185,358	11.94

Optional ECMs Considered, but not included with base project at this time	Estimated Installed Hard Costs [1] $	Estimated Annual Savings $	Estimated Simple Payback (years)
1C De-Stratification Fans w/ UV Disinfection	$ 76,230	$ 3,837	19.87
2B Burner Replacements and Controls	$ 145,200	$ 1,385	104.81
2E Kitchen Hood Controllers	$ 96,800	$ 2,635	36.73
2F Premium Efficiency Motors and VFDs	$ 87,684	$ 776	113.05
2H Walk-In Compressor Controls	$ 14,520	$ 482	30.12
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-
0	$ -	$ -	-

Add additional lines as needed*

(1) The total value of Hard Costs is defined in accordance with standard AIA definitions that include: Labor Costs, Subcontractor Costs, Cost of Materials & Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead, Profit, etc.

Form III: Recommended Project — Projected Annual Energy Savings Data Form

15YR @2.75%

FORM III @ 15yr 2.75%
ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP)
FORM II @ 15yr 2.75%
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual savings for each fuel type MUST be completed using the following format. Data should be given in the form of fuel units that appear in the utility bills.

Energy/Water	ESCO Developed Baseline (Units)	ESCO Developed Baseline (Costs $)	Proposed Annual Savings (Units)	Proposed Annual Savings (Costs $)
Electric Demand (KW)	10,294	$57,944	543	$2,922
Electric Energy (KWH)	1,983,400	$250,136	1,415,994	$136,570
Natural Gas (therms)	117,878	$125,786	25,825	$27,713
Fuel Oil (Gal)	0	$0	0	$0
Steam (Pounds)				
Water (gallons)				
Other (Specify Units)				
Other (Specify Units)				
Avoided Emissions (1)	Provide in Pounds (Lbs)			
NOX	1,413			
SO2	949			
CO2	2,131,620			

(1) ESCOs are to use the rates provided as part of this RFP to calculate Avoided Emissions. Calculation for all project energy savings and greenhouse gas reductions will be conducted in accordance with adopted NJBPU protocols

(2) "ESCOs Developed Baseline": Board's current annual usages and costs as determined by the proposing ESCO; based off Board's utility information as provided to proposing ESCO.

(3) "Proposed Annual Savings": ESCOs proposed annual savings resulting from the Board's implementation of the proposed ESP, as based upon "ESCOs Developed Baseline".

15YR @ 5&

FORM III @ 15yr 5%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP)
PROJECTED ANNUAL ENERGY SAVINGS DATA FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual savings for each fuel type MUST be completed using the following format. Data should be given in the form of fuel units that appear in the utility bills.

Energy/Water	ESCO Developed Baseline (Units)	ESCO Developed Baseline (Costs $)	Proposed Annual Savings (Units)	Proposed Annual Savings (Costs $)
Electric Demand (KW)	10,294	$57,944	543	$2,922
Electric Energy (KWH)	1,983,400	$250,136	1,410,398	$136,017
Natural Gas (therms)	117,878	$125,786	25,825	$27,713
Fuel Oil (Gal)	0	$0	0	$0
Steam (Pounds)				
Water (gallons)				
Other (Specify Units)				
Other (Specify Units)				
Avoided Emissions (1)	Provide in Pounds (Lbs)			
NOX	1,408			
SO2	945			
CO2	2,124,389			

(1) ESCOs are to use the rates provided as part of this RFP to calculate Avoided Emissions. Calculation for all project energy savings and greenhouse gas reductions will be conducted in accordance with adopted NJBPU protocols

(2) "ESCOs Developed Baseline": Board's current annual usages and costs as determined by the proposing ESCO; based off Board's utility information as provided to proposing ESCO.

(3) "Proposed Annual Savings": ESCOs proposed annual savings resulting from the Board's implementation of the proposed ESP, as based upon "ESCOs Developed Baseline".

19YR @ 3%

FORM III 19yr 3%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP)
PROJECTED ANNUAL ENERGY SAVINGS DATA FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual savings for each fuel type MUST be completed using the following format. Data should be given in the form of fuel units that appear in the utility bills.

Energy/Water	ESCO Developed Baseline (Units)	ESCO Developed Baseline (Costs $)	Proposed Annual Savings (Units)	Proposed Annual Savings (Costs $)
Electric Demand (KW)	10,294	$57,944	592	$3,183
Electric Energy (KWH)	1,983,400	$250,136	1,420,548	$137,005
Natural Gas (therms)	117,878	$125,786	26,572	$28,641
Fuel Oil (Gal)	0	$0	0	$0
Steam (Pounds)				
Water (gallons)				
Other (Specify Units)				
Other (Specify Units)				
Avoided Emissions (1)	Provide in Pounds (Lbs)			
NOX	1,424			
SO2	952			
CO2	2,146,246			

(1) ESCOs are to use the rates provided as part of this RFP to calculate Avoided Emissions. Calculation for all project energy savings and greenhouse gas reductions will be conducted in accordance with adopted NJBPU protocols

(2) "ESCOs Developed Baseline": Board's current annual usages and costs as determined by the proposing ESCO; based off Board's utility information as provided to proposing ESCO.

(3) "Proposed Annual Savings": ESCOs proposed annual savings resulting from the Board's implementation of the proposed ESP, as based upon "ESCOs Developed Baseline".

Form IV: Recommended Project — Projected Annual Energy Savings Data Form in MMBTUs

15YR @ 2.75%

FORM IV
ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
PROJECTED ANNUAL ENERGY SAVINGS DATA FORM IN MMBTUs
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual energy savings for each fuel type MUST be completed using the following format. Data should be given in equivalent MMBTUs.

ENERGY	ESCO Developed Baseline	ESCO Proposed Savings Annual	Comments
Electric Energy (MMBTUs)	6,767	4,831	
Natural Gas (MMBTUs)	11,788	2,583	
Fuel Oil (MMBTUs)	0	0	
Steam (MMBTUs)			
Other (Specify) (MMBTUs)			
Other (Specify)			

NOTE: MMBTU Defined: A standard unit of measurement used to denote both the amount of heat energy in fuels and the ability of appliances and air conditioning systems to produce heating or cooling.

15YR @ 5%

FORM IV @ 15yr 5%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
PROJECTED ANNUAL ENERGY SAVINGS DATA FORM IN MMBTUs
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual energy savings for each fuel type MUST be completed using the following format. Data should be given in equivalent MMBTUs.

ENERGY	ESCO Developed Baseline	ESCO Proposed Savings Annual	Comments
Electric Energy (MMBTUs)	6,767	4,812	
Natural Gas (MMBTUs)	11,788	2,583	
Fuel Oil (MMBTUs)	0	0	
Steam (MMBTUs)			
Other (Specify) (MMBTUs)			
Other (Specify)			

NOTE: MMBTU Defined: A standard unit of measurement used to denote both the amount of heat energy in fuels and the ability of appliances and air conditioning systems to produce heating or cooling.

19YR @ 3%

FORM IV 19yr 3%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
PROJECTED ANNUAL ENERGY SAVINGS DATA FORM IN MMBTUs
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

The projected annual energy savings for each fuel type MUST be completed using the following format. Data should be given in equivalent MMBTUs.

ENERGY	ESCO Developed Baseline	ESCO Proposed Savings Annual	Comments
Electric Energy (MMBTUs)	6,767	4,847	
Natural Gas (MMBTUs)	11,788	2,657	
Fuel Oil (MMBTUs)	0	0	
Steam (MMBTUs)			
Other (Specify) (MMBTUs)			
Other (Specify)			

NOTE: MMBTU Defined: A standard unit of measurement used to denote both the amount of heat energy in fuels and the ability of appliances and air conditioning systems to produce heating or cooling.

Building-by-Building Simple Payback Summary (Hard Costs Only)

Building & ECM	kWh Savings ($)	kW Savings ($)	Natural Gas Savings ($)	Annual Energy Cost Savings ($)	Annual Operational Savings ($)	Net Cost ($)	Simple Payback
Administrative Building	**$ 1,732**	**$ 79**	**$ 251**	**$ 2,810**	**$ 748**	**$ 26,897**	**7.6**
1A LED Lighting Upgrades	$ 1,145	$ 79	$ (57)	$ 1,915	$ 748	$ 4,518	1.7
1B Lighting Controls	$ 252	$ -	$ (13)	$ 239	$ -	$ 3,720	15.6
2C Domestic Water Heater Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2D Rooftop Unit Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2G Split System Replacements	$ 89	$ -	$ -	$ 89	$ -	$ 14,520	163.1
2I Add Cooling to Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
3A Building Management System Upgrades	$ 126	$ -	$ 132	$ 259	$ -	$ 3,271	12.6
4A Building Envelope Improvements	$ 120	$ -	$ 189	$ 309	$ -	$ 868	2.8
5A Permanent Load Reduction	$ -	$ -	$ -	$ -	$ -	$ -	-
7A Solar PPA	$ -	$ -	$ -	$ -	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ -	$ -	$ -	$ -	$ -	$ -	-
Alternative School	**$ 630**	**$ 33**	**$ 286**	**$ 1,417**	**$ 468**	**$ 6,468**	**3.4**
1A LED Lighting Upgrades	$ 308	$ 33	$ (16)	$ 792	$ 468	$ 2,860	2.3
1B Lighting Controls	$ 79	$ -	$ (4)	$ 74	$ -	$ 1,029	13.8
2C Domestic Water Heater Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2D Rooftop Unit Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2G Split System Replacements	$ -	$ -	$ -	$ -	$ -	$ -	-
2I Add Cooling to Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
3A Building Management System Upgrades	$ 72	$ -	$ 62	$ 135	$ -	$ 1,647	12.2
4A Building Envelope Improvements	$ 171	$ -	$ 245	$ 416	$ -	$ 932	2.2
5A Permanent Load Reduction	$ -	$ -	$ -	$ -	$ -	$ -	-
7A Solar PPA	$ -	$ -	$ -	$ -	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ -	$ -	$ -	$ -	$ -	$ -	-
Industrial Arts Building	**$ 1,227**	**$ 13**	**$ 1,095**	**$ 2,721**	**$ 385**	**$ 142,500**	**45.9**
1A LED Lighting Upgrades	$ 296	$ 13	$ (20)	$ 674	$ 385	$ 2,039	1.9
1B Lighting Controls	$ 68	$ -	$ (5)	$ 63	$ -	$ 1,215	19.3
2C Domestic Water Heater Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2D Rooftop Unit Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2G Split System Replacements	$ -	$ -	$ -	$ -	$ -	$ -	-
2I Add Cooling to Industrial Arts Building	$ 429	$ -	$ (57)	$ 372	$ -	$ 58,080	156.2
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ 312	$ 312	$ -	$ 72,600	232.8
3A Building Management System Upgrades	$ 161	$ -	$ 327	$ 488	$ -	$ 6,483	13.3
4A Building Envelope Improvements	$ 274	$ -	$ 538	$ 812	$ -	$ 2,084	2.6
5A Permanent Load Reduction	$ -	$ -	$ -	$ -	$ -	$ -	-
7A Solar PPA	$ -	$ -	$ -	$ -	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ -	$ -	$ -	$ -	$ -	$ -	-

Building & ECM	kWh Savings ($)	kW Savings ($)	Natural Gas Savings ($)	Annual Energy Cost Savings ($)	Annual Operational Savings ($)	Net Cost ($)	Simple Payback
Manasquan Elementary School	**$ 65,193**	**$ 1,652**	**$ 11,829**	**$ 87,615**	**$ 8,942**	**$ 1,509,703**	**15.6**
1A LED Lighting Upgrades	$ 11,962	$ 1,652	$ (689)	$ 21,867	$ 8,942	$ 69,086	2.2
1B Lighting Controls	$ 2,490	$ -	$ (153)	$ 2,337	$ -	$ 32,884	14.1
2C Domestic Water Heater Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2D Rooftop Unit Replacement	$ 5,430	$ -	$ -	$ 5,430	$ -	$ 992,200	182.7
2G Split System Replacements	$ 1,807	$ -	$ -	$ 1,807	$ -	$ 254,100	140.6
2I Add Cooling to Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
3A Building Management System Upgrades	$ 3,468	$ -	$ 3,137	$ 6,605	$ -	$ 94,828	14.4
4A Building Envelope Improvements	$ 4,756	$ -	$ 9,535	$ 14,290	$ -	$ 42,405	3.0
5A Permanent Load Reduction	$ -	$ -	$ -	$ -	$ -	$ -	-
7A Solar PPA	$ 35,766	$ -	$ -	$ 35,766	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ (487)	$ -	$ -	$ (487)	$ -	$ 24,200	(49.7)
Manasquan High School	**$ 67,268**	**$ 1,146**	**$ 14,003**	**$ 88,223**	**$ 5,806**	**$ 284,274**	**3.0**
1A LED Lighting Upgrades	$ 14,461	$ 1,146	$ (1,025)	$ 20,388	$ 5,806	$ 53,111	2.0
1B Lighting Controls	$ 2,677	$ -	$ (203)	$ 2,474	$ -	$ 30,606	12.4
2C Domestic Water Heater Replacement	$ -	$ -	$ 555	$ 555	$ -	$ 72,600	130.8
2D Rooftop Unit Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2G Split System Replacements	$ -	$ -	$ -	$ -	$ -	$ -	-
2I Add Cooling to Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
3A Building Management System Upgrades	$ 1,847	$ -	$ 1,743	$ 3,590	$ -	$ 50,055	13.9
4A Building Envelope Improvements	$ 6,021	$ -	$ 12,933	$ 18,954	$ -	$ 53,703	2.8
7A Solar PPA	$ 42,749	$ -	$ -	$ 42,749	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ (487)	$ -	$ -	$ (487)	$ -	$ 24,200	(49.7)
MHS Warehouse/Weightroom	**$ 519**	**$ -**	**$ 249**	**$ 948**	**$ 180**	**$ 3,788**	**3.4**
1A LED Lighting Upgrades	$ 284	$ -	$ (14)	$ 451	$ 180	$ 1,401	2.2
1B Lighting Controls	$ 69	$ -	$ (4)	$ 65	$ -	$ 327	5.0
2C Domestic Water Heater Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2D Rooftop Unit Replacement	$ -	$ -	$ -	$ -	$ -	$ -	-
2G Split System Replacements	$ -	$ -	$ -	$ -	$ -	$ -	-
2I Add Cooling to Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
2J Replace Univentilators in Industrial Arts Building	$ -	$ -	$ -	$ -	$ -	$ -	-
3A Building Management System Upgrades	$ 23	$ -	$ 81	$ 105	$ -	$ 1,277	12.2
5A Permanent Load Reduction	$ -	$ -	$ -	$ -	$ -	$ -	-
7A Solar PPA	$ -	$ -	$ -	$ -	$ -	$ -	-
8A Sustainable Transportation - EV Chargers	$ -	$ -	$ -	$ -	$ -	$ -	-
Project Total	**$ 136,570**	**$ 2,922**	**$ 27,713**	**$ 183,734**	**$ 16,529**	**$ 1,973,631**	**9.9**

Section G-2. Preliminary Energy Savings Plan: Energy Conservation Measures (ECMs)

Introduction

The information used to develop this section was obtained through the independent energy audit building surveys to collect equipment information, interviews with operators and end users, and an understanding of the components to the systems at the sites. The information obtained includes nameplate data, equipment age, condition, the system's design and actual load, operational practices and schedules, and operations and maintenance history.

Honeywell has conducted a review of the Energy Conservation Measures (ECMs) which would provide energy and cost savings for the District. This report aims to be an assessment of the feasibility and cost effectiveness of such measures and an indication of their implementation potential. The ECMs listed below have been reviewed throughout your facilities for consideration within a complete Energy Savings Plan. What follows is a general description of the energy auditing process and the detailed descriptions of the ECMs for your facilities.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
1A LED Lighting Upgrades	●	●	●	●	●	●
1B Lighting Controls	●	●	●	●	●	●
1C De-Stratification Fans w/ UV Disinfection		●	●			
2A Boiler Replacements					●	
2B Burner Replacements and Controls		●				
2C Domestic Water Heater Replacement		●				
2D Rooftop Unit Replacement			●			
2E Kitchen Hood Controllers		●	●			
2F Premium Efficiency Motors and VFDs			●			
2G Split System Replacements	●		●			
2H Walk-In Compressor Controls		●	●			
2I Add Cooling to Industrial Arts Building					●	
2J Replace Unit Ventilators in Industrial Arts Building					●	
3A Building Management System Upgrades		●	●			
4A Building Envelope Improvements	●	●	●	●	●	●
5A Permanent Load Reduction	●	●	●	●	●	●
6A Cogeneration CHP		●				
7A Solar PPA		●	●			
8A Sustainable Transportation - EV Chargers		●	●			

ECM 1A LED LIGHTING UPGRADES

The key benefits of this ECM include:

- **Energy savings** from reducing total energy consumption with more efficient, state-of-the-art technology. Today's most efficient way of illumination and lighting has an estimated energy efficiency of 80–90% when compared to traditional lighting and conventional light bulbs. Lighting controls reduce or eliminate reliance on occupants or staff to turn lights off when spaces are unoccupied by automatically turning lighting fixtures off thereby reducing electrical energy consumption.
- **Improved teacher and student performance** from enhanced lighting quality that translates to an enhanced learning working environment.
- **Improved equipment longevity** by reducing amount of light usage and extending the useful life of your lighting system. LED bulbs and diodes have an outstanding operational lifetime expectation of up to 100,000 hours. This is 11 years of continuous operation, or 22 years of 50% operation. Operational savings in terms of bulb and ballast replacement are significant based on this technology.
- **Reduced maintenance and operational costs** by modernizing your lighting system, reducing the runtime of lighting system and components, and providing for longer lasting and technologically advanced lights without the need to address deficient or bad ballasts.
- **Ecologically friendly** LED lights are free of toxic chemicals. Most conventional fluorescent lighting bulbs contain a multitude of materials like mercury that are dangerous for the environment. LED lights contain no toxic materials, are 100% recyclable, and will help to reduce carbon footprint by up to a third. The long operational lifetime span mentioned above means also that one LED light bulb can save material and production of 25 incandescent light bulbs. A big step towards a greener future!

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
1A LED Lighting Upgrades	●	●	●	●	●	●

EXISTING CONDITIONS

Indoor lighting predominantly consists of fluorescent T-8 lamps, with a smaller quantity of other fixtures such as compact fluorescent lamps (CFLs), incandescent bulbs, and high-intensity discharge (HID) lighting.

SCOPE OF WORK

The proposed lighting system is based on the recent investment grade lighting system audit where existing lighting systems were analyzed and inventoried. Honeywell proposes to retrofit all existing fluorescent fixtures with high efficiency Light Emitting Diode (LED) lamps.

The district will receive many benefits from the lighting system upgrade.

Existing Lighting at Manasquan ES

Existing Lighting at Manasquan HS

LED OUTDOOR LIGHTING UPGRADES

EXISTING CONDITIONS

The District has various types of High Intensity Discharge (HID) light fixtures and older LED fixtures, which are not as efficient as modern LED types. Parking lot and building exterior lights consist of pole mounted shoe-box type and wall pack HID fixtures.

SCOPE OF WORK

The exterior wall-packs and pole-mounted shoebox fixtures are currently high wattage HID lamps. These will be replaced with lower wattage LED fixtures. The LED technologies offer significant advantages such as extended lamp life, minimal lumen depreciation, “instant on,” and very high energy conversion efficiency. These fixtures will provide substantial maintenance savings via the new 100,000-hour LED lamp life versus the 20,000 hours of the existing metal halide lamps.

CHANGES IN INFRASTRUCTURE

New LED lamps and fixtures will be installed as part of this ECM. Existing poles and shoe box fixtures will be utilized where possible.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination efforts will be needed to reduce or limit impact to building occupants.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced electric energy usage. A slight increase in heating energy is resultant from the reduced heat output of more efficient lamps.
Waste Production	All lamps and ballasts that are removed will be properly disposed.
Environmental Regulations	No environmental impact is expected.

ECM 1B LIGHTING CONTROLS

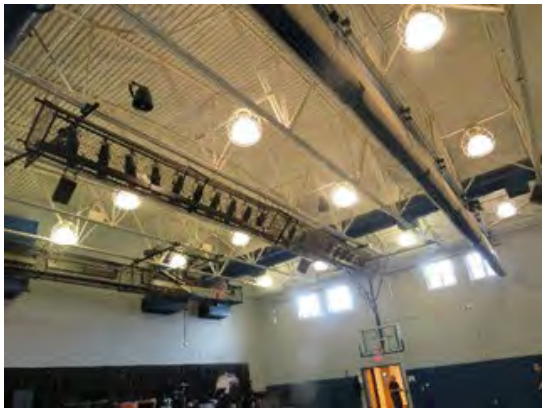
The key benefits of this ECM include:

- **Reduced energy usage** from improved boiler efficiency resulting from replacement of older equipment, and in certain instances, oversized boilers
- **Lower operational costs** through less frequent maintenance and operational issues

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
1B Lighting Controls	●	●	●	●	●	●

EXISTING CONDITIONS

Educational institutions, such as K-12 districts, are focused on providing classrooms and campuses for their students and teachers that are safe, healthy, and energy-efficient, by providing the best environment for learning while also chartered with reducing the costs of building operations.



Lighting Control Space at Manasquan ES

Lighting Control Space at Manasquan HS

Example of interior lighting sensor

Example of Exterior lighting sensor

Honeywell proposes the installation of occupancy-based lighting controls for interior spaces and photo-controls for exterior lighting fixtures where none are currently installed. These controls will automatically control lighting systems based on either occupancy or outdoor light levels.

SCOPE OF WORK

Lighting controls lower cost by adjusting light levels by occupancy and turning lights off when not needed.

CHANGES IN INFRASTRUCTURE

New lighting control devices will be installed as part of this ECM.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination efforts will be needed to reduce or limit impact to building occupants.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced electric energy usage. A slight increase in heating energy is resultant from the reduced heat output from lighting that is turned off.
Waste Production	Proper disposal of any waste generated.
Environmental Regulations	No environmental impact is expected.

ECM 1C DE-STRATIFICATION FANS W/ UV DISINFECTION

The key benefits of this ECM include:

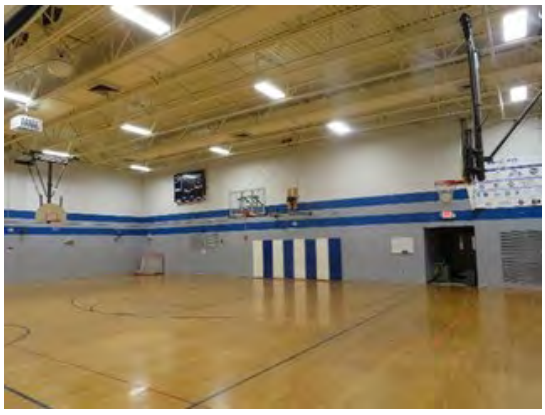
- **Improved efficiency and energy savings** through more equal distribution of conditioned air space
- **Equipment longevity** due to lower utilization of equipment to condition air
- **Increased comfort** of students and teachers

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
1C De-Stratification Fans w/ UV Disinfection		●	●			

EXISTING CONDITIONS

Warm air stratifies close to the ceiling in high ceiling areas such as in a gymnasium or auditorium. Elevated levels of heat transfer through the high walls and roof causes elevated heat loss.

Manasquan HS - Multi-purpose Room



Manasquan ES - Gym

PROPOSED SOLUTION

In areas with 20+ foot ceiling heights, there is approximately a 15°F+ temperature difference between the floor and the ceiling. With higher ceilings, it is even greater. That means to generate the heat necessary to maintain a comfortable 70°F temperature at the floor level where student activities occur, the ceiling could be 85°F or higher.

De-stratification fans even out the air temperature to a 0−3°F differential from floor to ceiling and wall to wall. This will allow HVAC systems to run for a shorter duration because of the absence of extreme temperatures to heat or cool, thus allowing the local thermostats to be satisfied for longer periods of time.

Systems Evaluation and Selection

An energy-efficient motor drives a near-silent fan that forces a column of hotter air from the ceiling to the cooler floor below. As this column of warm air nears the floor, it begins to flare out in a circular pattern and rise again creating a torus. While doing so, it warms the cooler air and mixes with air near the floor, increasing the temperature and comfort of occupants. Through a natural law of physics, this torus will continue to re-circulate air, mixing warmer air from the ceiling with cooler air near the floor until the ceiling and air temperatures are nearly equal. As this happens, it will require less and less energy to comfortably heat the work area, allowing thermostats to be lowered and energy savings to be realized. Once started, the entire process of "thermal equalization" will take an average of less than 24 hours.

Airius PureAir Series is an air purification and airflow circulation fan system that incorporates the latest in Photohydroionization (PHI) Cell technology to efficiently and effectively neutralize up to 99% of all harmful germs, bacteria, viruses, mold, and other contaminants in any internal environment. The PHI Cell emits ionized hydroperoxides, naturally occurring cleaning agents, which are circulated throughout spaces via the fan. As the fans continue to circulate internal atmosphere, the PHI circulates its neutralizing ionized hydroperoxides, providing 24/7 continuous Air Purification. The PureAir also provides all the features and benefits of the world's most popular destratification and airflow circulation fan, balancing temperatures, improving comfort, reducing heating and cooling costs, and reducing carbon emissions.

Based on preliminary site investigation conducted by our staff, we propose to install the de-stratification fans as indicated in the table below.

Proposed De-Stratification Fans

Building	Location	Airius Model	Qty
Manasquan High School	Gym	Air Pear 45	8
Manasquan High School	Cafeteria	Air Pear 25	4
Manasquan Elementary School	MPR	Air Pear 25	6
Total			**18**

SCOPE OF WORK

Per De-Stratification Fan:

- Shut off the main electric power to the area in which the unit(s) will be installed
- Install new de-stratification fan and wiring
- Re-energize
- Inspect unit operation by performing electrical and harmonics testing

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

New de-stratification fans will be installed as part of this ECM.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination efforts will be needed to reduce or limit impact to building occupants.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced thermal energy usage. A slight increase in electrical energy is resultant from the operation of the fan motors.
Waste Production	Proper disposal of any waste generated.
Environmental Regulations	No environmental impact is expected.

ECM 2A BOILER REPLACEMENTS

The key benefits of this ECM include:

- **Reduced energy usage** from improved boiler efficiency resulting from replacement of older equipment and, in certain instances, oversized boilers.
- **Lower operational costs** through less frequent maintenance and fewer operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2A Boiler Replacements					●	

EXISTING CONDITIONS

The boiler at the Industrial Arts Building is past the end of its useful life and is less efficient compared to new boilers. The existing boiler can be replaced with high efficiency condensing boilers.

Industrial Arts Building - Boiler

Industrial Arts Building - Boiler

EXISTING BOILERS TO BE REPLACED

Existing Boilers

Building	Type	Manufacturer	Model	Output (MBH)	Fuel	Qty
Industrial Arts Building	Hot Water	HB Smith	M86-86	874	NG	1

PROPOSED SOLUTION

It is recommended that the boiler listed in the table above be replaced with boilers operating at higher efficiency as provided in table below. New condensing hot water boilers have thermal efficiencies that range from 88–95% depending on the return hot water temperature from the heating loop. With proper design, it is typical to see thermal efficiencies of around 92%. Thermal efficiency is only one part of the equation that makes up the seasonal efficiency of a boiler.

New boiler sizes and quantities will be based on the heat load of the building with redundancy, taking into account the existing system sizing and level of redundancy.

Proposed Boilers

Building	Type	Manufacturer	Model	Output (MBH)	Fuel	Qty
Industrial Arts Building	Hot Water	AERCO	AM-399	399	NG	1

SCOPE OF WORK

The following outlines the boiler replacement:

1. Disconnect gas back to shutoff valve and electric back to source panelboard.
2. Remove existing boilers.
3. Install new boilers.
4. Connect gas and heating hot water appurtenances to new boilers.
5. Terminate and power new boiler electric circuiting.
6. Start up, commissioning, and operator training.

ENERGY SAVINGS METHODOLOGY AND RESULTS

In general, Honeywell uses the following approach to determine savings for this specific measure:

Existing Boiler Efficiency	= Existing Heat Production/ Existing Fuel Input
Proposed Boiler Efficiency	= Proposed Heat Production/ Proposed Fuel Input
Energy Savings $	= Heating Production (Proposed Efficiency – Existing Efficiency)

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

ECM 2B BURNER REPLACEMENTS AND CONTROLS

The key benefits of this ECM include:

- **Reduced energy usage** from improved boiler efficiency resulting from replacement of older equipment, and in certain instances, oversized boilers.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2B Burner Replacements and Controls		●				

EXISTING CONDITIONS

During our preliminary walkthroughs and conversations with District personnel, Honeywell has identified the boiler burners at Manasquan High School as the best candidates for burner replacements and controls.

Manasquan High School – Burners

Manasquan High School – Burners

EXISTING BURNERS TO BE REPLACED

Existing Burners

Building	Make	Model	MBH	Qty
Manasquan High School	Industrial Combustion	-	3,135	2
Manasquan High School	Industrial Combustion	LNVG-40	1,413	2

PROPOSED SOLUTION

Typically, boilers are sized to accommodate the coldest days (approximately 5% of the year). During these periods of maximum demand, the burner is constantly on and operating at maximum capacity. The burner cycles on and off, maintaining temperature or pressure in the boiler. It is during these periods of lesser demand that the controller will monitor the boiler make-up rate and efficiently manage the firing of the boiler.

The length of the burner's off-cycle is the best measure of total heating demand or load. In other words, the load is directly related to the time it takes for water (or steam) in the boiler to drop from its high-limit temperature (or pressure) to its low-limit or "call" setting. When demand is high, these off-cycles are short and the on-cycles are longer. When demand is lower, off-cycles are longer and on-cycles are reduced.

The device, which is a microprocessor-based computer, constantly monitors the demand on the boiler by assimilating all factors affecting a building's heating requirements, including occupancy, climate, wind chill, solar gain, type of building, and many others.

PROPOSED SYSTEMS AND SCOPE OF WORK

Honeywell will replace the burners on the boilers listed above with new, natural gas-fired burners, utilizing advanced controls.

HONEYWELL SLATE™

SLATE™ from Honeywell brings together configurable safety and programmable logic for the first time ever. It's one platform from one vendor that can easily be customized for almost any application—in less time with less complexity.

This upgrade will provide a combustion curve and light-off points including minimum and maximum firing rate points resulting in a precise firing rate control over the entire firing rate of the burner. Combustion efficiency will be maximized throughout the combustion curve and will provide a fuel curve to achieve maximum efficiency.

MODULATING BURNER CONTROL

The Modulating Burner integrates flame safeguard control, fuel-air ratio control, O2 Trim, VFD control, and proportional integral derivative (PID) control into a single, integrated, user-friendly system.

The features integrated into the burner provide energy savings, reduced emissions, reduced installation costs, and enhanced safety.

FUEL METERING

- Reduced fuel use
- Increased burner efficiency
- Greenhouse gas emissions reduction

EASY ACCESS PANELS

- Total access to components
- Easy maintenance

GRAPHIC BURNER MANAGEMENT SYSTEM

- Graphic annunciation of critical burner functions

SCOPE OF WORK

The following outlines the boiler burner controls:

1. Disconnect electrical and gas from existing boiler burner.
2. Install new burner controls on existing burner (where applicable).
3. Start up, commissioning, and operator training.

ENERGY SAVINGS METHODOLOGY AND RESULTS

In general, Honeywell uses the following approach to determine savings for this specific measure:

Existing Boiler Efficiency	= Existing Heat Production/ Existing Fuel Input
Proposed Boiler Efficiency	= Proposed Heat Production/ Proposed Fuel Input
Energy Savings $	= Heating Production (Proposed Efficiency – Existing Efficiency)

CHANGES IN INFRASTRUCTURE

New combustion controls will be installed and programmed in the locations listed above. In addition, training for maintenance personnel will be required as well as on-going, annual preventive maintenance.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods. Continuity of service must be maintained for the customer.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from greater boiler load control, reduced maintenance costs control, and setback.
Waste Production	Existing equipment scheduled for removal will be disposed of properly.
Environmental Regulations	No environmental impact is expected; all regulations will be adhered to in accordance with EPA and local code requirements.

ECM 2C DOMESTIC WATER HEATER REPLACEMENT

The key benefits of this ECM include:

- **Reduced energy usage** from improved efficiency resulting from replacement of older equipment.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2C Domestic Water Heater Replacement		●				

EXISTING CONDITIONS

The existing Domestic Hot Water (DHW) heaters and storage tanks at Manasquan High School are in poor condition and are not high-efficiency units.

Manasquan High School – Water Heaters

Manasquan High School – Storage Tanks

EXISTING WATER HEATERS TO BE REPLACED

Existing Water Heaters

Building	Manufacturer	Model	Output (MBH)	Storage	Fuel	Qty
Manasquan High School	AO Smith	HW520896	411	300	NG	2

PROPOSED SOLUTION

Honeywell proposes replacing the existing DHW heaters at the above location with highly efficient condensing DHW heaters. New condensing DHW heaters have efficiencies between 97–98%. They provide better control with capabilities as night setback, temperature adjustments, and demand control hot water.

Proposed Water Heaters

Building	Manufacturer	Model	Output (MBH)	Storage	Fuel	Qty
Manasquan High School	AO Smith	BTH-400	400	300	NG	2

SCOPE OF WORK

The following outlines the boiler replacement:

1. Demolish and remove old water heaters.
2. Furnish and install condensing gas-fired domestic hot water heaters as specified in the table above.
3. Install all required piping, controls, and breeching as needed.
4. Install mixing valve.
5. Install circulators where needed for building use and kitchen supply.
6. Test and commission.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The savings are calculated from the domestic hot water heater efficiency differences.

Existing Boiler Efficiency	= Existing Boiler Efficiency + Existing Heat Exchanger Efficiency
Proposed Boiler Efficiency	= Efficiency of the New Domestic Hot Water Heater
Energy Savings $	= DHW Load x (Existing Equipment Efficiency – New Equipment Efficiency)

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available.
Equipment Identification	As part of the measure design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

A new controller for each DHW heater will be installed and programmed. In addition to the controllers, training for maintenance personnel will be required.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from improved thermal efficiency.
Waste Production	Proper disposal of any waste generated.
Environmental Regulations	No environmental impact is expected.

ECM 2D ROOF TOP UNIT REPLACEMENTS

The key benefits of this ECM include:

- **Reduced energy usage** from improved efficiency resulting from replacement of older equipment.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2D Rooftop Unit Replacement			●			

EXISTING CONDITIONS

Some Rooftop Units (RTUs) serving the locations photographed below are inefficient or past their useful lives. Replacing these units with new, high-efficiency units will save energy costs over the long term while reducing repair costs that would otherwise have been necessary to keep the old RTUs in operation.

Manasquan ES - RTU

Manasquan ES - RTU

EXISTING ROOFTOP UNITS TO BE REPLACED

Existing Rooftop Units

Building	Location Served	Manufacturer	Model	Tons	Qty
Manasquan Elementary School	Section A2 Classrooms & Corridors	Trane	YCH480AEHU2B7 LE10B0D	40.0	1
Manasquan Elementary School	Section D1 Classroom - POD B1-6	Trane	YCD420AEHU2B7 GE10B0D	35.0	1
Manasquan Elementary School	202, 203, 204, 205	Trane	YCD420AEHU2B7 GE10BD	35.0	1
Manasquan Elementary School	Multipurpose Rm	Trane	YCD420AEHU2B7 GE10B0D	35.0	1
Manasquan Elementary School	Gym	Trane	YCH360AEHU2B6 DE10B0D	30.0	1

Building	Location Served	Manufacturer	Model	Tons	Qty
Manasquan Elementary School	Gym	Trane	YCH360AEHU2B6 DE10B0D	30.0	1
Manasquan Elementary School	Gym Storage 300,301,302	Trane	YCD330A4HU2B5 BE10B0D	27.5	1
Manasquan Elementary School	303, 304, 305, 306, 307, 308	Trane	YCD241C4HCCA	20.1	1
Manasquan Elementary School	Section A1 Classrooms & Corridors	Trane	YCH211C3HBCA	17.6	1
Manasquan Elementary School	Music 14	Trane	YCD181C3HCCA	15.0	1
Manasquan Elementary School	Main Office & Nurse	Trane	YCD151C3HRBB	12.6	1
Manasquan Elementary School	Kitchen Cafetorium	Trane	-	7.5	1

PROPOSED SOLUTION

Honeywell proposes replacing the existing rooftop units in the above table. The new units will be installed in the same location as the existing units. Existing electrical power supply will be reconnected to the new units. The new units will be equipped with factory-installed microprocessor controls that improve unit efficiency. The units will also communicate with the building management system.

Proposed Rooftop Units

Building	Location Served	Manufacturer	Model	Tons	Qty
Manasquan Elementary School	Section A2 Classrooms & Corridors	Trane	YCH480	40.0	1
Manasquan Elementary School	Section D1 Classroom - POD B1-6	Trane	YCD420	35.0	1
Manasquan Elementary School	202, 203, 204, 205	Trane	YCD420	35.0	1
Manasquan Elementary School	Multipurpose Rm	Trane	YCD420	35.0	1
Manasquan Elementary School	Gym	Trane	YCH360	30.0	1
Manasquan Elementary School	Gym	Trane	YCH360	30.0	1
Manasquan Elementary School	Gym Storage 300,301,302	Trane	YCD330	27.5	1
Manasquan Elementary School	303, 304, 305, 306, 307, 308	Trane	YHD240	20.0	1
Manasquan Elementary School	Section A1 Classrooms & Corridors	Trane	YHH210	17.5	1
Manasquan Elementary School	Music 14	Trane	YHD180	15.0	1
Manasquan Elementary School	Main Office & Nurse	Trane	YHD150	12.5	1
Manasquan Elementary School	Kitchen Cafetorium	Trane	YHC092	7.5	1

SCOPE OF WORK

The following outlines the scope of work to install the rooftop units stated in the above table:

1. Disconnect existing RTU electric connections.
2. Disconnect piping and air ducts from the unit.
3. Remove unit from the base.
4. Modify base for new unit if necessary.
5. Rig and set new unit at the base.
6. Inspect piping and air ducts before reconnecting them to the unit.
7. Reconnect piping and air ducts.
8. Repair duct and piping insulation.
9. Connect electric power.
10. Start up and commissioning of new unit.
11. Maintenance operator(s) training.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The savings approach is based on the energy efficiency between the existing and new units. The savings are generally calculated as:

Electric Energy savings	= Existing unit energy consumption (kWh) – replacement unit energy consumption (kWh)

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. Honeywell and the customer will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

New rooftop units will be installed in itemized locations. In addition, training for maintenance personnel will be required, as well as on-going, annual preventive maintenance.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination of the electrical tie-in will be required.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from higher efficiency units.
Waste Production	Existing unit scheduled for removal will be disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 2E KITCHEN HOOD EFFICIENCY IMPROVEMENTS

The key benefits of this ECM include:

- **Reduced energy usage** from improved equipment control and reduced exhaust of conditioned air.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2E Kitchen Hood Controllers		●	●			

EXISTING CONDITIONS

Honeywell observed that the kitchens utilize a constant volume kitchen exhaust hood system. This system operates at full load, even when there is no activity in the kitchen. It also requires operating the exhaust fan at full load. This wastes both fan energy and heating energy. When the hood is not utilized, an opportunity exists to reduce airflow and conserve energy.

Manasquan ES - RTU

Manasquan ES - RTU

PROPOSED SOLUTION

Honeywell recommends installing a microprocessor-based controls system whose sensors automatically regulate fan speed based on cooking load, time of day and hood temperature while minimizing energy usage. The system includes a temperature sensor installed in the hood exhaust collar, IP sensors on the ends of the hood that detect the presence of smoke or cooking effluent and VFDs that control the speed of the fans. This will result in energy and cost savings, noise reduction, longer equipment life, and reduction in cleaning costs.

Existing Kitchen Hoods to Receive Controls

Building	Kitchen Hood (sq. ft.)
Manasquan High School	60
Manasquan Elementary School	150
Total	**210**

SCOPE OF WORK

1. Install a temperature sensor in the hood to monitor temperature of the exhaust gas.
2. Install a set of two photo sensors on the sides to monitor smoke density across the hood.
3. Install a control panel with a small point controller and a set of relays in the kitchen close to the hood.
4. Provide electric wiring from the new panel to the sensors, exhaust fan motor as well as to the closest electric panel for power supply.
5. Provide connection to the BMS system for remote monitoring, control, and alarming. This system could also be stand-alone to save on cost.
6. Commission control components and sequences and calibrate control loops.

Sequence of operation will enable the exhaust fans when either temperature or smoke density in the range hoods is above a pre-set value. Time delays between start and stop will be programmed to prevent motor short cycling. Schedule programming could be implemented as well.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The savings approach is based upon reducing the amount of conditioned air that is being exhausted when there is no cooking taking place.

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

There will be improvements in HVAC equipment and controls for not operating fans continuously.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced energy.
Waste Production	Any removed parts will be disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 2F PREMIUM EFFICIENCY MOTORS AND VFDS

The key benefits of this ECM include:

- **Energy savings** from reduced run hours and reduced motor speeds.
- **Equipment longevity** due to more efficient and less wasteful equipment utilization and reduced startup wear.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2F Premium Efficiency Motors and VFDs			●			

EXISTING CONDITIONS

Honeywell has identified standard efficiency electric motors on several pumps. Energy savings can be obtained by replacing the standard efficiency motors with premium efficiency motors as well as by installing VFDs on systems that have two-way control valves.

Manasquan Elementary School – Motor

Manasquan Elementary School – Motor

EXISTING MOTORS TO BE REPLACED

Existing Motors

Building	Equipment Description	Qty.	Motor HP	Existing Efficiency	Replace Motor	Add VFD
Manasquan Elementary School	HW Pump	4	7.5	88.5%	Y	Y

PROPOSED SOLUTION

Honeywell observed that several motors and pumps that are sized to meet peak heating or cooling conditions. However, we've learned that most operating hours occur during conditions that require less than peak loads.

Honeywell proposes replacement of all above-mentioned single speed standard efficiency motors (that do not have VFDs) with new premium efficiency motors and installing new couplings where applicable. In addition, Honeywell recommends installing VFDs on these pumps. Energy used by the motor can be reduced by varying the flow in response to varying loads in the space. Motor speed may be controlled either based on the pressure in the distribution system or based on time of day.

Honeywell recommends fitting unit ventilators with two-way valves (provided that unit ventilators located at end of piping branches are fitted with three-way valves to keep hot water moving through the distribution piping at all times).

Honeywell also recommends installing VFDs on the heating hot water pumps and chilled water pumps to better match pumping output to system requirements and reduce energy waste. Each motor will be equipped with new selector relays that will allow one drive to operate per pump with the VFD drive. Honeywell also recommends installation of new differential pressure sensors and tying them to the control system to allow you to regulate the speed of the pump per load requirements. Lastly, we recommend installation of VFDs on the cooling system pump motors that have higher horsepower. VFDs will maintain temperatures in the unit by adjusting the speed of both the motor and the pump and can be connected to your BMS.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The energy consumed by electric motors varies inversely with the cube of the motor speed. Variable frequency drives reduce motor speed (in response to load), thus reducing energy consumption exponentially.

CHANGES IN INFRASTRUCTURE

New motors will be installed in place of the old motors. No expansion of the facilities will be necessary.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination of the electrical tie-in will also be required.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reducing electrical usage by operating higher efficiency motors for the same horsepower output. The equipment uses no other resources.
Waste Production	This measure will produce waste byproducts. Old motors shall be disposed of in accordance with all federal, state, and local codes.
Environmental Regulations	No environmental impact is expected.

ECM 2G SPLIT SYSTEM REPLACEMENTS

The key benefits of this ECM include:

- **Reduced energy usage** from improved boiler efficiency resulting from replacement of older equipment and, in certain instances, oversized boilers.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2G Split System Replacements	●		●			

EXISTING CONDITIONS

Honeywell identified some condensing units as being inefficient and having exceeded their useful service life. Replacing these units with new, high-efficiency units will save energy costs over the long term while reducing repair costs that would otherwise have been necessary to keep the old units in operation.

Administrative Building – Split System

Manasquan Elementary School – Split System

EXISTING CONDENSING UNITS TO BE REPLACED

Existing Condensing Units

Building	Area Served	Manufacturer	Model	Tons	Qty
Manasquan Elementary School	Library	Trane	RAUCC30EBY13ABD	30.0	1
Manasquan Elementary School	POD A	Trane	RAUCC25LBY13ABD	25.0	1
Manasquan Elementary School	Cafeteria	Trane	TTA180B300FA	15.0	1
Administrative Building	Storage	BDP	563AN048-A	4.0	1

PROPOSED SOLUTION

Honeywell proposes replacing the existing condensing units in the table above. The new units will be installed in the same location as the existing units. Existing electrical power supply will be reconnected to the new motors. The new units will be equipped with factory-installed microprocessor controls that improve unit efficiency. The units will also communicate with the existing or enhanced BMS.

Proposed Condensing Units

Building	Area Served	Manufacturer	Model	Tons	Qty
Manasquan Elementary School	Library	Trane	RAUJC30	30.0	1
Manasquan Elementary School	POD A	Trane	RAUJC25	25.0	1
Manasquan Elementary School	Cafeteria	Trane	TTA18043D	15.0	1
Administrative Building	Storage	Trane	4TTA3048	4.0	1

SCOPE OF WORK

The following outlines the scope of work to install the condensing units listed in the Proposed Split Systems table above.

1. Disconnect existing electric connections.
2. Disconnect piping from the unit.
3. Remove unit from the base.
4. Modify base for new unit if necessary.
5. Rig and set new unit at the base.
6. Inspect piping and air ducts before reconnecting them to the unit.
7. Reconnect piping and air ducts.
8. Repair duct and piping insulation.
9. Connect electric power.
10. Start up and commissioning of new unit.
11. Maintenance operator(s) training.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The savings approach is based on the energy efficiency between the existing and new units. The savings are generally calculated as:

Electric Energy savings	= Existing unit energy consumption (kWh) – replacement unit energy consumption (kWh)

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

New split systems will be installed in itemized locations. In addition, training for maintenance personnel will be required, as well as on-going, annual preventive maintenance.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination of the electrical tie-in will be required.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from higher efficiency units.
Waste Production	Existing condensing units scheduled for removal will be disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 2H WALK-IN COMPRESSOR CONTROLS

The key benefits of this ECM include:

- **Energy savings** from reducing equipment runtime.
- **Equipment longevity** due to more efficient and less wasteful equipment utilization.
- **Operational savings** from less frequent need to repair or replace equipment thanks to less frequent equipment use.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2H Walk-In Compressor Controls		●	●			

EXISTING CONDITIONS

In many refrigerators, walk-in freezers, and coolers, the compressor is oversized and cycles on and off frequently. This compressor cycling results in higher energy consumption and may reduce the life of the compressor.

Manasquan HS – Walk-In Ref./Frz.

Manasquan ES – Walk-In Ref./Frz.

EXISTING WALK-IN REFRIGERATOR/FREEZERS TO RECEIVE CONTROLS

Existing Walk-In Refrigerator/Freezers

Building	Location	Walk-In Refrigerators	Walk-In Freezers	Type
Manasquan Elementary School	Kitchen	1	1	Intellidyne
Manasquan High School	Kitchen	1	1	Intellidyne

PROPOSED SOLUTION

Honeywell will install a controller manufactured by Intellidyne at the above-mentioned buildings to reduce the compressor cycles of the kitchen walk-in coolers and freezers. The installation of this ECM will have no negative impact on system operation or the freezing of food products. By reducing the cycling, the sensor will improve operating efficiency and reduce electric consumption by 10–20%.

This control enhancement will save energy through the reduced compressor cycling in the kitchen walk-in coolers and freezers and will extend the operating life of the compressor. Consequently, the compressor will not have to be replaced as often.

Intellidyne Sensor Features

- Automatic restart on power failure
- Surge protection incorporated into circuitry
- Fully compatible with all energy management systems
- UL listed
- Maintenance free

Intellidyne Sensor Benefits

- Patented process reduces air conditioning electric consumption typically 10–20%
- Increased savings without replacing or upgrading costly system components
- “State-of-the-art” microcomputer controller—LED indicators show operating modes
- Protects compressor against momentary power outages and short cycling
- Simple 15-minute installation by qualified installer
- No programming or follow-up visits required
- Maximum year-round efficiency
- Reduces maintenance and extends compressor life
- Fail-safe operation
- Guaranteed to save energy
- UL listed, “Energy Management Equipment”

Intellidyne’s patented process determines the cooling demand and thermal characteristics of the entire air conditioning system by analyzing the compressor’s cycle pattern and dynamically modifies that cycle pattern to provide the required amount of cooling in the most efficient manner. This is accomplished in real-time by delaying the start of the next compressor “on” cycle by an amount determined by the cooling demand analysis. These new patterns also result in less frequent and more efficient compressor cycles.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The energy savings for this ECM is realized by the reduction in run time of the compressors and fan motors in the freezers/refrigerators.

CHANGES IN INFRASTRUCTURE None.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from the reduced electrical consumption of the compressor.
Waste Production	Any removed parts will be disposed of properly
Environmental Regulations	No environmental impact is expected.

ECM 2I ADD COOLING TO INDUSTRIAL ARTS BUILDING

The key benefits of this ECM include:

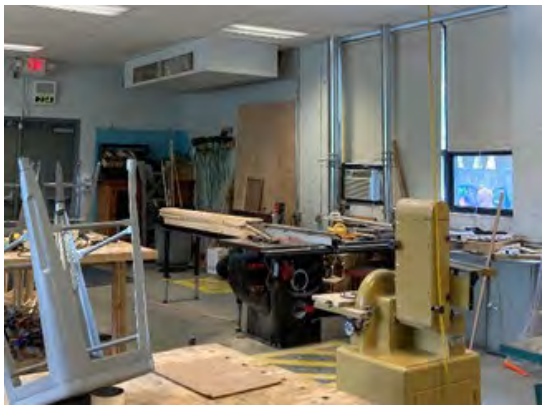
- **Energy savings** from reduced run hours and reduced motor speeds.
- **Equipment longevity** due to more efficient and less wasteful equipment utilization and reduced startup wear.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2I Add Cooling to Industrial Arts Building					●	

EXISTING CONDITIONS

Honeywell has identified several areas in schools where addition of cooling is desirable. Cooling is now provided by window units at Industrial Arts Building. Although adding cooling increases the energy use of the building, the addition of cooling makes a better learning environment for students by increasing comfort during warmer school days.

Industrial Arts Building – Art Room



Industrial Arts Building – Wood Shop

PROPOSED SOLUTION

New Cooing Units

Building	Manufacturer	Area Served	Model	Qty	Tons
Industrial Arts Building	Trane	Wood Shop A	4TTA4048	1	4
Industrial Arts Building	Trane	Wood Shop B	4TTA4048	1	4
Industrial Arts Building	Trane	Art Room A	4TTA4048	1	4
Industrial Arts Building	Trane	Art Room B	4TTA4048	1	4

Honeywell proposes installing new cooling units at the above location to add cooling to wood shop and art room at Industrial Arts Building.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The energy savings for this ECM is realized by the reduction in run time of the cooling compressors and increased quality of the learning environment. In spaces not previously cooled, there may be a negative impact on energy savings.

CHANGES IN INFRASTRUCTURE

Addition of roof mounted equipment requiring roof penetrations as required.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Coordination of the electrical tie-in will also be required. Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from the reduced electrical consumption of the compressor versus older technology.
Waste Production	Any removed parts will be disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 2J REPLACE UNIT VENTILATORS IN INDUSTRIAL ARTS BUILDING

The key benefits of this ECM include:

- **Reduced energy usage** from improved efficiency resulting from replacement of older equipment.
- **Lower operational costs** through less frequent maintenance and operational issues.

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
2J Replace Unit Ventilators in Industrial Arts Building					●	

EXISTING CONDITIONS

Honeywell observed that the existing unit ventilators are beyond the useful life and being inoperable or unrepairable.

Industrial Arts Building – Unit Ventilator

Industrial Arts Building – Unit Ventilator

EXISTING UNIT VENTILATORS TO BE REPLACED

Existing Unit Ventilators

Building	Type	Location	Qty
Industrial Arts Building	Ceiling Mount	Classroom	4

*During IGA, additional unit ventilators may be added.

PROPOSED SOLUTION

Honeywell proposes to replace existing unit ventilators with new units. New units will be equipped with open protocol factory mounted controls which can be tied into existing BMS system.

SCOPE OF WORK

1. The following outlines the unit ventilator replacements
2. Disconnect electrical and steam from existing units
3. Install new univents and reconnect, steam, and electric
4. Start up, commissioning, and operator training

ENERGY SAVINGS METHODOLOGY AND RESULTS

In general, Honeywell uses the following approach to determine savings for this specific measure:

Existing Univent Efficiency	= Heat Input x Existing Efficiency
Proposed Univent Efficiency	= Heat Input x New Efficiency
Energy Savings $	= Heating Production (Proposed Efficiency – Existing Efficiency)

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

New unit ventilators will be installed and programmed in the locations listed above. In addition, training for maintenance personnel will be required as well as on-going, annual preventive maintenance.

O&M IMPACT

The new unit ventilators will decrease the O&M cost for maintaining the equipment.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods. Continuity of service must be maintained for the customer.

ENVIRONMENTAL ISSUES

Resource Use	Minor support will be required for the interruption of utilities for brief tie-in periods. Continuity of service must be maintained for the customer.
Waste Production	Existing units scheduled for removal will be disposed of properly.
Environmental Regulations	Minor support will be required for the interruption of utilities for brief tie-in periods. Continuity of service must be maintained for the customer.

ECM 3A BUILDING MANAGEMENT SYSTEM UPGRADES

The key benefits of this ECM include:

- **Improve Air Quality** by more precise control of air filtration, air composition, and ultra-violet cleaning to create a healthier school building environment
- **Operational efficiency** resulting from better control and system wide visibility
- **Remote operation** of HVAC systems via mobile phone or off-site computer
- **Energy savings** from reducing total energy consumption with more efficient, state-of-the-art technology
- **Occupancy comfort and productivity** resulting from enhanced temperature and humidity control throughout your buildings

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
3A Building Management System Upgrades		●	●			

Building Management System Overview

Honeywell has performed a preliminary survey of the existing building management systems (BMS) throughout the Manasquan Public School District. The District currently has a Trane control system at Manasquan Elementary School and a Honeywell control system at Manasquan High School. Most of the HVAC equipment throughout both schools are equipped with DDC controls. The BMS provides equipment scheduling control and monitors and controls space temperatures, supply air temperatures, humidity, heating water loop temperatures, and chilled water loop temperatures. Operators are capable of monitoring and controlling connected equipment in the building from a front-end user interface.

EXISTING CONDITIONS

Existing Building Management Controls

Building	Existing Building Management System
Manasquan High School	Trane
Manasquan Elementary School	Honeywell

PROPOSED SOLUTION

Honeywell proposes the following potential control programs with BMS upgrades.

Night Setback & Setup

Design and implementation of a more aggressive setback and setup schedule will help to further eliminate energy waste in each of your buildings by utilizing an optimal start/stop schedule.

Set Point Optimization

Honeywell will help deliver temperature uniformity by calibrating thermostats to the same set point, thereby achieving optimum comfort for your occupants by reducing the occurrence of hot and cold spots. We will also help you to reduce energy waste caused when adjacent areas cause your systems to overcompensate due to running in different operating modes.

Heating/Cooling Mode Selection

A modern, state-of-the-art building management system can make real time decisions about the heating and cooling needs of any of your buildings. Honeywell will help you establish optimal system configurations to ensure that your buildings are always in optimal settings to deliver a more comfortable space and reduce energy waste.

Optimal Start/Stop

Honeywell understands that equipment start times are typically set to run earlier than normal to ensure optimal comfort is maintained during hot and cold weather seasons. We will work with staff to ensure that optimal start and stop features are fully utilized to optimize occupancy comfort and eliminate energy waste.

Remote Access

Facility managers will be able to login in to their BMS system from anywhere via their smartphone or iPad/Tablet or other internet enable devices. This added granular view will allow them to verify existing conditions and effectively manage their alarms and critical conditions and take steps to remediate the situation

ENERGY SAVINGS METHODOLOGY AND RESULTS

The savings approach is based upon reducing the amount of energy that needs to pre-heat or cool the outside air. The savings are generally calculated as:

Existing Heating BTU & Cost per BTU	= Metered data from existing meter readings
Cost of Existing Heating	= Average site data $/CCF or $/Gallon
Reduction in Heating/Cooling BTU	= Reduction in outside air CFM x 1.08 x Delta T x Operating Hours
Cost of Proposed Heating/Cooling	= Reduced BTU x Cost per BTU
Energy Savings $	= Existing Costs – Proposed Costs

The baseline adjustment calculations are included with the energy calculations.

CHANGES IN INFRASTRUCTURE

None.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced energy.
Waste Production	Any removed parts will be disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 4A BUILDING ENVELOPE IMPROVEMENTS

The key benefits of this ECM include:

- **Energy savings** from reducing unwanted outside air infiltration
- **Equipment longevity** due to more efficient and less wasteful equipment utilization
- **Occupancy comfort and productivity** by way of enhanced temperature and humidity control throughout your buildings
- **Improved building envelope** from addressing building gaps that allow unconditioned air penetration

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
4A Building Envelope Improvements	●	●	●	●	●	●

EXISTING CONDITIONS

Heat loss due to infiltration is a common problem, particularly in places with long and cold winter seasons such as NJ. This problem has been shown to represent the single largest source of heat loss or gain through the building envelopes of nearly all types of buildings. Our work has found 30–50% of heat loss attributable to air leaks in buildings.

Honeywell uncovered several leaks that allow for heat loss to occur during the winter season and unwanted heat gains during the summer season. These problems include door gaps, exhaust fans in poor condition, open windows or windows in poor condition, lack of air sealing, and insulation.

Manasquan ES - Building Envelope

Manasquan HS - Building Envelope

Honeywell has helped customers like you to address these problems with a comprehensive and thorough building envelope solution that seals up your buildings to improve occupancy comfort and help eliminate unwanted energy waste. We propose to conduct a comprehensive weatherization job to weatherproof doors and windows, caulk and seal leaks, and install spray foam and rigid foam boards to stop unwanted air movement and provide a thermal barrier between spaces. Part of this process may include decoupling floor-to-floor and compartmentalizing of components of the building to equalize pressure differences.

PROPOSED SOLUTION

Roof-Wall Joints

- Existing – Buildings throughout the District were found to require roof-wall joint air sealing.
- Proposed – Honeywell recommends using a high-performance sealant. In some buildings, two-component foam will be used. Any cantilevers off the buildings will be sealed with backer rod and sealant. Finally, the inside vestibule corners should be sealed with backer rod and sealant.

Roof Penetrations

- Existing – There are many roof top exhaust fans that require damper cleaning, lubrication, and inspection for proper operation and to seal the roof deck to prevent penetration. Some units may be deemed to be too oversized for this service. Some buildings have roof-top AHUs with ducts that may show air leak during an IGA.
- Proposed – Honeywell recommends that, if there is leak, these duct penetrations will be sealed with two-component polyurethane foam. Skylights will also be sealed. Sealant will be injected behind the drip cap to eliminate airflow.

Roof Overhangs

- Existing – We found that roof overhangs at exterior doors are open to the drop ceilings, providing a pathway allowing heated and cooled air to escape between the interior and exterior of the building.
- Proposed – Honeywell proposes to install rigid foam boards and seal the perimeter and any penetrations with spray foam to prevent air leak and provide a sufficient thermal barrier between the spaces.

Windows

- Existing – The operable windows in most of your buildings could present air leak issues that require weather stripping with fuzz or gasket type materials.
- Proposed – Honeywell recommends installing weather stripping and door sweeps to prevent air leak.

Doors

- Existing – Doors in this facility need full weather-stripping replacement and/or door sweeps.
- Proposed – Honeywell recommends new weather stripping and door sweeps to be installed where needed.

Benefits

This work will allow for more efficient operation of your buildings by reducing heating and cooling losses throughout the year. In addition, the draftiness of the buildings and hot and cold spots will be significantly reduced. A reduction in air infiltration will also minimize potential concerns for dirt infiltration or indoor air quality concerns including allergies.

ENERGY SAVINGS METHODOLOGY AND RESULTS

The energy savings for this ECM are realized at the buildings' HVAC equipment. The improved building envelope will limit conditioned air infiltration through openings in the building air barrier. Less infiltration means less heating required by the heating system.

EQUIPMENT INFORMATION

Manufacturer and Type	Several quality and cost-effective manufacturers are available. The District and Honeywell will determine final selections.
Equipment Identification	As part of the ECM design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

Building envelope will be improved with little or no noticeable changes.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minimal coordination efforts will be needed to reduce or limit impact to building occupants.

ENVIRONMENTAL ISSUES

Resource Use	Energy savings will result from reduced HVAC energy usage and better occupant comfort.
Waste Production	Some existing caulking and weather-stripping will be removed and disposed of properly.
Environmental Regulations	No environmental impact is expected.

ECM 5A PERMANENT LOAD REDUCTION

The key benefits of this ECM include:

- **Reduced utility costs**
- **Reduced energy usage** from improved efficiency resulting from replacement of older equipment
- **Lower Operational Costs** through less frequent maintenance and operational issues

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
5A Permanent Load Reduction	●	●	●	●	●	●

ECM OVERVIEW

This measure evaluates the savings from the decrease in power (KW) usage and the rebates associated with that reduction through the PJM Permanent Reduction Program. Honeywell proposes to continue to utilize a registered Demand Response Curtailment Service Provider (CSP) to provide energy response services to the School District. Through the CSP, the School District will participate in the PJM Capacity Market Program and PJM Energy Efficiency Program. These programs are offered through the PJM Regional Transmission Organization (RTO) and Independent System Operator (ISO). The Capacity Market Program allows PJM customers the ability to respond to capacity emergencies when called upon by PJM. The energy efficiency program pays PJM customers for implementing Energy Conservation measures (ECMs) that result in permanent load reductions during defined hours.

Manasquan ES - Electric Meter

Manasquan HS – Electric Meter

PJM CAPACITY MARKET PROGRAM

Capacity represents the need to have adequate resources to ensure that the demand for electricity can be met at all times. For PJM, that means that a utility or other electricity supplier, a load serving entity, is required to have the resources to meet its consumers' demand plus a reserve amount. Electricity suppliers, load serving entities, can meet that requirement by owning and operating generation capacity by purchasing capacity from others or by obtaining capacity through PJMs capacity market auctions.

Permanent Load Reduction KW per Building

Building	Permanent Load Reduction (KW)
Administrative Building	3
Manasquan High School	18
Manasquan Elementary School	23
Alternative School	1
Industrial Arts Building	0
MHS Warehouse/Weight room	1
Total	**46**

PJM operates a capacity market called the Reliability Pricing Model (RPM). It is designed to ensure that adequate resources are available to meet the demand for electricity at all times. In the RPM, those resources include not only generating stations, but also demand response actions and energy efficiency measures by consumers to reduce their demand for electricity.

PJM must keep the electric grid operating in balance by ensuring there is adequate generation of electricity to satisfy demand at every location in the region both now and in the future. PJM's markets for energy and ancillary services help maintain the balance now while the PJM market for capacity aims to keep the system in balance in the future. Resources, even if they operate infrequently, must receive enough revenue to cover their costs. Payments for capacity provide a revenue stream to maintain and keep current resources operating and to develop new resources. Investors need sufficient long-term price signals to encourage the maintenance and development of generation, transmission, and demand-side resources. The RPM, based on making capacity commitments in advance of the energy need, creates a long-term price signal to attract needed investments for reliability in the PJM region.

PROPOSED SOLUTION

Honeywell proposes to work with a PJM Regional Transmission Organization (RTO) CSR to implement a Demand Response energy curtailment program which will generate revenue streams for the School District. Honeywell's Demand Response agent acting as the CSP will notify the district prior to potential events in order to advise and coordinate load curtailment participation in accordance with RTO program requirements and will work with the School District to benefit from energy efficiency improvements.

The PJM Markets are further described below.

The PJM Energy Efficiency Program

Energy efficiency measures consist of installing more efficient devices or implementing more efficient processes and systems that exceed then-current building codes or other relevant standards. An energy efficiency resource must achieve a permanent, continuous reduction in demand for electricity. Energy efficiency measures are fully implemented throughout the delivery year without any requirement of notice, dispatch, or operator intervention. A demand response resource can reduce its demand for electricity when instructed. This means PJM considers it a "dispatchable resource." A demand response resource can participate in the RPM market for as long as its ability to reduce its demand continues. A demand response resource must be willing to reduce demand for electricity up to 10 times each year when called for a reduction. In a year without any reduction calls, the demand response resource is required to

demonstrate the ability to reduce demand for electricity during a test of reduction capability. Data will be submitted by the demand response resource to prove compliance with reductions from actual calls or reductions from capability tests. An energy efficiency resource is one that reduced their demand for electricity through an energy efficiency measure that does not require any additional action by the consumer.

ENERGY SAVINGS METHODOLOGY AND RESULTS

Revenue is generated through participation in the PJM DR program.

CHANGES IN INFRASTRUCTURE

None

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Initiation of demand response curtailment will be required.

ENVIRONMENTAL ISSUES

Resource Use	None.
Waste Production	This measure will produce no waste by-products.
Environmental Regulations	None.

ECM 6A CHP (COGENERATION)

The key benefits of this ECM include:

- **Energy savings** from utilizing a Combined Heat and Power (CHP) system to supplement the existing heating system
- **Operational savings** resulting from improved operational efficiencies unique to CHP technology

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
6A Cogeneration CHP		●				

EXISTING CONDITIONS

No Combined Heat and Power (i.e., cogeneration) units are currently located within the Manasquan Public School District.

Cogeneration Configuration

Ecopower CHP

PROPOSED SOLUTION

Honeywell recommends the installation of the ecopower micro-cogeneration system provides heat and electrical power in a cost effective and environmentally friendly manner. Using a natural gas or propane fueled Marathon Engine, the system captures thermal energy for space heating or domestic hot water. The mCHP uses heat generated by an internal combustion engine to produce between 13,000–47,000 BTU of heat per hour while simultaneously co-generating 1.2–4.4kW of electricity per hour. The system is thermally driven. The ecopower will anticipate the heat demand from sensors located in the house, buffer tank or outside and varies its output to satisfy the demand. It will modulate (slow down or speed up) to run at a level to maintain a constant heat requirement in order to keep the engine running as long as possible, ensuring maximum electrical generation.

SCOPE OF WORK

Proposed Cogeneration Units

Building	Type	Manufacturer	KW	Model
Manasquan High School	Axiom	Ecopower	4.4	1

ENERGY SAVINGS METHODOLOGY AND RESULTS

Savings are based on energy conversion of natural gas to thermal and electrical energy.

EQUIPMENT INFORMATION

Manufacturer and Type	Axiom Ecopower, Electrical Output 1.2–4.4 kW, Thermal Output 13,000–47,000 Btu/hr, Overall efficiency 93%
Equipment Identification	Product cut sheets and specifications for generally used are available upon request. As part of the measure design and approval process, specific product selection will be provided for your review and approval.

CHANGES IN INFRASTRUCTURE

The proposed micro-generator unit would reside in or near the boiler room.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods. The customer and Honeywell will decide upon the exact location of the CHP installation.

ENVIRONMENTAL ISSUES

Resource Use	Energy will be generated to supplement energy purchased from the electrical utility.
Waste Production	Any removed parts will be disposed of properly.
Environmental Regulations	Aside from the environmental benefits from on-site energy generation, no other environmental impact is expected.

ECM 7A SOLAR POWER PURCHASE AGREEMENT (PPA)

The key benefits of this ECM include:

- **Reduced utility costs**
- **Guaranteed utility rates** for 15 years to provide a valuable hedge against future price volatility and deliver greater budgetary certainty utilizing clean electricity
- **Additional savings** from solar can provide the Manasquan Schools with more potential ESIP funding to expand the overall project scope and include additional projects
- **Educational asset** to provide additional tools for teachers to engage students on sustainability and the environment
- **Low risk** given that maintenance is provided by the third-party system owner
- **No upfront costs**

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
7A Solar PPA		●	●			

ECM OVERVIEW

Honeywell recommends that the District further assess the feasibility of a solar photovoltaic system on District owned roofs to generate on-site renewable electricity. This could be provided at no upfront cost via a Power Purchase Agreement (PPA). A PPA is a public-private partnership financial arrangement in which a third-party solar company owns, operates, and maintains your photovoltaic system while the host customer agrees to provide the site for the system on its property. The solar system's power production is purchased by you for a predetermined price ($/kWh) for a predetermined period. This stable price for electricity will be lower than the utilities and third-party suppliers, thereby allowing you to benefit from lower electricity prices, on-site renewable energy generation, a reduction in greenhouse gas emissions, and a powerful educational tool for your teachers and students. Meanwhile, the system will not add any additional maintenance costs since it is owned by the third-party solar company. One of the more significant benefits of this potential ECM is that it will provide for a rate change, helping to deliver greater savings within your ESIP project to help fund other measures

Typical Rooftop Solar Array

Typical Parking Lot Solar Array

Honeywell will oversee the design and construction of the system. We will assist in the feasibility study during your IGA, in conjunction with your technical consultant and legal team, to provide RFP development, solicitation, and oversight of the installation of a solar photovoltaic system.

PROPOSED SOLUTION

Honeywell proposes to install the solar PPA system at the potential buildings listed in the chart below.

Proposed Solar PPA System

Building	Type	kW DC	kWh AC Generated
Manasquan High School	PPA	501	607,189
Manasquan Elementary School	PPA	419	507,809
Total		**920**	**1,114,998**

Potential Solar Arrays – New Building

Potential Solar Arrays - Manasquan ES

ENERGY SAVINGS METHODOLOGY AND RESULTS

Savings are based on the difference in kWh price between the PPA and the District's current electrical supplier.

CHANGES IN INFRASTRUCTURE

The proposed solar array would be roof-mounted only.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	None.
Waste Production	None.
Environmental Regulations	Aside from the environmental benefits of increasing energy awareness no other environmental impact is expected.

ECM 8A SUSTAINABLE TRANSPORTATION – ELECTRIC VEHICLE (EV) CHARGERS

The key benefits of this ECM include:

- **Increased Sustainability** from encouraging the use of pollution-free transportation
- **Tangible Learning Experience** by integrating educational materials with on-site student experience

ECM Description	Administrative Building	Manasquan High School	Manasquan Elementary School	Alternative School	Industrial Arts Building	MHS Warehouse/ Weight room
8A Sustainable Transportation - EV Chargers		●	●			

ECM OVERVIEW

Honeywell will seek to increase the availability of eco-friendly transportation options for staff and parents by providing Electric Vehicle charging stations at each of your schools.

EXISTING CONDITIONS

There are no Electric Vehicle (EV) Charging Stations currently located at the District facilities.

Sample Level 2 EV Chargers

Sample Level 2 EV Chargers

PROPOSED SOLUTION

Honeywell proposes to install multiple Level 2 EV Chargers at the locations outlined below. These chargers are capable of increasing the battery charge of electric vehicles by up to 25 miles (of range) per hour. With a five-year prepaid ChargePoint cloud plan, the District can operate and customize charging stations to meet specific requirements. Some of the most widely used features include:

1. Set the price that drivers pay to use charging stations based on energy cost, duration, time of use, session length, or driver group. Funds collected from drivers are electronically transferred to a designated bank account. For example, staff who work for the District may be allowed to use the chargers for free, while visitors may be charged for a certain price per kWh. This can help generate revenue for the District.
2. Advanced access controls manage which drivers can access stations and when. The chargers may be set available for staff and students only during school hours, and open for public after school hours.
3. Waitlist makes charging more convenient by notifying drivers when a charging spot becomes available for them and holding it until they can plug in their vehicle.

With new state-wide incentives available towards the installation of up to six chargers per site, this can be a cost-effective way to integrate the future of transportation into your District's buildings.

Proposed EV Charging Stations

Location	Make	Model	Qty
Manasquan High School	ChargePointe	CT4021	1
Manasquan Elementary School	ChargePointe	CT4021	1
Total			**2**

CHANGES IN INFRASTRUCTURE

New EV Chargers will be installed as part of this measure.

CUSTOMER SUPPORT AND COORDINATION WITH UTILITIES

Minor support will be required for the interruption of utilities for brief tie-in periods.

ENVIRONMENTAL ISSUES

Resource Use	An increase in electrical use may occur due to this ECM, offset by revenue generated from charging stations.
Waste Production	Any discarded components will be disposed of properly.
Environmental Regulations	Reduced pollution from staff and parent vehicles is expected.

Section G-3. Project Development and Management Overview

Honeywell approaches any ESIP project with a systematic, tested, and proven delivery process based upon industry best practices including strong project management, open and collaborative communication, superior technical design, and state-of-the-art technologies. We go above and beyond, with multiple New Jersey delivery teams to ensure enough resources, meticulous and thorough training and commissioning, and robust maintenance planning that goes the extra mile for the long term. Honeywell excels at project delivery because of our experience in New Jersey delivering ESIP projects with results that meet or exceed expectations.

Honeywell will demonstrate our partnership-based commitment to the District throughout the development and delivery of your ESIP project, as we have done for dozens of other K-12 school districts throughout New Jersey under the ESIP Law. Our approach is backed by our references and track record and highly experienced engineering resources, which will be fully utilized to help you achieve your unique project goals and requirements.

Honeywell prescribes four phases in the ESIP Process that constitutes your project, including:

- **Phase 1**: IGA
- **Phase 2**: Project Implementation
- **Phase 3**: Commissioning and Training
- **Phase 4:** Energy Savings Guarantee Period

The IGA will commence with a kickoff meeting between key project stakeholders of the District and Honeywell to review the ESIP process, including the expectations of both parties during the IGA, audit parameters, reporting methods, building access protocols, availability of utility, and building data. Phase 2 will commence after our kickoff meeting has concluded with agreed upon next steps.

Honeywell takes a holistic approach in development of a comprehensive solution that is customized to meet your operational and facility needs and project goals. Our integrated project delivery approach supports continuous and collaborative communication between key stakeholders throughout the process.

A. IGA Development Process

Honeywell's IGA development process includes the steps identified.

Figure 4. IGA Development Process

Step 1: Discovery

The first step of your IGA is to gain a thorough comprehension of the District's key priorities and requirements. Honeywell will work with you to identify what your key needs and goals include and investigate your buildings and systems with that in mind during this step.

Honeywell will initiate your IGA shortly after formal selection with a kickoff meeting involving all key project decision makers of the District and Honeywell. The purpose of this meeting is to establish preliminary project expectations and define key next steps of the process to inform the IGA. Honeywell will develop a customized plan for developing an efficient, cost-effective solutions-based project including schedule, finance, performance requirements, and scheduling activities.

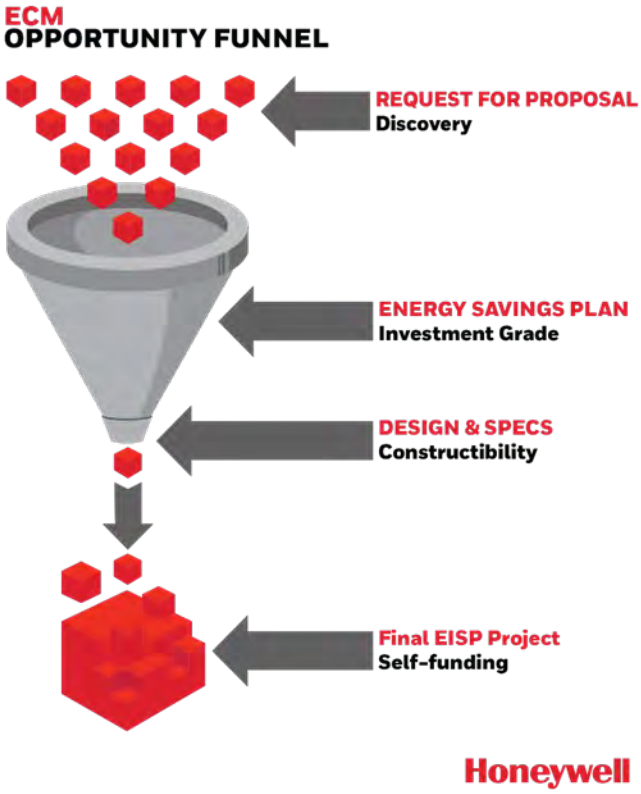
Honeywell will schedule site visits to commence at the earliest convenience. Utility data is a key component used for establishing your energy baseline to project potential energy savings. Building plans and operating schedules will assist Honeywell to focus our time during the site visits and serve to provide the means for our engineers to complete their calculations. Data required for this step includes 24 months of electric, thermal, water/sewer data, original and renovation drawings, equipment lists, equipment operating schedules, occupancy data, maintenance records, and repair costs.

Our goal for the site surveys is to understand your systems in each facility and to identify potential ECMs for inclusion in your final project scope. This step allows Honeywell to determine needed improvements by evaluating each building and its systems in terms of condition, performance and age, including lighting and HVAC systems, Building Automation Systems (BMS), building envelopes, electrical distribution, domestic water, and heating systems.

Step 2: Identify and Develop Project

Honeywell will take the findings of our earlier diagnostic phase to develop solutions that address your priorities and key needs as ascertained in Step 1. Our collaborative, solutions-based approach will allow you to maximize savings to invest more into modernizing buildings and generate maximum rebates to help deliver the most positive cash flow available.

Figure 5. ECM Opportunity Funnel



Our primary objective is to ensure quality control and on time delivery throughout your project. Your project will have a dedicated team consisting of project management and engineering who have helped deliver similarly sized project under ESIP in recent past.

Honeywell will create an exhaustive ECM list following the completion of the site survey process. Each opportunity is then analyzed individually to determine both economic and construction feasibility. Input from the District is critical to determine how each ECM fits within your overall project priorities. Honeywell's ECM Opportunity Funnel (**Figure 5**) will help further narrow down the list of potential ECMs to your final ESIP project scope, by analyzing all aspects of your energy consumption to deliver an optimal project scope based on realistic savings potential. Our unique collaborative approach ensures we deliver on your expectations while providing for turnkey solutions that are cost effective.

Step 3: Cost and Savings Forecasting

Honeywell will then move on to analyze and quantify your unique savings guarantee utilizing the District's dedicated ESIP Team. During this step, we will quantify energy savings by identifying the scope of work and its impact on your facilities and systems. We will measure individual ECMs based on how they will impact future performance of the building. This will help to ensure the ECM savings are accounted for only once. Results are then subject to peer reviews to verify accurate modeling and savings forecasts based on the proposed scope of work. Honeywell's unique approach to engineering is why we often exceed the savings guarantee of our contracts.

Step 4: Deliver Solution

Honeywell will leverage our experience delivering more than two dozen New Jersey ESIP projects since 2009 to help the District complete a successful project on time that maximizes realistic savings, cash rebates and positive cash flow. We have learned through this unrivaled experience that what matters most is to meet your expectations and ensure your involvement in the decision-making process. The Rebate Energy Analysis Constructability Tool (REACT) will provide for an interactive solution development experience designed to maximize NJ Office of Clean Energy rebates. Our No Change Orders policy (which helps distinguish Honeywell from the competition) will further reduce risk and enhance project results.

Our in-house finance team, Honeywell Global Finance (HGF), will work to ensure that you secure the most competitive financial offering and interest rate available. ***No ESCO offers more value throughout the ESIP Process than Honeywell***.

Figure 6 identifies Deliverables.

Figure 6. Deliverables

B. Honeywell Performance Contracting

Honeywell is the undisputed performance contracting market leader in the Northeast. Honeywell's Guaranteed Performance Contracting, which we pioneered in the early 1980s, has surpassed $2 Billion in cumulative sales. Our performance contracting business features specialized and dedicated resources, including people with expertise specifically to address the needs of our customers. Our portfolio of business experience in the region is over 400 projects and over $500 Million in project investment.

C. Project Management Policy: Honeywell's Commitment To Health, Safety, The Environment, And The District

All of Honeywell's Project Management Plans (PMPs) begin with Safety. By integrating health, safety, and environmental considerations into all aspects of our business, we help our customers, our people, and the environment achieve sustainable growth and accelerated productivity, drive compliance with all applicable regulations, and develop the technologies that expand the sustainable capacity of our world. Our health, safety, and environment management systems reflect our values and help us meet our customers' needs and our business objectives.

Our Safety Commitment to Schools

In today's world, nothing is more important than safeguarding our families at home, at work, and at school. Through Honeywell's safety awareness process, we commit to our customers to protect and safeguard our construction sites, our employees, sub-contractors, your staff, and most of all your children.

Our projects all begin with the following steps:

- Safety training for employee's and sub-contractors
- Detailed work schedules around the school day
- Detailed background checks of personnel
- Detail logs of sub-contractor personnel
- On-site logs of time sheets contact information for all personnel
- Clearly displayed identification badges of all construction personnel
- On-site daily supervision of all sub-contractors
- Detailed and weekly reviews of accident reports and remediation strategy

Our Safety Commitment to Our Customers and Employees

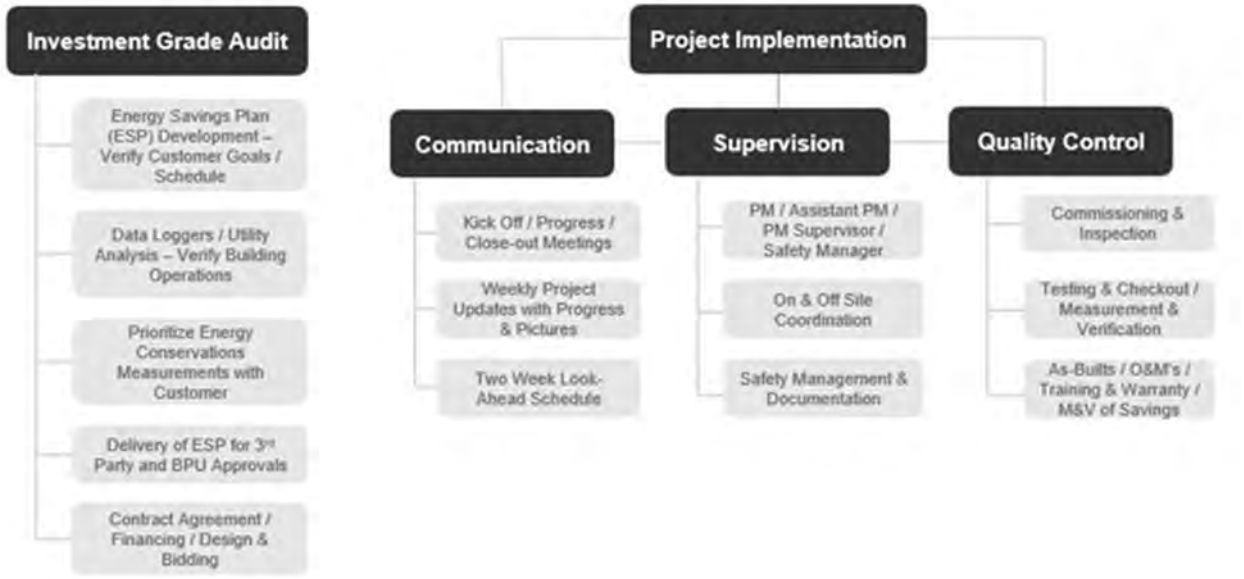
We protect the safety and health of our customers and employees through prevention of illness, injury, and pollution.

- We actively promote and develop opportunities for expanding sustainable capacity by increasing fuel efficiency, improving security and safety, and reducing emissions of harmful pollutants.
- We are committed to compliance with all our health, safety, environmental and legal requirements everywhere we operate.
- Our commitment to health, safety, and the environment is an integral aspect of our design of products, processes and services, and of the lifecycle management of our products.
- Our management systems apply a global standard that provides protection of both human health and the environment during normal and emergency situations.
- We identify, control, and endeavor to reduce emissions, waste and inefficient use of resources, and energy.
- We abide by the Company's own strict standards in cases where local laws are less stringent.
- Our senior leadership and individual employees are accountable for their role in meeting our commitments.
- We measure and periodically review our progress and strive for continuous improvement.
- These are our commitments to health, safety, and the environment and to creating a safe, clean, environment everywhere we operate.

D. Project Management Process

The Project Management Process, illustrated in the figure below, applies technical knowledge, people, communication skills, and management talent in an on-site, pro-active manner to ensure that our contract commitments are met on time, within budget, and at the quality you expect.

Figure 7. Project Management Process



A Honeywell PMP defines plans and controls the tasks that must be completed for your project. But more than task administration, our project management process oversees the efficient allocation of resources to complete those tasks.

Each project and each customer's requirements are unique. At Honeywell, we address customer needs through a formal communication process. This begins by designating one of our project managers to be responsible for keeping the customer abreast of the status of the project.

As the facilities improvements portion of the partnership begins, the Project Manager serves as a single focal point of responsibility for all aspects of the partnership. The Project Manager monitors labor, material, and project modifications related to the District – Honeywell partnership and makes changes to ensure achievement of performance requirements in the facilities modernization component. The Project Manager regularly reviews the on-going process of the project with the customers.

The Project Manager will develop and maintain effective on-going contact with the District and all other project participants to resolve issues and update project status.

There are several challenges in this position. The Project Manager must staff the project and create a work force capable of handling the technologies associated with the project (pneumatic or electric/electronic controls, mechanical systems, etc.), and plan for and use these personnel to achieve optimum results focused on occupant comfort and guarantee requirements.

E. Construction Management

Prior to any work in the buildings, our Project Manager, Wyatt Ferguson, will meet with your administrative and building staff to outline the ECMs we will be installing in your buildings. We will discuss proper contractor protocol of checking in and out of the buildings daily, wearing identifiable shirts, and checking in with your facilities staff. We will coordinate certain projects for different times of the day so we do not interrupt the building and learning environments. Our staff will work a combination of first and second shifts to accomplish the pre-set implementation schedule.

Communication is the key success factor in any construction management plan and our project manager will be the key focal point during the installation process.

Our team will endeavor to prevent schedule slippages by continuously tracking the location of all equipment and components required for the project. We make sure all equipment and components will be delivered on time prior to the scheduled date of delivery. Our thorough survey, evaluation, and analysis of existing conditions, performed prior to the commencement of construction, will also prevent schedule slippages.

Honeywell is required to subcontract various portions of our projects to local contractors. Within the District's project, all subcontractors will be selected in accordance with New Jersey public contracts law. Typical areas that are subcontracted are as follows:

- Electrical Installation
- Water Conservation (Plumbing)
- HVAC Installation (depends upon the project size and scope)
- Associated General Contracting specialty items to support the project etc., (ceilings, windows, concrete, structural steel, roofing, demolition and removal of equipment, painting, and rigging)

Honeywell uses the following guidelines in hiring subcontractors to perform work on our projects.

- Local Presence in the Community (Customer Recommendations)
- Firm's Qualifications and WBE/MBE Status
- Firm's Financial Stability
- Ability to perform the work within the project timeline
- Price
- Ability to provide service on the equipment or materials installed over a long period
- Approval of subcontractors that Honeywell proposes to use lies with the District

Honeywell is pleased to have NEW ROAD Construction Management Co. Inc. as a member of the Honeywell project implementation delivery team for your ESIP project. NEW ROAD is a leading provider of construction management (CM) services for the NJ K-12 market. NEW ROAD's CM contributions to the District's 2017 and 2019 referendum projects, as well as the current Field House project, will bring additional value to the District's ESIP project. NEW ROAD's familiarity with the District and the Borough of Manasquan will be an asset to the delivery of your ESIP project.

NEW ROAD is an award-winning firm that has specialized in managing New Jersey K-12 capital projects for over 43 years. NEW ROAD is a registered New Jersey Small Business Enterprise that has earned an exceptional reputation for integrity, professionalism, capability, depth of resources, and delivering successful projects.

Established in 1979, NEW ROAD's professional staff is dedicated to planning, construction, and renovation of New Jersey Public Schools. NEW ROAD professionals include: two (2) licensed architects, one (1) professional planner, two (2) licensed building inspectors, three (3) certified construction managers, one (1) certified building commissioning professional, engineers, project managers, construction superintendents, HVAC and roofing experts, cost estimators, schedulers, and support staff.

F. Commissioning

Honeywell provides full commissioning of ECMs as part of our responsibility on this project. We will customize this process based on the complexity of ECMs. Specifically, Honeywell will be responsible for start-up and commissioning of the new equipment and systems to be installed during the project. This will include verifying that the installed equipment meets specifications, is installed and started up in accordance with manufacturer's recommendations and operates as intended. A commissioning plan will be prepared that describes the functional tests to be performed on the equipment and the acceptance criteria.

Prior to the District acceptance of the project, Honeywell submits the final commissioning report containing signed acceptance sheets for each ECM. Signed acceptance sheets are obtained upon demonstrating the functionality of each ECM to a District appointed representative.

Additionally, Honeywell provides training for facility operators and personnel as needed when each ECM is completed and placed into service. All training is documented in the final commissioning report.

After the completion of the Honeywell commissioning effort, in accordance with New Jersey ESIP legislation, the District will be required to secure the services of a third-party independent firm to verify the new equipment and systems meet the standards set forth in the Energy Savings Plan. To maintain the independence of this review, these costs must be born directly by the District. However, at the option of the District, these services can be financed as a portion of the total project cost.

Section G-4. Description of Savings Calculations, Monitoring, Measurement and FF Verification, and Program Guarantee

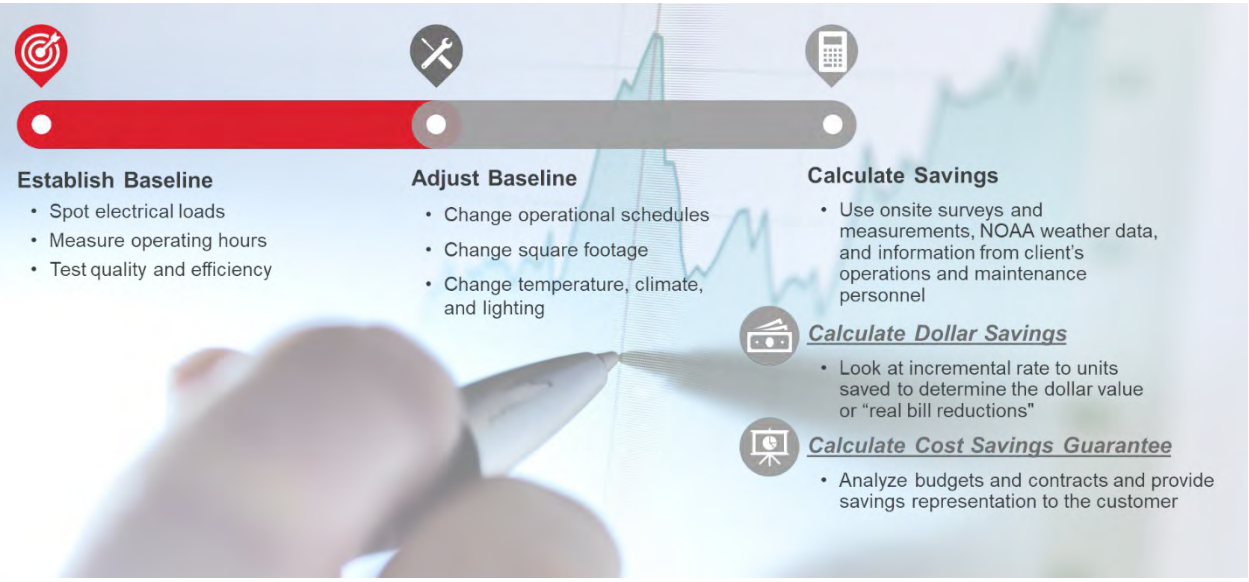
A. Baseline

The purpose for establishing a baseline for an energy performance project is to accurately predict what the energy consumption and costs would have been as if the energy project was never completed. The baseline can then be used to measure the improvement in efficiency and determine the overall energy savings of the project. Since the energy consumption of all facilities is somewhat affected by variable weather conditions, a baseline for heating and cooling systems is typically dependent on degree-days or outside temperature. A baseline also needs to incorporate changes in facility use, such as a change in hours of operation or increased levels of outside air. Once again, if these changes would have occurred in the absence of the energy project, they should be incorporated into the project's baseline.

Honeywell will calculate the baseline based on the systems and operating conditions as they currently exist. Honeywell finds baseline development most accurate if specific measurements are taken on equipment over a period of time (early in the audit phase) to determine actual kW, kWh, oil and gas consumption, cfm, gpm, hours of use, etc.

The following figure illustrates the process for establishing the baseline calculation.

Figure 8. Establishing Baseline Calculation



A summary of some of the methods, which will be used by Honeywell to establish baselines and support calculated savings, are listed below.

1. Spot measurements of electrical loads such as lighting, fan and pump motors, chillers, electric heat, etc.
2. Measurement of equipment operating hours using electric data recorders
3. Measurement of existing operating conditions using data recorders for space temperature and humidity, air handler temperatures (mixed, return, cooling and heating coil discharges), and space occupancy using lighting loggers
4. Spot measurement for boiler efficiencies and water use

5. Running measurements of chiller operation, including simultaneous measurement of input kWh or steam flow, and chilled water supply and return temperatures and flow (gpm)
6. Records of operating conditions from building management systems and utility-grade meters

The data from the above is used to calculate existing energy use, which is then reconciled with current facility utility bills and adjusted as required to provide a mutually agreed baseline.

To provide valid savings evaluations, Honeywell maintains a significant inventory of metering equipment utilized by its auditors and energy engineers to ascertain critical data about the operation of the facility. Typically, Honeywell's auditors use the following equipment for their onsite measurements:

1. Recording and instantaneous power analyzers as well as and harmonic analyzers
2. Data loggers for pressures, temperatures, flow rates, humidity, and CO2
3. Lighting level and recording profile/run-hour and occupancy meters
4. Multimeters, handheld kW meters
5. Combustion analyzers
6. Ultrasonic flow meters
7. Infrared thermometers

The ECMs installed in many projects allow for energy savings to be identified by direct metering or a combination of metering and calculations with accepted assumptions. For example, it is relatively easy to meter representative lighting samples of unique fixture types, both before and after a retrofit, to determine the power consumption difference in watts. When multiplied by the quantity of each fixture type, the total connected load reduction can be derived. In combination with run time assumptions, or meters, the electrical reduction can be accurately determined. Where possible, direct measurement of ECMs during construction (before and after the retrofit) coupled with energy savings calculations is an accurate and cost-effective method.

Due to the nature of some ECMs, or when a combination of ECMs is installed, individual (discrete) metering may not be either possible or able to fully document a baseline and calculate savings. Many of these situations can be handled by combining results from metering along with either engineering-based calculations or output from nationally recognized building simulation programs such as DOE II, ASEAM, TRACE, or HAP. This method would be used for ECMs such as night setback and where no other ECMs have significant interaction with the setback measure.

Formulas exercised in energy savings calculations follow the laws of physics. Many are included in the ASHRAE Handbook of Fundamentals. However, such calculations (i.e., equipment operation profiles) must be tempered by experience, past retrofit practice, and expectations of future operating conditions to arrive at achievable values in practice. Honeywell always reviews every project in detail for the anticipated savings and never hesitates to reduce the anticipated energy calculations where experience dictates necessary. The result is a coupled project where the final savings are equal to or greater than anticipated.

Calculating the units of energy saved is a critical measure of energy efficiency improvements, but it does not indicate the actual dollars saved. To do this, Honeywell and the District will establish the base rates that will act as "floor" rates in calculating the savings. These are usually the rates that are in effect at the time of the start of the contract or rates used for audit estimated savings.

B. Adjustment to Baseline Methodology

Honeywell's methodology for establishing and adjusting the baseline is determined by the characteristics of the facility, the conservation technology being installed, the technology being replaced, the type of Measurement & Verification (M&V) the District requires, and the needs of the District for future changes in facility use.

The purpose of this flexible approach is to make the most accurate possible measurement of the changes in energy uses that are specifically attributable to Honeywell installed ECMs. This creates the ability over the life of the contract to continue measuring only savings achieved by Honeywell and leaves the District free to make future changes to the building or systems without affecting the savings agreement. It also necessitates fewer provisions for adjusting the baseline.

Modifications to the energy baseline or savings will be made for any of the following circumstances:

1. Changes in the number of days in the annual review cycle
2. Changes in the square footage of the facilities
3. Changes in the operational schedules of the facilities
4. Changes in facility indoor temperatures
5. Significant changes in climate
6. Significant changes in the amount of equipment or lighting utilized in the facility

Examples of situations where the baseline needs to be adjusted are:

- Changes in the amount of space being air conditioned
- Changes in auxiliary systems (towers, pumps, etc.)
- Changes in occupancy or schedule. If the baseline conditions for these factors are not well documented it becomes difficult, if not impossible, to properly adjust them when they change and require changes to payment calculations.

To compensate for any addition and deletion of buildings and impact on the baseline model, Honeywell will use sound technical methodologies to adjust the baseline. An example would be to add or delete building energy impact via the calculated cooling load in tons as a percentage of the existing campus tonnage baseline or use indices like Watts/ft2 and BTU/ft2 to calculate the energy consumption of the building and then add or subtract the energy usage to or from the baseline energy consumption.

C. Energy Savings Calculations

In calculating energy savings, Honeywell's highly experienced audit staff uses onsite surveys and measurements, National Oceanic and Atmospheric Administration weather data, detailed discussions with the client's operations and maintenance personnel and engineers, utility records, and other sources to ensure accurate energy, water, and Operations and Maintenance (O&M) savings.

Typically, the following data is gathered:

1. Local weather data
2. Utility bills and sub-metered consumption trends
3. Utility rate structure
4. Facility use and occupancy data
5. Internal equipment loads
6. Interviews of operations and maintenance staff and management
7. Building construction, age, use and layout
8. Schematics of energy and water distribution systems
9. Identification and inventory of HVAC equipment

10. Identification and inventory of process equipment
11. Design, configuration and operating characteristics of HVAC systems
12. Design, configuration and operating characteristics of process systems
13. Control strategies and sequences of operation for HVAC and other process equipment
14. Identification and count of all lighting fixtures and determination of power consumption for each type
15. Identification and inventory of lighting control methods
16. Measurement of foot-candle levels at sample locations
17. Power quality and harmonics, power factor
18. Indoor air quality issues

The equation below will be used to calculate the annual savings in dollars.

$$AnnualSavings(\$) = \sum_{m=1}^{12} \{(Rate_{kWh,Base} \times kWh_{Saved,m}) + (Rate_{fuel\ Oil,\ Base} \times Fuel\ Oil_{Saved,gal,m}) + (Rate_{Steam,\ Base} \times Steam_{Saved,klbs,m}) + (Rate_{NG} \times NG_{Saved,MCF,m})\} + Agreed(\$)$$

where:

$Rate_{kWh,Base}$= defined base rate for kWh consumption
$kWh_{Saved,m}$= calculated kWh savings for month *m*

$Rate_{Fuel\ Oil,\ Base}$= defined base rate for fuel Oil savings (XX/gal.)
$Fuel\ Oil_{Saved,m}$= calculated chilled water savings in gal. for month *m*

$Rate_{Steam,Base}$= defined base rate for steam consumption ($XX/MMBtu.)
$Steam_{Saved,m}$= calculated Steam savings in MMBtu. for month *m*

$Rate_{NG,Base}$= defined base rate for natural gas consumption ($XX/Therm)
$NG_{Saved,m}$= calculated natural gas savings in Therms for month *m*

Agreed($)= Annual savings in dollars (water, sewer, maintenance, etc.)

Honeywell assigns dollar values to the true incremental value of savings for energy and water. In other words, we do not combine for example, demand, and consumptions numbers so there is an average value to savings. Honeywell looks at each incremental rate to units saved to properly determine the value (dollar) to the District or “real bill reductions.” As noted in the RFP, energy escalation rates will be established in accordance with New Jersey Board of Public Utility guidelines. Based on this, Honeywell will review all utility bills (hourly data), tariffs, special contracts, and commodity contracts to develop the incremental value (costs) of each utility.

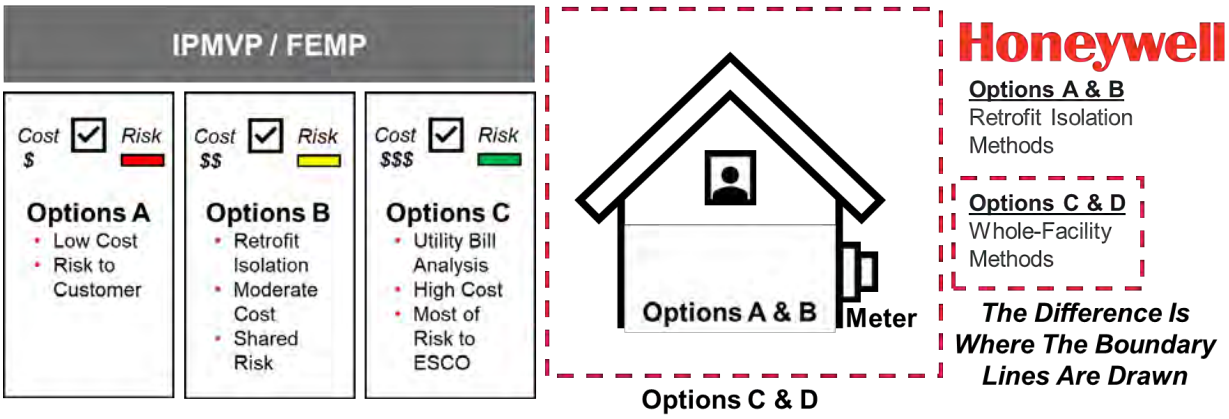
The O&M savings are typically a function of the existing District budgets (labor and direct costs), maintenance contracts, and operations (supplier) contracts. Honeywell will analyze the information to provide a conservative savings representation for District review and acceptance. The information will include all calculations and assumptions.

D. M&V

The purpose of performing M&V is to establish an agreed-upon process that provides the customer satisfaction that the improvements have been delivered and ongoing information regarding operation and performance. Additionally, this effort will be used to assess the actual dollars of savings versus the guarantee level.

It is essential for the success of this program that Honeywell and the District agree on a mutually acceptable methodology for measuring and verifying energy savings that are attributable to the ECMs Honeywell installs. This M&V plan provides the procedures to document the energy and cost savings of each of the proposed ECMs.

Figure 9. IPMVP / FEMP



The plan for monitoring and verifying energy savings for the proposed ECMs is based on the methods described in the International Performance Measurement and Verification Protocol (IPMVP). Our approach to M&V is directly consistent and in compliance with the IPMVP and the Federal Energy Management Program (FEMP) M&V guidelines. This protocol provides a framework for the most widely accepted and used M&V methods by the industry.

Engineering calculations of energy and cost savings for the project are based on operating parameters (such as weather, temperature settings, run hours, occupancy patterns, and space usage) and equipment performance characteristics. The M&V plan uses the operating parameters established in the baseline for all savings calculations during the term of the project.

The intent of the M&V plan is to verify the ECMs installed by Honeywell will provide the expected energy savings. Therefore, Honeywell will collect data and relative information during the post-retrofit period to demonstrate the installed equipment is performing at expected levels. It is assumed that the District will continue to be a dynamic institution adding or renovating buildings and desiring to retain the right to set comfort and operating characteristics. To accommodate this, Honeywell will develop its M&V plan in a way that allows the District to adapt to the demands of future campus growth and changes without the need for the District and Honeywell to negotiate energy baseline adjustments.

Our typical M&V plan will utilize broadband Internet access to the appropriate the District control interfaces to both confirm operating status and to download trend data to verify proper equipment maintenance.

One year after the commencement date of the ECMs, Honeywell will submit a report verifying and calculating the energy and cost savings for the first year. This report will be submitted for the District

review and approval. For the remaining contract term, Honeywell will provide annual reports. These reports will include results of inspections of the installed equipment/systems, energy and cost savings, and recommendations to provide optimum energy performance.

All permanent measurement equipment will be purchased new with a calibration certificate from the manufacturer. The power multi-meter and the TSI multi-meter will be calibrated annually before using them in the annual inspection.

GENERAL APPROACH TO M&V

The IPMVP guidelines classify the M&V procedures into four categories: Options A, B, C, and D. The specific option to be used per ECM will be defined in the implementation contract once the final ECMs are selected. As shown in M&V Options Summary table below, these options differ in their approach to the level of complexity of the M&V procedures.

FEMP* Guidelines / Option	Verification of Potential to Perform (and Generate Savings)	Verification of Performance (Savings)	Performance Verification Techniques
Option A - Verifying that the opportunity has the potential to perform and to generate savings.	Yes	Yes	Engineering calculations with metering and monitoring throughout term of contract with varying level of measurement.
Option B - Verifying that the opportunity has the potential to perform and verifying actual performance by end use.	Yes	Yes	Engineering calculations with metering and monitoring throughout term of contract with measurement of all variables.
Option C - Verifying that the opportunity has the potential to perform and verifying actual performance (whole building analysis).	Yes	Yes	Utility meter billing analysis.
Option D - Simulating that the opportunity has the potential to perform and simulating actual performance.	Yes	Yes	Computer simulation.

In general, ECM Energy Savings = Baseline Energy Use – Post-Installation Energy Use and Energy Cost savings ($) = Total Energy Savings x Contractual Energy Rates.

Exceptions to this simple equation include projects where an on/off M&V method is used. For example, after a new energy management system is installed, control features are turned off for a set period to recreate baseline conditions. Thus, savings are determined after installation by comparing energy use with and without the control features activated.

Since energy use at a facility is rarely, if ever, constant, another way to define M&V is as a comparison of a facility's post-installation energy use with its usage if the ECM or system had not been installed. This considers situations in which baseline energy use must be adjusted to account for changing conditions, such as changes in facility operation, occupancy, or use or external factors such as weather.

POST-RETROFIT M&V ACTIVITIES

There are two components associated with M&V of performance contract projects:

- Verifying the potential of the ECM to generate savings also stated as confirming the proper equipment/systems were installed, are performing to specification and have the potential to generate the predicted savings
- Determining/verify energy savings achieved by the installed ECM(s)

VERIFYING THE POTENTIAL TO GENERATE SAVINGS

Verifying baseline and post-installation conditions involves inspections (or observations), spot measurements, and/or commissioning activities. Commissioning includes the following activities:

- Documentation of ECM or system design assumptions
- Documentation of the ECM or system design intent for use by contractors, agencies and operators.
- Functional performance testing and documentation necessary for evaluating the ECM or system for acceptance
- Adjusting the ECM or system to meet actual needs within the capability of the system

POST-INSTALLATION VERIFICATION

Post-installation verification will be conducted by both Honeywell and the District to ensure the proper equipment and systems were installed, are operating correctly, and have the potential to generate the predicted savings. Verification methods may include surveys, inspections, and spot or short-term metering.

REGULAR INTERVAL POST-INSTALLATION VERIFICATION

At least annually, Honeywell will verify the installed equipment and systems have been properly maintained, continue to operate correctly, and continue to have the potential to generate the predicted savings. Savings report for all the installed ECMs will be submitted each year after the acceptance date of the work performed by Honeywell.

COMPUTATION OF ENERGY SAVINGS

After the ECMs are installed, energy and cost savings will be determined annually by Honeywell in accordance with an agreed-upon M&V approach as defined in a project-specific M&V plan.

CONSTRUCTION/INTERIM SAVINGS

Construction or Interim savings are usually measured by using the same methodology as described in the detail M&V plan for each ECM. The start and the completion time for each ECM must be agreed to between Honeywell and the District.

Electricity and thermal savings from the ECMs where no detailed long-term data is required to be collected will be stipulated and will be based on the starting and the final completion dates and verification of the operation of the ECMs. For other ECMs where long-term data collection is required by the M&V plan, data will be used to calculate the savings using the same equations as described in the detail plan. For example, to calculate electricity savings for the installation of a VFD, the kW is spot measured at a set speed for selected motors through a sampling plan. The measured kW is subtracted from the baseline kW to calculating the savings. Thermal savings are tied to the electrical savings in the manner described in the detail M&V plan. The results are extrapolated to cover all the VFDs installed by Honeywell. The savings for each of the monitored VFD is calculated on an interval basis.

E. Site Specific M&V Plan

ECM # and Name	Summary of ECM	M&V Methodology / Recommendation	Description of M&V – Pre- and Post-Process
1A LED Lighting	▪ Upgrade Lighting systems: – Re-lamp/Re-ballast T8/T12 to LED, – Incandescent to LED – Metal Halide and Sodium Vapor to LED High Bays	**Option A** ▪ Pre and Post measurements ▪ Line by Line scope and engineering calculations	▪ Pre-M&V: Measurement of kW for 5% sample fixtures in each category ▪ Data log usage hours ▪ Data Log occupancy schedules ▪ Update Line by Line scope with measured kW and usage hours ▪ Post M&V: Measurement of kW for 5% sample fixtures in each category ▪ Usage Hours to remain same ▪ Occupancy schedules to remain same ▪ Energy Savings: Update Line by Line scope with measured kW and usage hours and compare to pre-retrofit calculated savings
1B Lighting Controls	▪ Upgrade Lighting Control systems: – Install Occupancy Sensors – Install Lighting Controls	**Option A** ▪ Pre and Post measurements ▪ Line by Line scope and engineering calculations	▪ Pre-M&V: Measurement of kW for 5% sample fixtures in each category ▪ Data log usage hours ▪ Data Log occupancy schedules ▪ Update Line by Line scope with measured kW and usage hours ▪ Post M&V: Measurement of kW for 5% sample fixtures in each category ▪ Usage Hours to remain same ▪ Occupancy schedules to remain same ▪ Energy Savings: Update Line by Line scope with measured kW and usage hours and compare to pre-retrofit calculated savings
1C De-Stratification Fans & Disinfection	▪ Install De-Stratification fans in Gymnasiums to minimize stratification of hot air and maintain hot air flow below the fan level	**Option A** ▪ Electric energy savings - Engineering calculations based on programmed parameters. **Option C** ▪ Fuel Savings ▪ Utility Bill Comparison for all fuel related measures	▪ Pre-M&V: Verify existing operating parameters match the baseline calculation assumptions ▪ Post M&V: Verify that systems are installed as specified and controls are programmed to match the savings assumptions ▪ Electric Energy: Verify savings based on programmed parameters and engineering calculations ▪ Fuel: Compare post installation M&V fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days

ECM # and Name	Summary of ECM	M&V Methodology / Recommendation	Description of M&V – Pre- and Post-Process
2A Boiler Replacements	▪ Replace boilers in select locations to handle base load	**Option C** ▪ Utility Bill Comparison for all fuel related measures	▪ Pre-M&V: Baseline annual fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform combustion efficiency test on boilers ▪ Post M&V: Compare post installation M&V fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform efficiency test on replaced boilers to ensure operating conditions are maintained
2B Burner Replacements and Controls	▪ Replace boiler burners and install advanced combustion controls on burners.	**Option C** ▪ Utility Bill Comparison for all fuel related measures	▪ Pre-M&V: Baseline annual fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform combustion efficiency test on boilers ▪ Post M&V: Compare post installation M&V fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform efficiency test on replaced boilers to ensure operating conditions are maintained
2C Domestic Hot Water Heater Replacement	▪ Replace heater in select locations to handle base load	**Option C** ▪ Utility Bill Comparison for all fuel related measures	▪ Pre-M&V: Baseline annual fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform combustion efficiency test on boilers ▪ Post M&V: Compare post installation M&V fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days ▪ Perform efficiency test on replaced boilers to ensure operating conditions are maintained
2D Rooftop Unit Replacement	▪ Replace antiquated Roof Top Units with new high efficiency Rooftop Units	**Option C** ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement units	▪ Pre-M&V: Verify manufacturer provided data for existing unit efficiency (EER) ▪ Post M&V: Verify manufacturer provided data for new rooftop unit (EER) – verify the new equipment and controls are installed and commissioned as recommended by manufacturer
2E Kitchen Hood Controllers	▪ Install control devices on the Kitchen hoods to control exhaust air in response to the cooking load. Replace fan motors with new premium efficiency motors and VFD drives	**Option A** ▪ Energy savings - Engineering calculations based on programmed parameters.	▪ Pre-M&V: Verify existing operating parameters match the baseline calculation assumptions ▪ Post M&V: Verify that systems are installed as specified and controls are programmed to match the savings assumptions

ECM # and Name	Summary of ECM	M&V Methodology / Recommendation	Description of M&V – Pre- and Post-Process
2F Premium Efficiency Motors and VFDs	▪ Install VFDs on select pumps to operate the pump motors in response to the system load. Replace motors with new premium efficiency motors	**Option A** ▪ Engineering calculations for VFDs following pump affinity laws. ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement motors	▪ Pre-M&V: Verify manufacturer provided data for the pump performance data and motor efficiencies. ▪ Post M&V: Obtain trend data for VFD operation from the BMS system to verify baseline calculation assumptions on system loads ▪ Verify efficiency of new motors ▪ Verify manufacturer provided data for new VFDs – verify the new equipment and controls are installed and commissioned as recommended by manufacturer
2G Split System Replacements	▪ Replace select split systems with new high efficiency units.	**Option A** ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement Units	▪ Pre-M&V: Verify manufacturer provided data for existing unit efficiency (EER) ▪ Post M&V: Verify manufacturer provided data for new split system unit (EER) – verify the new equipment and controls are installed and commissioned as recommended by manufacturer
2H Walk-In Compressor Controls	▪ Install control device on walk-in freezer and refrigerator evaporators to shut down the fan motor when the compressor is off on duty cycle	**Option A** ▪ Stipulated Engineering calculations based on case studies for the Intellidyne control	▪ Pre-M&V: None ▪ Post M&V: Savings stipulated based on engineering calculations for the term of contract
2I Add Cooling to Industrial Arts Building	▪ Add Cooling with high efficiency VRF units.	**Option A** ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement Units	▪ Pre-M&V: Verify manufacturer provided data for existing unit efficiency (EER) ▪ Post M&V: Verify manufacturer provided data for new split system unit (EER) – verify the new equipment and controls are installed and commissioned as recommended by manufacturer
2J Replace Unit Ventilators in Industrial Arts Building	▪ Refurbish or replace antiquated Unit Ventilators.	**Option C** ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement Units	▪ Pre-M&V: Verify manufacturer provided data for existing units efficiency ▪ Post M&V: Verify manufacturer provided data for new units verify the new equipment and controls are installed and commissioned as recommended by manufacturer

ECM # and Name	Summary of ECM	M&V Methodology / Recommendation	Description of M&V – Pre- and Post-Process
3A Building Management System Upgrades	▪ Upgrade Building Management Systems to DDC and integrate all systems to a central platform	**Option A** ▪ Electric energy savings - Engineering calculations based on programmed parameters. **Option C** ▪ Fuel Savings Utility Bill Comparison for all fuel related measures	▪ Pre-M&V: Verify existing operating parameters match the baseline calculation assumptions ▪ Post M&V: Verify that systems are installed as specified and controls are programmed to match the savings assumptions ▪ Electric Energy: Verify savings based on programmed parameters and engineering calculations ▪ Fuel: Compare post installation M&V fuel cost based on fuel billing data and Metrix tuned to normalize to heating degree days
4A Building Envelope Improvements	▪ Install weather stripping on doors, seal roof wall joints and roof penetrations	**Option A** ▪ Engineering calculations based on nameplate and manufacturer supplied data	▪ Pre-M&V: Verify existing conditions ▪ Post M&V: Visual inspection per scope of work
5A Permanent Load Reduction	▪ Rebates for Load Reduction (KW)	N/A	N/A
6A Cogeneration CHP	▪ Install Cogeneration units	**Option A** ▪ Engineering calculations based on nameplate and manufacturer supplied data for the existing and replacement Units	▪ Pre-M&V: Verify manufacturer provided data for existing units efficiency ▪ Post M&V: Verify manufacturer provided data for new units verify the new equipment and controls are installed and commissioned as recommended by manufacturer
7A Solar PPA	▪ Install Solar Power using Power Purchase Agreement	N/A	Pre-M&V: N/A Post M&V: N/A
8A Sustainable Transportation - EV Chargers	▪ Install EV charging stations on select areas/buildings	**Option A** ▪ Engineering calculations based on nameplate and manufacturer supplied data	▪ Pre-M&V: Verify existing conditions ▪ Post M&V: Visual inspection per scope of work

F. Performance Guarantee / Guarantee of Savings

The approach Honeywell utilizes in this asset management program includes two key components: a performance guarantee and financial savings. Honeywell guarantees the District all installations and work performed are subject to final inspection and the District's acceptance. This procedure ensures all work will be to the level of quality the District expects.

Honeywell also guarantees it will meet the objectives mutually defined with the District. Honeywell takes its commitment to partner with the District for the life of the contract seriously and looks forward to a successful, long-term partnership.

Honeywell considers the guarantee to be the cornerstone of our service to you. To be considered a performance contract, an energy guarantee is an optional component under the New Jersey ESIP legislation. The basis of an energy performance contract is that much of the risk is shifted from the District to the ESCO. The strength of the Guarantee is only as good as the Company backing it and their financial solvency. With over $64.5 billion in assets, Honeywell has the financial strength and background to support the District for the long term.

Savings Guarantee. With the understanding the District must maintain fiscal health and accountability, Honeywell can financially guarantee the results of its programs and clearly support this obligation with the commitment to regular review of program results and reconciliation. Honeywell's financial strength and stability give it the ability to extend a first-party guarantee to the District. A first-party guarantee eliminates the risk on the District and places it directly onto Honeywell. This differs from ESCOs that provide a third-party guarantee, which insulates them from the owner using insurance instruments.

If, at the end of any year, the program has not met or exceeded the guaranteed savings for that year, Honeywell will refund the difference between the guaranteed amount and what was saved.

For all equipment covered by the Energy Savings Guarantee, the District shall be responsible for on-going maintenance and component replacements in accordance with the manufacturer's standards. The District will also be responsible for operating the equipment in accordance with the manufacturer's specifications.

Honeywell will develop savings methodologies that follow current industry practice, such as outlined by the New Jersey Board of Public Utilities (BPU) and FEMP M&V Guidelines: Measurement and Verification for Federal Energy Projects. References to M&V protocols from the IPMVP, ASHRAE Guideline 14, and the Air-Conditioning Refrigeration Institute (ARI) are used to further qualify the M&V plan.

As stated above, under the New Jersey ESIP legislation, acceptance of a performance guarantee is optional at the District's sole discretion. In the same way, the duration of the guarantee is also optional. Many of Honeywell's New Jersey customers have elected to keep the guarantee in force for less than the total performance periods (i.e., three to five years). Others have elected to accept a one-year guarantee while reserving the option to renew for additional years after they have had the opportunity to review the track record of actual savings results. Obviously, this a very customer-specific decision based on the risk management culture of each unique organization. The key point is that Honeywell is flexible regarding the structure and duration of the guarantee.

The final terms will be discussed and defined as part of our co-authored ESIP project. Solely for informational purposes, it is worth noting that if the District does elect to accept a guarantee, New Jersey ESIP law requires that the District contract with a third-party independent firm to verify that the energy savings are realized. To preserve the independent status of this contractor, these costs are required to be incurred directly by the District.

The RFP requires that the cost of the guarantee be identified during this response phase. Honeywell develops and implements every project with the same high level of detail and confidence and therefore will always provide a Savings Guarantee at no additional cost. However, if the District opts to accept the Savings Guarantee, the fee indicated on Form V in Section H-1 will be applicable to account for on-going Honeywell service costs incurred during the M&V of the savings.

All guarantees require the owner maintain the system in accordance with the manufacturer's specifications. Regardless of guarantee acceptance, ongoing maintenance as recommended by the BPU, Honeywell, and manufacturer specifications is required to achieve the projected energy savings. Maintenance should also include a periodic verification of the system to ensure maintenance is properly conducted and the system is meeting the original specifications and design.

Section G-5. Description of Post Construction Training and Services

A. Honeywell Training Services

Honeywell has the capability to provide a diverse and comprehensive training program for the District. Working closely with your staff, Honeywell will identify the training requirements for the District and provide a customized program to address the specific needs of your personnel on each of the new systems installed. This will include training manuals with equipment cut sheets for each ECM.

Honeywell's core training objectives focus on:

- Understanding the District building systems and equipment
- Reducing energy use to support the District's financial and sustainability goals
- Maintaining building comfort conditions for students, staff and visitors
- Maintaining system equipment parameters and optimizing operational efficiencies over the long term

After the initial training is completed, Honeywell can provide ongoing training of the facility staff on the energy management system and mechanical systems, as well as other systems that we have installed.

Example Course Outline

What a BAS Operator Needs to Know about HVAC Operations – This session is designed for District's operations staff and supervisors interested in learning more about how an HVAC system operates and how it affects occupant comfort, safety, and bottom-line costs. It addresses all aspects of HVAC operations that impact the cost of operating a building. Safety, efficiency, and energy conservation are discussed throughout the session.

I. Principles of Heating, Ventilating, and Air Conditioning
   a. How to keep humans comfortable
   b. How to economically cool the computer
   c. How to satisfy the "code" (IAQ/SBS)

II. Heating
   a. Electric vs. gas/oil
   b. Steam heat/hot water heat
   c. Furnaces, water heaters, boilers, and strip heaters
   d. Efficient vs. effective operation

III Hydronics
   a. Choosing the right size for the District's buildings
   b. Pump, pipe, coil, valve, motor, tank, etc.

IV. Cooling
   a. Types of heat (sensible and latent)
   b. CFCs
   c. What to do with the District's old CFCs
   d. Centrifugal or absorption
   e. Lack of maintenance = $$$

V. Air Distribution
   a. The importance of airflow balance
   b. Is VAV for me?
   c. Why does comfort cost so much?
   d. Name the eight types of air handlers
   e. When is it the right time to change filters?

VI. Maintenance
   ✓ How to write a maintenance task - Benefits of PM vs. BM
   ✓ Hiring the right person for the job and training the maintenance person effectively

VII. Automation
   a. What is automation? What is DDC?
   b. What is the difference between automation and DDC?

What a BAS Operator Needs to Know about HVAC Operations. This course is designed for facility staff and supervisors to learn more about HVAC systems operation and how it affects occupant comfort, safety, and cost. It covers all aspects of HVAC operations that impact the cost of operating a facility. Safety, efficiency, and energy conservation are discussed throughout the session.

Equipment manufacturers also have an important role in training. Manufacturers often lead equipment workshops covering topics such as product characteristics, maintenance, troubleshooting, controls, and repairs. Manufacturer training on boilers, chillers, variable speed drives, and heat recovery systems is also provided as required. These training sessions are typically half- to full-day sessions.

Honeywell will work with the major equipment manufacturers providing equipment to be installed in your ESPC to develop training curriculum and manuals, as well as troubleshooting tables, parts lists, exploded views, and reassembly instructions to be included in Operations & Maintenance (O&M) manuals. It is important that O&M manuals are carefully prepared, so they are a practical resource for facilities staff. These manuals will be used throughout training.

MANUALS

Honeywell will develop project specific O&M manuals for all equipment installed, upgraded, or provided.

B. Student Engagement Program – Honeywell FutureShaper

Honeywell proposes an educational partnership program with the Manasquan Public School District. The Honeywell Futureshaper Program could serve as the framework for this learning environment with District.

The overarching tenets of the Futureshaper Program include:

- Collaboration with District administration and faculty to create opportunities for student involvement in the development and implementation of the Energy Savings Improvement Program (ESIP) project at Manasquan Public School District
- Enable students to interact with select aspects of the District's "live" project with consideration and analysis of real project data. Students can experience actual engineering methodology, design and analysis practices as well as project construction scheduling, management and quality control
- Showcasing science, technology, engineering and mathematics (STEM) positions within Honeywell and providing the opportunity for students to meet and interact with Honeywell's diverse workforce
- Presenting an overview of the genesis of innovative products and services developed and delivered by Honeywell to solve real world challenges

C. Operational Technology Cybersecurity

Close attention to Cybersecurity issues is not new. Over the last decade, educational institutions have invested heavily in ongoing Information Technology (IT) security research, resources, training, and defender initiatives (offensive and defensive) directed at predicting and mitigating the risk of cyber threats worldwide. This increased focus and awareness has often been beneficial for securing more traditional IT systems, such as mail servers and public web servers. However, Operational Technology (OT) like building control systems are often overlooked and potentially vulnerable resulting in a "weak link" in the organization. These OT systems have often been out of sight for internal IT departments and, as such, haven't always had the same level of monitoring or maintenance hygiene.

OT is the hardware and software that monitors and controls physical devices. Put simply, OT is the use of computers to supervise, monitor, and alter the physical state of a system, such as the control network for a building system. Unlike IT, where the prime responsibilities include supporting people in open networked environments, OT systems traditionally support the equipment operated in a controlled and closed manner.

By understanding cybersecurity risks around OT, decision makers are better placed to make smart buying decisions, implement targeted OT security controls, educate personnel in effective procedural measures, and maintain heightened cyber resilience across OT environments.

Maintaining a more secure and resilient OT and converged IT and OT environment requires a wide-ranging strategy that includes personnel awareness training, implementation of robust security governance and process, and investment in the right technology. The strategy also typically requires support from C-level executives and, ultimately, association with a trusted solution provider with the capability to leverage industry intelligence and provide the assistance needed to help drive the strategy to completion.

As a leading buildings technology systems integrator and manufacturer of building-related systems, Honeywell brings decades of industry knowledge and expertise to help understand and proactively monitor the complete converged IT and OT infrastructure and assess the health of systems for key cybersecurity risk indicators. Our focus is on driving heightened awareness around cybersecurity, leveraging a strong understanding of control systems which form part of our DNA.

HONEYWELL CYBERSECURITY ASSESSMENTS

A formal threat and risk assessment is the essential first step for determining vulnerabilities in your cyber defense profile and typically underpins the processes and procedures for holistic risk mitigation. Conducted by trained and experienced staff, Honeywell's Cybersecurity assessments can provide benefits including:

ASSET INVENTORY

Staff must know what is – and is not – on their OT networks. Security assessments routinely discover undocumented devices, as well as the absence of expected assets.

NETWORK TRAFFIC BASELINING

OT networks are largely deterministic, so it is possible to identify normal operations traffic and use this "fingerprint" to identify anomalous activity.

SECURITY BREACH DETECTION

Many infiltrations of OT networks are discovered only during the in-depth examination conducted during an assessment.

VULNERABILITY IDENTIFICATION

Security weaknesses of OT and network equipment are discovered by vendors, clients, and researchers on an ongoing basis. Assessments are underpinned with the knowledge of current information on vulnerabilities, providing a checklist from which assessors work.

CONFIRMATION OF REMEDIATION

Each assessment includes a list of challenges to potentially address and is to be used as a baseline for cybersecurity improvement bringing OT systems into an enhanced level of compliance.

SECURITY POSTURE INSIGHT

Senior stakeholders need metrics to guide business decisions. Information regarding cybersecurity risks and actions planned or taken to manage those risks is essential for allocation of appropriate resources. Security assessments are excellent tools with which to gather and provide that information.

Honeywell's ICT and Cybersecurity team can work with your team to conduct an onsite cybersecurity assessment of the nominated Honeywell OT systems installed at your site and complete a formal review of all such systems against best-practice guidelines inclusive of perimeter defense, operating systems, application software and firmware, critical user access and control mechanisms, staff awareness, processes, procedures, and more. A Cybersecurity health report will deliver actionable output, summarizing key findings and providing easy-to-follow potential next steps across the scope of the assessment.

HOUSING AND SHELTER

With our neighbors and neighborhoods in mind, we created programs that foster safe homes and community living spaces critical to personal well-being and peace of mind. Since 2003, more than 24,500 Honeywell employee volunteers have partnered with Rebuilding Together to repair nearly 600 homes and non-profit centers in 52 communities in Canada, Mexico, Puerto Rico, and the continental United States.

FAMILY SAFETY AND SECURITY

We have decades of experience, developing, and delivering technologies that keep families safe and secure. This knowledge is at the heart of programs that focus on families and children around the world. Nothing is more important than the safety and security of our families and kids. At Honeywell, we have decades of experience developing and deploying technologies that keep families safe and secure wherever they live, work, and travel. At Honeywell Hometown Solutions, we work with leading child safety partners around the world to develop programs that educate teachers, parents, guardians, and children on how to reduce risks of accident, abduction, and abuse, keeping our kids safe today so they can thrive, prosper, and succeed tomorrow.

HUMANITARIAN RELIEF FUND

When a natural disaster strikes, the Honeywell Humanitarian Relief Fund is at the forefront of relief efforts, delivering immediate and direct financial assistance to employees and communities across the globe. Honeywell Humanitarian Relief Fund (HHRF) is a non-profit organization fully funded by our employees since 2005. Thousands have donated more than $13.2M, matched by Honeywell, to help victims of natural disasters such as earthquakes, tsunamis, fires, flooding and hurricanes. When a natural disaster strikes, HHRF is at the forefront of relief efforts, delivering immediate, direct assistance to employees and communities in need. 100% of donations go directly to employees and communities affected by natural disasters.

In partnership with organizations such as Operation USA, Honeywell Humanitarian Relief Fund has addressed both the immediate and long-term needs of affected communities around the world. The following are some examples of the natural disasters Honeywell and its employees have supported:

- Hurricane Michael (2018)
- Hurricane Florence (2018)
- Hurricane Maria (2017
- Hurricane Irma (2017)
- Hurricane Harvey (2017)
- Earthquake in Mexico City (2017)
- Super Typhoon Haiyan (November 2013)
- Colorado Springs Wildfires (2012 and 2013)
- Hurricane Sandy (2012)
- Japan Earthquake and Tsunami (2011)

D. Service and Maintenance

Honeywell is proud to offer the District maintenance and support services as a complement to our core ESIP program. While some ESCOs focus exclusively on engineering and project management services, Honeywell's comprehensive ESIP approach addresses all phases of the project lifecycle. Honeywell maintenance services are optional. However, we do require that the District maintain the installed measures.

Honeywell can provide a wide range of ongoing support services for the District. During the engineering design phase, Honeywell and the District will co-author the Support Services required for the successful achievement of the energy and operational savings identified. The program will ensure that the program meets the needs and expectations of the District and that the required performance guarantee parameters are achieved.

HONEYWELL MAINTENANCE SERVICE

Service the Right Way - Local. Flexible. Effective. Honeywell is a local service provider that maintains mechanical equipment and systems. Our teams provide expert-level, union-trained service on chillers, boilers, rooftop units, cooling towers, air handling units, fans, and other HVAC components which help to:

- Minimize breakdowns and costly emergency repairs
- Ensure more consistent comfort conditions
- Extend the life of existing equipment
- Improve system efficiency and reduce operational costs

We offer flexible, customizable service programs that can enhance the skills of your existing staff or shift the right amount of risk to Honeywell. Whether you simply need preventive maintenance support or you require Honeywell to include repair parts, repair labor, and emergency services, Honeywell can create a program that is right for you.

THE HONEYWELL DIFFERENCE

The Right Team. We employ over 500 mechanical professionals at over 80 branch offices in the US and Canada that are backed by a global network of expertise. These Honeywell branch locations are local businesses with leaders and employees that live and work in your community. Plus, when you purchase a mechanical maintenance contract, you have 24/7 access to our Global Service Response Center for emergency assistance and you will have a Customer Care Advocate assigned to provide a personal level of service.

With the Right Tools. Of course, our mechanics have the tools and the parts needed to get the job done. More importantly, we believe in transparency. You will have access to a customer ServicePortal™ where you can access digital work order reports real time, view repair history by asset, and track other key performance indicators. Honeywell will also work with you to access lifecycle planning tools and can offer remote monitoring services for critical assets.

The Honeywell ServicePortal lets you:

- Submit service requests online and instantly receive a tracking number
- See when preventive maintenance is scheduled and performed
- Determine the status of all service calls, whether scheduled, open, or closed
- Review the details of work done on completed service calls
- Track all work by location, contract, or asset
- Access contract and equipment coverage details
- Use the data to construct a variety of reports, including multiple-site roll-ups

The District's staff can access the ServicePortalTM application from any Internet-enabled PC. Executives responsible for multiple facilities can quickly see the latest data for any location. And managers have immediate access to detailed, comprehensive service histories for their site.

Delivering the Right Approach. Honeywell believes in accountability. We do what we say we are going to do and we have metrics that prove it. Whether you choose flex or comprehensive service, we will provide guaranteed response times. We will also share quarterly performance reports to further demonstrate value. Additionally, our culture is one of continuous improvement. We value your feedback and often ask you to rate us via our customer satisfaction surveys.

Honeywell will work with Manasquan Public School District to evaluate current maintenance practices and procedures. This information will be the basis of a preventive maintenance and performance management plan designed to maximize building operating efficiencies and extend the useful life of your equipment. Because of this planning effort, Honeywell will make suggestions on how we can assist the District with implementing a plan. These suggestions may include training staff on maintenance procedures and techniques, computerized maintenance planning, and contracted services proposals from Honeywell or other third-party service contractors selected by the District. A comprehensive support service plan plays a critical role in maximizing building efficiencies and maintaining the persistence of savings generated by the performance contract.

SECTION H
FINANCIAL ASPECTS OF THE PROPOSALS

Section H. Financial Aspects of the Proposals

Honeywell presents three scenarios for the Board's consideration. On the following pages, we include FORMs V and VI for each of these scenarios. These forms present a detailed description of our fees, costs, and preliminary program cash flow projections for each proposed scenario.

Manasquan Public School District	15 YR, 5.0% IR	15 YR, 2.75% IR	19 YR, 3.0% IR
Total Project Value	$2,049,228	$2,441,382	$2,738,116
Total Energy and Operational Savings	$3,040,062	$3,049,932	$3,651,182
Potential Rebates Paid Directly to School District	$46,210	$75,835	$73,309
Positive Cash Flow for School District	$104,531	$107,173	$148,514

Section H-1: Financials: ESCO Fees and Preliminary Projections of Program Cash Flow

Form V: Recommended Project—Project Cost Form For Base Case Project Forms

15YR @ 2.75%

FORM V @15yr 2.75%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCOs PROPOSED FINAL PROJECT COST FORM FOR BASE CASE PROJECT
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **HONEYWELL INTERNATIONAL**

PROPOSED CONSTRUCTION FEES

Fee Category	Fees [1] Dollar ($) Value	Percentage of Hard Costs
Estimated Value of Hard Costs [2]:	$1,973,631	
Project Service Fees		
Investment Grade Energy Audit	$53,288	2.70%
Design Engineering Fees	$59,209	3.00%
Construction Management & Project Administration	$138,154	7.00%
System Commissioning	$9,868	0.50%
Equipment Initial Training Fees	$9,868	0.50%
ESCO Overhead	$138,154	7.00%
ESCO Profit	$59,209	3.00%
Project Service Fees Sub Total	$270,387	13.70%
TOTAL FINANCED PROJECT COSTS:	$2,441,382	23.70%
ESCO Termination Fee (To be paid only if the Board decides not to proceed beyond the ESP)	$0.00	0.00%

PROPOSED ANNUAL SERVICE FEES

First Year Annual Service Fees	Fees [1] Dollar ($) Value	Percentage of Hard Costs
SAVINGS GUARANTEE (OPTION)	$0.00	0.00%
Measurement and Verification (Associated w/ Savings Guarantee Option)	$12,000	Flat Fee
ENERGY STAR™ Services (optional)	Included	0.00%
Post Construction Services (If applicable)	N/A	–
Performance Monitoring	Included	–
On-going Training Services	N/A	–
Verification Reports	Included	–
TOTAL FIRST YEAR ANNUAL SERVICES	$12,000	Flat Fee

NOTES:
(1) Fees should include all mark-ups, overhead, and profit. Figures stated as a range will NOT be accepted.
(2) The total value of Hard Costs is defined in accordance with standard AIA definitions that include:

Labor Costs, Subcontractor Costs, Cost of Materials and Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead and Profit, etc.
*Annual Service only applies if customer accepts energy guarantee.

15YR @ 5%

FORM V @15yr 5%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCOs PROPOSED FINAL PROJECT COST FORM FOR BASE CASE PROJECT
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **HONEYWELL INTERNATIONAL**

PROPOSED CONSTRUCTION FEES

Fee Category	Fees [1] Dollar ($) Value	Percentage of Hard Costs
Estimated Value of Hard Costs [2]:	$1,656,611	
Project Service Fees		
Investment Grade Energy Audit	$44,728	2.70%
Design Engineering Fees	$49,698	3.00%
Construction Management & Project Administration	$115,963	7.00%
System Commissioning	$8,283	0.50%
Equipment Initial Training Fees	$8,283	0.50%
ESCO Overhead	$115,963	7.00%
ESCO Profit	$49,698	3.00%
Project Service Fees Sub Total	$226,956	13.70%
TOTAL FINANCED PROJECT COSTS:	$2,049,228	23.70%
ESCO Termination Fee (To be paid only if the Board decides not to proceed beyond the ESP)	$0.00	0.00%

PROPOSED ANNUAL SERVICE FEES

First Year Annual Service Fees	Fees [1] Dollar ($) Value	Percentage of Hard Costs
SAVINGS GUARANTEE (OPTION)	$0.00	0.00%
Measurement and Verification (Associated w/ Savings Guarantee Option)	$12,000	Flat Fee
ENERGY STAR™ Services (optional)	Included	0.00%
Post Construction Services (If applicable)	N/A	-
Performance Monitoring	Included	-
On-going Training Services	N/A	-
Verification Reports	Included	-
TOTAL FIRST YEAR ANNUAL SERVICES	$12,000	Flat Fee

NOTES:
(1) Fees should include all mark-ups, overhead, and profit. Figures stated as a range will NOT be accepted.
(2) The total value of Hard Costs is defined in accordance with standard AIA definitions that include:

Labor Costs, Subcontractor Costs, Cost of Materials and Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead and Profit, etc.
*Annual Service only applies if customer accepts energy guarantee.

19YR @ 3%

FORM V @ 19yr 3%

ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCOs PROPOSED FINAL PROJECT COST FORM FOR BASE CASE PROJECT
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **HONEYWELL INTERNATIONAL**

PROPOSED CONSTRUCTION FEES

Fee Category	Fees [1] Dollar ($) Value	Percentage of Hard Costs
Estimated Value of Hard Costs [2]:	$2,213,514	
Project Service Fees		
Investment Grade Energy Audit	$59,765	2.70%
Design Engineering Fees	$66,405	3.00%
Construction Management & Project Administration	$154,946	7.00%
System Commissioning	$11,068	0.50%
Equipment Initial Training Fees	$11,068	0.50%
ESCO Overhead	$154,946	7.00%
ESCO Profit	$66,405	3.00%
Project Service Fees Sub Total	$303,251	13.70%
TOTAL FINANCED PROJECT COSTS:	$2,738,116	23.70%
ESCO Termination Fee (To be paid only if the Board decides not to proceed beyond the ESP)	$0.00	0.00%

PROPOSED ANNUAL SERVICE FEES

First Year Annual Service Fees	Fees [1] Dollar ($) Value	Percentage of Hard Costs
SAVINGS GUARANTEE (OPTION)	$0.00	0.00%
Measurement and Verification (Associated w/ Savings Guarantee Option)	$12,000	Flat Fee
ENERGY STAR™ Services (optional)	Included	0.00%
Post Construction Services (If applicable)	N/A	-
Performance Monitoring	Included	-
On-going Training Services	N/A	-
Verification Reports	Included	-
TOTAL FIRST YEAR ANNUAL SERVICES	$12,000	Flat Fee

NOTES:
(1) Fees should include all mark-ups, overhead, and profit. Figures stated as a range will NOT be accepted.
(2) The total value of Hard Costs is defined in accordance with standard AIA definitions that include:

Labor Costs, Subcontractor Costs, Cost of Materials and Equipment, Temporary Facilities and Related Items, and Miscellaneous Costs such as Permits, Bonds Taxes, Insurance, Mark-ups, Overhead and Profit, etc.
*Annual Service only applies if customer accepts energy guarantee.

Form VI: Recommended Project — District Preliminary Annual Cash Flow Analysis Forms

15YR @2.75%

FORM VI @ 15yr @2.75%
ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCO's PRELIMINARY ANNUAL CASH FLOW ANALYSIS FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: Honeywell International

Note: Proposers must use the following assumptions in all financial calculations:
(a) The cost of all types of energy should be assumed to inflate at: 2.4% gas, 2.2% electric per year

1. Term of Agreement: 15 (Years) (Months)
2. Construction Period (2) (months): 12
3. Cash Flow Analysis Format:
Project Cost (1): $ 2,441,382 Interest Rate to Be Used for Proposal Purposes: 2.75%

Year	Annual Energy Savings	Solar Savings	Annual Operational Savings	Energy Rebates/Incentives	Total Annual Savings	Annual Project Costs	Board Costs	Annual Service Costs (3)	Net Cash-Flow to Client
Installation	$ 26,489			$ -	$ 26,489	$ -	$ -	$ -	$ 26,489
1	$ 88,295	$ 78,910	$ 16,529	$ 72,832	$ 256,566	$ (251,187)	$ (263,187)	$ (12,000)	$ 5,379
2	$ 90,293	$ 80,646	$ 16,529	$ 1,001	$ 188,469	$ (183,090)	$ (183,090)	$ -	$ 5,379
3	$ 92,336	$ 82,420	$ 16,529	$ 1,001	$ 192,286	$ (186,907)	$ (186,907)	$ -	$ 5,379
4	$ 94,426	$ 84,233	$ 16,529	$ 1,001	$ 196,189	$ (190,810)	$ (190,810)	$ -	$ 5,379
5	$ 96,563	$ 86,086	$ 16,529	$ -	$ 199,178	$ (193,799)	$ (193,799)	$ -	$ 5,379
6	$ 98,748	$ 87,980		$ -	$ 186,728	$ (181,349)	$ (181,349)	$ -	$ 5,379
7	$ 100,983	$ 89,916		$ -	$ 190,898	$ (185,520)	$ (185,520)	$ -	$ 5,378
8	$ 103,268	$ 91,894		$ -	$ 195,162	$ (189,783)	$ (189,783)	$ -	$ 5,379
9	$ 105,606	$ 93,915		$ -	$ 199,521	$ (194,142)	$ (194,142)	$ -	$ 5,379
10	$ 107,996	$ 95,981		$ -	$ 203,978	$ (198,599)	$ (198,599)	$ -	$ 5,379
11	$ 110,441	$ 98,093		$ -	$ 208,534	$ (203,155)	$ (203,155)	$ -	$ 5,379
12	$ 112,941	$ 100,251		$ -	$ 213,192	$ (207,813)	$ (207,813)	$ -	$ 5,379
13	$ 115,497	$ 102,457		$ -	$ 217,954	$ (212,575)	$ (212,575)	$ -	$ 5,379
14	$ 118,112	$ 104,711		$ -	$ 222,823	$ (217,444)	$ (217,444)	$ -	$ 5,379
15	$ 120,786	$ 107,014		$ -	$ 227,800	$ (222,421)	$ (222,421)	$ -	$ 5,379
Totals	$ 1,582,779	$ 1,384,506	$ 82,647	$ 75,835	$ 3,125,767	$ (3,018,594)	$ (3,030,594)	$ (12,000)	$ 107,173

NOTES:
(1) Includes: Hard costs and project service fees defined in ESCO's PROPOSED "FORM V"
(2) No payments are made by MANASQUAN PUBLIC SCHOOL DISTRICT during the construction period.
(3) This figure should equal the value indicated on the ESCO's PROPOSED "FORM V". DO NOT include in the Financed Project Costs.

*Annual Service only applies if customer accepts energy guarantee.

15YR @5%

FORM VI @ 15yr @ 5%
ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCO's PRELIMINARY ANNUAL CASH FLOW ANALYSIS FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: Honeywell International

Note: Proposers must use the following assumptions in all financial calculations:
(a) The cost of all types of energy should be assumed to inflate at: 2.4% gas, 2.2% electric per year

1. Term of Agreement: 15 (Years) (Months)
2. Construction Period (2) (months): 12
3. Cash Flow Analysis Format:
Project Cost (1): $ 2,049,228 Interest Rate to Be Used for Proposal Purposes: 5.00%

Year	Annual Energy Savings	Solar Savings	Annual Operational Savings	Energy Rebates/Incentives	Total Annual Savings	Annual Project Costs	Board Costs	Annual Service Costs (3)	Net Cash-Flow to Client
Installation	$ 26,323			$ -	$ 26,323	$ -	$ -	$ -	$ 26,323
1	$ 87,742	$ 78,910	$ 16,529	$ 43,207	$ 226,388	$ (221,174)	$ (233,174)	$ (12,000)	$ 5,214
2	$ 89,728	$ 80,646	$ 16,529	$ 1,001	$ 187,904	$ (182,690)	$ (182,690)	$ -	$ 5,214
3	$ 91,759	$ 82,420	$ 16,529	$ 1,001	$ 191,709	$ (186,495)	$ (186,495)	$ -	$ 5,214
4	$ 93,835	$ 84,233	$ 16,529	$ 1,001	$ 195,599	$ (190,385)	$ (190,385)	$ -	$ 5,214
5	$ 95,959	$ 86,086	$ 16,529	$ -	$ 198,575	$ (193,361)	$ (193,361)	$ -	$ 5,214
6	$ 98,131	$ 87,980		$ -	$ 186,111	$ (180,898)	$ (180,898)	$ -	$ 5,213
7	$ 100,353	$ 89,916		$ -	$ 190,268	$ (185,054)	$ (185,054)	$ -	$ 5,214
8	$ 102,624	$ 91,894		$ -	$ 194,518	$ (189,304)	$ (189,304)	$ -	$ 5,214
9	$ 104,948	$ 93,915		$ -	$ 198,863	$ (193,649)	$ (193,649)	$ -	$ 5,214
10	$ 107,323	$ 95,981		$ -	$ 203,305	$ (198,091)	$ (198,091)	$ -	$ 5,214
11	$ 109,753	$ 98,093		$ -	$ 207,846	$ (202,632)	$ (202,632)	$ -	$ 5,214
12	$ 112,238	$ 100,251		$ -	$ 212,489	$ (207,275)	$ (207,275)	$ -	$ 5,214
13	$ 114,779	$ 102,457		$ -	$ 217,236	$ (212,022)	$ (212,022)	$ -	$ 5,214
14	$ 117,378	$ 104,711		$ -	$ 222,089	$ (216,875)	$ (216,875)	$ -	$ 5,214
15	$ 120,036	$ 107,014		$ -	$ 227,050	$ (221,836)	$ (221,836)	$ -	$ 5,214
Totals	$ 1,572,909	$ 1,384,506	$ 82,647	$ 46,210	$ 3,086,272	$ (2,981,741)	$ (2,993,741)	$ (12,000)	$ 104,531

NOTES:
(1) Includes: Hard costs and project service fees defined in ESCO's PROPOSED "FORM V"
(2) No payments are made by MANASQUAN PUBLIC SCHOOL DISTRICT during the construction period.
(3) This figure should equal the value indicated on the ESCO's PROPOSED "FORM V". DO NOT include in the Financed Project Costs.

*Annual Service only applies if customer accepts energy guarantee.

19YR @ 3%

FORM VI @ 19yr @ 3%
ESCO's PRELIMINARY ENERGY SAVINGS PLAN (ESP):
ESCO's PRELIMINARY ANNUAL CASH FLOW ANALYSIS FORM
MANASQUAN PUBLIC SCHOOL DISTRICT
ENERGY SAVING IMPROVEMENT PROGRAM

ESCO Name: **Honeywell International**

Note: Proposers must use the following assumptions in all financial calculations:
(a) The cost of all types of energy should be assumed to inflate at: **2.4%** gas, **2.2%** electric per year

1. Term of Agreement: **19** (Years)
2. Construction Period (2) (months): **12**
3. Cash Flow Analysis Format:
DMR

Total Project Cost (1): $ **2,738,116**

Interest Rate to Be Used for Proposal Purposes: **3.00%**

Year	Annual Energy Savings	Solar Savings	Distributed Generation	Annual Operational Savings	Energy Rebates/Incentives	Total Annual Savings	Annual Project Costs	Board Costs	Annual Service Costs (3)	Net Cash-Flow to Client
Installation	$ 26,976					$ 26,976	$ -	$ -	$ -	$ 26,976
1	$ 89,919	$ 78,910	$ 2,210	$ 16,529	$ 70,306	$ 257,874	$ (251,477)	$ (263,477)	$ (12,000)	$ 6,397
2	$ 91,955	$ 80,646	$ 2,259	$ 16,529	$ 1,001	$ 192,389	$ (185,992)	$ (185,992)	$ -	$ 6,397
3	$ 94,036	$ 82,420	$ 2,308	$ 16,529	$ 1,001	$ 196,295	$ (189,898)	$ (189,898)	$ -	$ 6,397
4	$ 96,165	$ 84,233	$ 2,359	$ 16,529	$ 1,001	$ 200,288	$ (193,890)	$ (193,890)	$ -	$ 6,398
5	$ 98,342	$ 86,086	$ 2,411	$ 16,529	$ -	$ 203,369	$ (196,972)	$ (196,972)	$ -	$ 6,397
6	$ 100,569	$ 87,980	$ 2,464			$ 191,013	$ (184,616)	$ (184,616)	$ -	$ 6,397
7	$ 102,846	$ 89,916	$ 2,518			$ 195,280	$ (188,883)	$ (188,883)	$ -	$ 6,397
8	$ 105,175	$ 91,894	$ 2,574			$ 199,642	$ (193,245)	$ (193,245)	$ -	$ 6,397
9	$ 107,556	$ 93,915	$ 2,630			$ 204,102	$ (197,705)	$ (197,705)	$ -	$ 6,397
10	$ 109,991	$ 95,981	$ 2,688			$ 208,661	$ (202,265)	$ (202,265)	$ -	$ 6,396
11	$ 112,482	$ 98,093	$ 2,747			$ 213,322	$ (206,926)	$ (206,926)	$ -	$ 6,396
12	$ 115,029	$ 100,251	$ 2,808			$ 218,088	$ (211,692)	$ (211,692)	$ -	$ 6,396
13	$ 117,634	$ 102,457	$ 2,869			$ 222,960	$ (216,564)	$ (216,564)	$ -	$ 6,396
14	$ 120,299	$ 104,711	$ 2,933			$ 227,942	$ (221,545)	$ (221,545)	$ -	$ 6,397
15	$ 123,023	$ 107,014	$ 2,997			$ 233,034	$ (226,638)	$ (226,638)	$ -	$ 6,396
16	$ 125,809		$ 3,063			$ 128,872	$ (122,475)	$ (122,475)	$ -	$ 6,397
17	$ 128,659		$ 3,130			$ 131,789	$ (125,392)	$ (125,392)	$ -	$ 6,397
18	$ 131,573		$ 3,199			$ 134,772	$ (128,376)	$ (128,376)	$ -	$ 6,396
19	$ 134,553		$ 3,270			$ 137,823	$ (131,426)	$ (131,426)	$ -	$ 6,397
Totals	**$ 2,132,593**	**$ 1,384,506**	**$ 51,437**	**$ 82,647**	**$ 73,309**	**$ 3,724,491**	**$ (3,575,977)**	**$ (3,587,977)**	**$ (12,000)**	**$ 148,514**

NOTES:
(1) Includes: Hard costs and project service fees defined in ESCO's PROPOSED "FORM V"
(2) No payments are made by MANASQUAN PUBLIC SCHOOL DISTRICT during the construction period.
(3) This figure should equal the value indicated on the ESCO's PROPOSED "FORM V". DO NOT include in the Financed Project Costs.

*Annual Service only applies if customer accepts energy guarantee.

Section H-2: Utility and Other Rebates and Incentives Available for Project

5.0% Interest, 15Year Sample Project

For the District 5.0% Interest, 15-Year Project, Honeywell has determined the District is eligible for $46,210 in estimated total incentives for the project. This includes $18,366 in Commercial and Industrial (C&I) Lighting Incentives, $23,840 in HVAC Incentives, and $4,004 in Permanent Load Reduction incentives. The table below provide a breakdown of incentives on a year-by-year basis for each type of incentive.

Commercial and Industrial Prescriptive Lighting Incentives - 5.0% 15 Year Project

	Permanent Load Reduction	Lighting Incentives	HVAC Incentives	EV Charging	Total Incentive
Installation		$18,366	$23,840		$42,206
Year 1	$1,001				$1,001
Year 2	$1,001				$1,001
Year 3	$1,001				$1,001
Year 4	$1,001				$1,001
Total Incentives	**$4,004**	**$18,366**	**$23,840**		**$46,210**

2.75% Interest, 15 Year Sample Project

For the District 2.75% Interest, 15-Year Project, Honeywell has determined the District is eligible for $75,835 in estimated total incentives for the project. This includes $18,366 in Commercial and Industrial (C&I) Lighting Incentives, $26,665 in HVAC Electric Incentives, $26,800 in EV Charging incentives, and $4,004 in Permanent Load Reduction incentives. The table below provide a breakdown of incentives on a year-by-year basis for each type of incentive.

Commercial and Industrial Prescriptive Lighting Incentives – 2.75% 15 Year Project

	Permanent Load Reduction	Lighting Incentives	HVAC Incentives	EV Charging	Total Incentive
Installation		$18,366	$26,665	$26,800	$71,831
Year 1	$1,001				$1,001
Year 2	$1,001				$1,001
Year 3	$1,001				$1,001
Year 4	$1,001				$1,001
Total Incentives	**$4,004**	**$18,366**	**$26,665**	**$26,800**	**$75,835**

3.00% Interest, 19 Year Sample Project

For the District 3.00% Interest, 19-Year Project, Honeywell has determined the District is eligible for $75,835 in estimated total incentives for the project. This includes $18,366 in Commercial and Industrial (C&I) Lighting Incentives, $24,139 in HVAC Incentives, $26,800 in EV Charging incentives, and $4,004 in Permanent Load Reduction incentives. The table below provide a breakdown of incentives on a year-by-year basis for each type of incentive.

Commercial and Industrial Prescriptive Lighting Incentives – 3.00% 19 Year Project

	Permanent Load Reduction	Lighting Incentives	HVAC Incentives Electric	EV Charging	Total Incentive
Installation		$18,366	$24,139	$26,800	$69,305
Year 1	$1,001				$1,001
Year 2	$1,001				$1,001
Year 3	$1,001				$1,001
Year 4	$1,001				$1,001
Total Incentives	**$4,004**	**$18,366**	**$24,139**	**$26,800**	**$73,309**

Section H-3: Additional Information: Financial Aspects of Proposal

A. Sources of Funding

Honeywell energy performance contracting programs are approached as life cycle processes, from cradle to grave. Honeywell retains responsibility for design and build implementation, O&M plan development, M&V, and project financing.

Honeywell's vast experience in arranging finance programs for performance contracts allows us to bring you a range of financing options from which to select a financial package best suited for the fiscal realities faced by the District.

Today's turbulent financial markets make financing a key component of any energy performance contract. To achieve the best rate and financing structure possible for this project, Honeywell will work with the District to develop a financing strategy to meet your objective.

The chosen financing structure may be the key to any project. While the District may choose to fund the project with Energy Refunding Bonds or Tax-Exempt Lease Purchase, we can also assist in obtaining utility rebates and search for any possible grant opportunities which could result in an overall lower blended financing rate. One state grant opportunity, for example, is the Clean Energy Solutions Program for a Large-Scale CHP – Fuel Cell Program above 1MW. This program will award up to $3 Million per project and is given on a first come first serve basis. Once your scope has been determined, we will have our grant writing team research all applicable grants that would be applicable to your project.

Honeywell and its in-house financial services group, Honeywell Global Finance (HGF), can be a sounding board for financing alternatives. HGF's objective is to support the implementation of Honeywell solutions by structuring creative financing options that meet the needs of Honeywell's customers. HGF arranges a wide range of financing options for its Energy Performance Contract (EPC) customers.

HGF will work closely with the Honeywell energy team and the District to gain a detailed understanding of the project and tailor a financial solution that meets the project's specific cash flow and structuring needs. HGF has a team of dedicated finance personnel, who understand the NJ financing process for customers such as the District.

1. Dedicated Honeywell resources that have a proven track record in NJ, to assist the District in identifying creative financing options
2. Have broad knowledge of local utility rebates, State incentives and Federal grants available to school districts
3. Our professional grant writers will research and apply for grants, as needed

As a leader in energy performance contracts for public entities, HGF and Honeywell have worked with numerous financing firms, both nationwide firms as well as finance companies that focus on New Jersey. If requested, Honeywell and HGF can assist with a competition to provide EPC financing.

Honeywell will ensure this portion of the process and will assist the District in reaching its goal to maximize the net economic benefit by finding the best and most cost-effective solution for this project. Honeywell and HGF are glad to offer these project financing service, and we do not profit on financing. Our track record in this industry and guaranteed performance attracts many competitive financing options from top investors.

B. Tax-Exempt Lease Purchase Financing

The tax-exempt lease is a common form of financing EPC projects. Tax-exempt leasing is a tool that meets the basic objectives of debt, spreading the cost of financing over the life of an asset while avoiding constitutional or statutory limitations on issuing public debt. If structured properly, by including non-appropriation language in the financing documents, the tax-exempt lease will not be considered debt for state law purposes but will be considered debt for federal income tax purposes. Thus, for federal purposes, the interest component of the lease payment is tax-exempt.

Under the New Jersey ESIP, the District may authorize a lease purchase agreement between the District and the ESCO. Ownership of the equipment or improved facilities will pass to the District when all the lease payments have been made. There are legal expenses and other minimal closing costs associated with this type of structure. The lease purchase agreement may not exceed 15 years (commencing upon completion of the construction work), except this term is extended to 20 years for a combined heat and power or cogeneration plant. This extended term will allow an improved cash flow over the term of the agreement or it will allow you to fund additional energy related opportunities. The primary benefits of a lease are lower rates and the acquisition of essential use property without creating debt.

Under a lease there is typically a single investor. The lease may have non-appropriation language that allows the District to access low tax-exempt rates. Some previous customers have chosen to remove the non-appropriation language which has resulted in lower competitive rates.

Repayment of the lease payments is tailored to meet the requirements of the District. Payments are typically scheduled to commence after the construction is complete and acceptance of the project has been received by the District. Typically, payment terms are structured so there is no up-front capital expense to the District and payments are aligned within your cash flow and fiscal limits.

C. Certificate of Participation (COP)

A Certificate of Participation is another form of a lease purchase agreement with the differentiating factor being that there are multiple investors that participate in the purchase of the lease. A COP requires financial disclosure and typically is utilized on large projects when one investor does not have the capacity to hold a large lease for a single customer.

D. Energy Savings Obligations

Energy Savings Obligations can be issued as refunding bonds in accordance with the requirements of N.J.S.A 40A:11-4.6(c)(3). These bonds may be funded through appropriation for the utility services in the annual budget of the contract unit and may be issued as refunding bonds pursuant to N.J.S.40A:2-52 et seq., including the issuance of bond anticipation notes as may be necessary, if all such bonds and notes mature within the periods authorized for such energy savings obligations. Energy savings obligations may be issued either through the contracting unit or another public agency authorized to undertake financing on behalf of the unit but does not require bond referendum.

E. Green Financing

One of the options Honeywell offers for Manasquan Public School District consideration is financing its Energy Savings Improvement Program (ESIP) project through Green bonds. Green bonds are financial instruments designed to encourage sustainability projects, such as energy efficiency, clean energy production, and environmentally friendly technologies, among others. Your project will be designed to improve learning environments, reduce environmental footprints, and lower operating costs by improving the efficiency of existing lighting, heating, cooling, and temperature control systems throughout the

District. Depending upon the size of the project and comparative costs to issue and insure the bonds, we offer this financing option for the District's consideration.

F. Financial Outcomes

Regardless of the financing instrument, it is important to be clear no capital or out of pocket dollars are required by the District. Invoicing and payment terms are tailored to meet the requirements of the District. Payments can be structured for just about any period in amounts that easily match the District's cash flow and Accounts Payable cycles.

As mentioned above, project payment terms associated with this financial approach are typically structured requiring no up-front capital expense to the District, although available capital contributions are utilized from time to time to reduce the financing costs of the project.

- Progress payments are financed for the District as part of the transaction.
- There are no upfront fees associated with a Municipal Lease Purchase.
- Some attorney's fees may apply for either funding source.
- Your payments are typically scheduled to begin after the project is installed, delivered, and acceptance is executed by the District.
- Payments can be made monthly, quarterly, semi-annually, or annually and the payment amounts can easily be tailored to meet your cash flow needs or the energy savings generated by the project.
- Non-appropriations can be included in the lease.
- Interest rates can be locked to remain fixed from the time of the Honeywell final contracts through the installation period and term of the lease.

Honeywell looks forward to providing whatever level of assistance the District should request or feel appropriate.

Honeywell is not, nor is Honeywell compensated as, a municipal advisor or fiduciary acting on your behalf. Any and all financial and other information provided about or relating to municipal securities or other municipal financial products is provided for general informational and educational purposes only and should not be construed as advice, is provided "as-is" without warranty of any kind (express or implied) and without any representation with respect to accuracy or completeness, and must not be relied upon in connection with any securities, investment or financial decision or other action/inaction. You should obtain the advice of a financial advisor, municipal advisor, or other third party licensed and qualified to advise you regarding any of the information provided about, or the potential suitability of, municipal securities or municipal financial products.

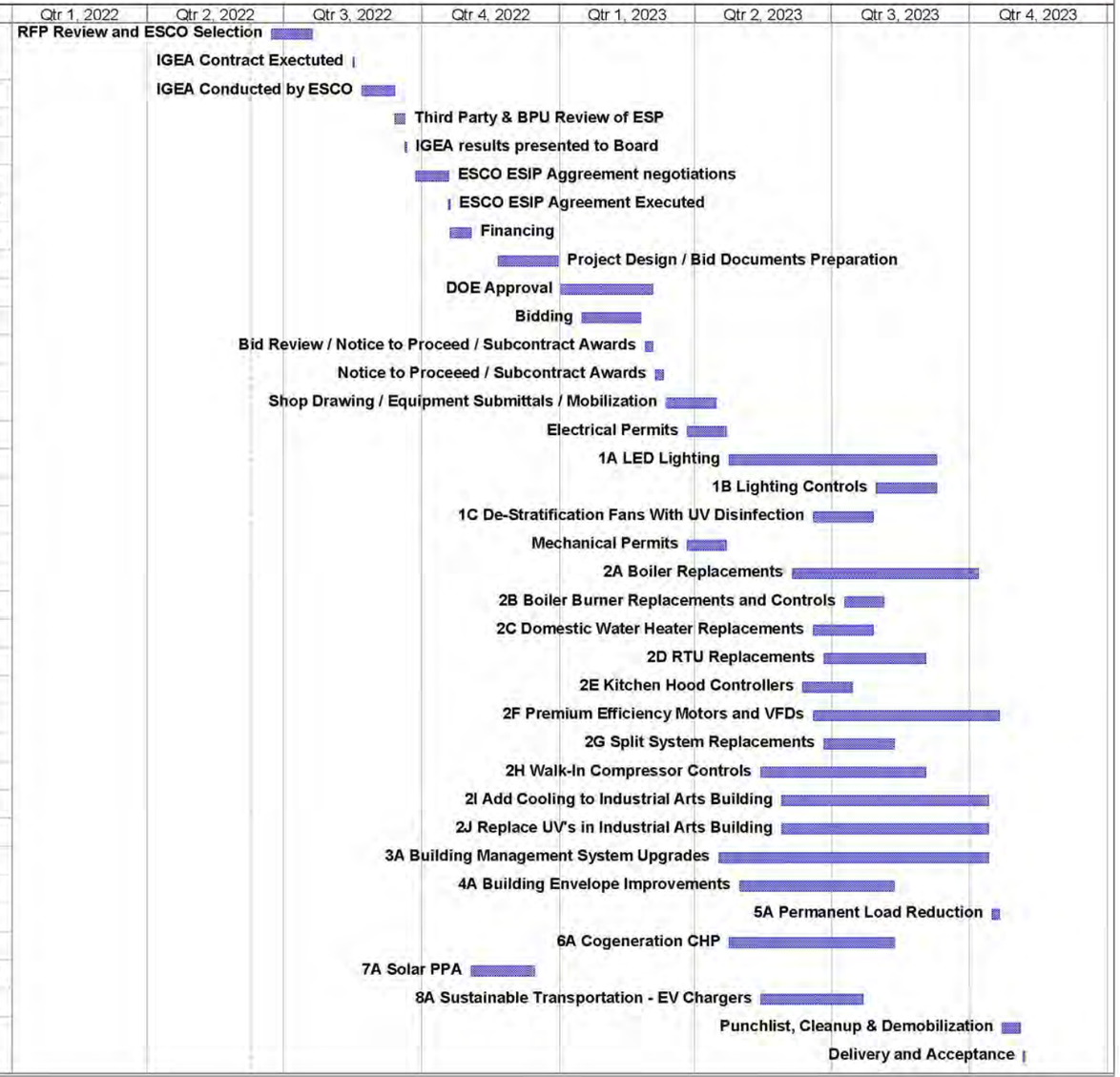
SECTION I
SCHEDULE FOR COMPLETION OF THE PROJECT

Section I. Schedule for Completion of the Project

Manasquan Public School District
Honeywell Energy Savings Improvement Program
RFP Sample Schedule (15 Year, 3.5% interest rate Project)

Honeywell

ID	Task Name	Start	Finish
1	RFP Review and ESCO Selection	Thu 6/23/22	Tue 7/19/22
2	IGEA Contract Exectuted	Tue 8/16/22	Tue 8/16/22
3	IGEA Conducted by ESCO	Mon 8/22/22	Mon 9/12/22
4	Third Party & BPU Review of ESP	Tue 9/13/22	Mon 9/19/22
5	IGEA results presented to Board	Tue 9/20/22	Tue 9/20/22
6	ESCO ESIP Aggreement negotiations	Tue 9/27/22	Tue 10/18/22
7	ESCO ESIP Agreement Executed	Wed 10/19/22	Wed 10/19/22
8	Financing	Thu 10/20/22	Wed 11/2/22
9	Project Design / Bid Documents Preparation	Mon 11/21/22	Fri 12/30/22
10	DOE Approval	Mon 1/2/23	Fri 3/3/23
11	Bidding	Mon 1/16/23	Thu 2/23/23
12	Bid Review / Notice to Proceed / Subcontract Awards	Mon 2/27/23	Fri 3/3/23
13	Notice to Proceeed / Subcontract Awards	Mon 3/6/23	Fri 3/10/23
14	Shop Drawing / Equipment Submittals / Mobilization	Mon 3/13/23	Fri 4/14/23
15	Electrical Permits	Mon 3/27/23	Fri 4/21/23
16	1A LED Lighting	Mon 4/24/23	Fri 9/8/23
17	1B Lighting Controls	Mon 7/31/23	Fri 9/8/23
18	1C De-Stratification Fans With UV Disinfection	Mon 6/19/23	Fri 7/28/23
19	Mechanical Permits	Mon 3/27/23	Fri 4/21/23
20	2A Boiler Replacements	Mon 6/5/23	Fri 10/6/23
21	2B Boiler Burner Replacements and Controls	Mon 7/10/23	Fri 8/4/23
22	2C Domestic Water Heater Replacements	Mon 6/19/23	Fri 7/28/23
23	2D RTU Replacements	Mon 6/26/23	Fri 9/1/23
24	2E Kitchen Hood Controllers	Mon 6/12/23	Fri 7/14/23
25	2F Premium Efficiency Motors and VFDs	Mon 6/19/23	Fri 10/20/23
26	2G Split System Replacements	Mon 6/26/23	Fri 8/11/23
27	2H Walk-In Compressor Controls	Mon 5/15/23	Fri 9/1/23
28	2I Add Cooling to Industrial Arts Building	Mon 5/29/23	Fri 10/13/23
29	2J Replace UV's in Industrial Arts Building	Mon 5/29/23	Fri 10/13/23
30	3A Building Management System Upgrades	Mon 4/17/23	Fri 10/13/23
31	4A Building Envelope Improvements	Mon 5/1/23	Fri 8/11/23
32	5A Permanent Load Reduction	Mon 10/16/23	Fri 10/20/23
33	6A Cogeneration CHP	Mon 4/24/23	Fri 8/11/23
34	7A Solar PPA	Thu 11/3/22	Wed 12/14/22
35	8A Sustainable Transportation - EV Chargers	Mon 5/15/23	Fri 7/21/23
36	Punchlist, Cleanup & Demobilization	Mon 10/23/23	Fri 11/3/23
37	Delivery and Acceptance	Mon 11/6/23	Mon 11/6/23



SECTION J
OFFICIAL STATEMENTS
BY PROPOSER

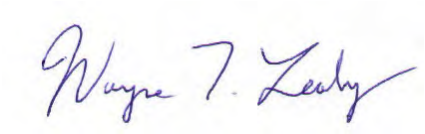
Section J. Official Statements by Proposer

Honeywell affirms the following statements:

1. Proposer has read and agrees to the terms and conditions set forth in the RFP;
2. The terms and conditions set forth in the proposal will remain in effect for at least sixty (60) days from date of opening of the proposal.
3. A sample Investment Grade Energy Audit Agreement, with costs and terms and conditions included.

Wayne T. Leahy, Senior Business Consultant

(Name and Title of Signer – Please Type)



Signature

Date: June 23, 2022

Sample Investment Grade Energy Audit Agreement

INVESTMENT GRADE AUDIT AGREEMENT

FOR ENERGY SAVINGS CONTRACTS

This Energy Audit Agreement ("Agreement") is entered into on _____, 20___, by and between the _____ (hereinafter referred to as the **"Customer"**) and Honeywell International Inc. (**"Honeywell"**). The Customer and Honeywell are referred to herein as the **"Parties"**.

Whereas, the Customer has selected Honeywell through an allowable process or has issued a Request for Proposals ("RFP") to select a qualified energy performance contractor to implement–a guaranteed energy savings contract in accordance with the requirements of the laws of the State of _____ at _____ (the "Facility(s)");

Whereas Honeywell submitted a proposal in response to the RFP.

Whereas, the Customer has evaluated proposals submitted by energy service companies and has selected Honeywell.

Whereas the Customer is responsible for the operation, management and maintenance of the Facility(s);

Whereas a comprehensive energy use and savings analysis (the **"Energy Audit Report"**) must be performed at the Facility(s) in order to determine the feasibility of entering into a guaranteed energy savings contract to provide for the installation and implementation of energy conservation measures (ECMs) at the Facility(s).

Whereas, if the ECMs are demonstrated to be feasible, and if the amount of energy and operational savings can be reasonably ascertained and guaranteed (for a term not to exceed the applicable State statute) in an amount sufficient to cover all costs associated with the project at the Facility(s), the Parties intend to enter into a guaranteed energy savings contract under which Honeywell shall design, procure, install, implement, maintain and monitor such energy conservation measures at the Facility(s);

Now, Therefore, intending to be legally bound hereby, the Parties agree as follows:

ARTICLE 1: PURPOSE. Customer intends to execute a contract with Honeywell for the design, installation, implementation, maintenance and monitoring of energy conservation measures at the Facility(s). The purpose of the contemplated contract is for Honeywell to provide services resulting in energy and operational savings for the Facility(s).

ARTICLE 2: TERM. This Agreement shall be effective for _____ or until superseded by an executed contract between the parties. The term can be extended by mutual agreement of the parties. Either party may terminate this Agreement in accordance with Article 4. During the term of this Agreement, Customer shall not negotiate with any party other than Honeywell concerning ECMs.

ARTICLE 3: COMPENSATION. It is clearly understood by both parties hereto that, if the Parties successfully negotiate and execute a guaranteed energy savings contract, payment for the Energy Audit Report shall be made under the guaranteed energy savings contract. This Agreement shall automatically terminate upon the execution of a guaranteed energy savings contract by the Customer and Honeywell for an energy performance contracting project at the Facility(s).

In the event Honeywell provides the Customer with an Energy Audit Report which meets the criteria set forth in Article 5 and for any reason Customer does not, within 30 days, execute a guaranteed energy

savings contract with Honeywell for the installation and implementation of the ECMS, Customer agrees to pay Honeywell the audit fee of $_____. Full payment shall be made to Honeywell within 30 days of receipt of Honeywell's invoice.

ARTICLE 4: TERMINATION PROVISION

a. By Honeywell: Honeywell may terminate this Agreement prior to the completion of the Energy Audit Report or subsequent to the completion of the Energy Audit Report if it determines that the guaranteed savings would be insufficient to cover the costs associated with performing this analysis, installing energy conservation measures and related maintenance and monitoring services.

In the event Honeywell terminates the Agreement pursuant to this subsection (a), the Customer shall not be obligated to pay any amount to Honeywell for services performed or expenses incurred by Honeywell in performing the Energy Audit Report required under this Agreement.

Termination under this section shall be effective upon Customer's receipt of written notification from Honeywell stating the reason for the termination.

b. By Customer: Customer may terminate this Agreement if Honeywell fails to complete and deliver the Energy Audit Report to Customer by the last day of the term established in Article 2; or fails to obtain a written extension of that date from the Customer. Termination under this subsection (b) shall be effective upon Honeywell's receipt of written notification from the Customer that the deadline for submission of the Energy Audit Report has passed. In this event, the Customer shall not be obligated to pay any amount to Honeywell for services performed or expenses incurred in performing and preparing the Energy Audit Report required under this Agreement.

ARTICLE 5: ENERGY AUDIT REPORT. The Energy Audit Report shall include, but is not limited to: (1) An evaluation of the facilities operations and technical services after interviews with Customer's personnel; (2) A completed survey of all facilities and current equipment along with proposed recommendations for energy savings equipment; (3) A completed study with cost and savings calculations and payback periods; 4) Utility Baseline and Tariff Analysis; 5) End-Use Analysis; and (6) A detailed financing plan.

ARTICLE 6: CUSTOMER RESPONSIBILITIES. Customer agrees to furnish Honeywell with the items it will need to complete the Energy Audit Report in a timely manner but in no event later than 5 business days from receipt of Honeywell's written request), In the event the requested information is not readily available and requires more than 5 business days to produce, the completion schedule established in Article 2 shall be adjusted accordingly. Information requested by Honeywell may include but is not limited to: Mechanical, Electric, and Architectural drawings; utility information; Facilities contact person and names and numbers of site managers; copies of previous energy and capital improvement studies, planned capital expenditures, itemized maintenance expenses; audited financial statements; access to Customer facilities and staff; site plans and copies of equipment inventory if available.

ARTICLE 7: INDEMNIFICATION. Each Party agrees to indemnify and hold the other party, and the other party's consultants, agents and employees harmless from all claims for bodily injury and property damages to the extent such claims result from or arise under the Party's negligent actions or willful misconduct in performance related to this Agreement. Provided that nothing in this provision shall be construed or understood to alter the limitations of liability set forth in this Agreement.

ARTICLE 8: LIMITATION OF LIABILITY. Honeywell's services under this Agreement are provided, as is, without any warranty whatsoever. Notwithstanding anything to the contrary in this Agreement, in no event shall either party be liable for indirect, incidental or consequential damages which result from, arise under or relate to the Energy Audit Report or services provided under this Agreement. Honeywell shall have no responsibility to Customer or others for any use of the Energy Audit Report or any other

information provided by Honeywell unless it is implemented through a subsequently-executed guaranteed energy savings contract.

ARTICLE 9: INSURANCE. Honeywell, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. Honeywell will not issue coverage on a per project basis. It is agreed, however, that Honeywell has the right to insure or self-insure any of the insurance coverages listed below:

(a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD $1,000,000 per occurrence. Such policy will be written on an occurrence form basis;

(b) If automobiles are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD $1,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles.

(c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage to property which is assumed in the Contract.

(d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD $1,000,000 for bodily injury each accident or disease.

ARTICLE 10: ARBITRATION. The Parties agree that any controversy or claim between them arising out of or relating to this Agreement, or the breach thereof, shall be settled and administered by arbitration in a neutral venue, conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Any award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

ARTICLE 11: MISCELLANEOUS.

a. This Agreement constitutes the entire Agreement between the parties with respect to the subject matter hereof and will supersede all previous negotiations, representations, commitments and writings.

b. This Agreement shall be governed by the laws of the State of Pennsylvania.

c. Waiver. A party's failure to insist upon the performance or fulfillment of any of the other party's obligations under this Agreement shall not be deemed or construed as a waiver or relinquishment of the future performance of any such right or obligation hereunder.

IN WITNESS WHEREOF, this Agreement is duly executed on the day and year first above written, by the parties hereto, who intend themselves to be legally bound hereby. The signatures of both parties below signify an Agreement to the above terms and conditions.

Honeywell International Inc.	**Manasquan Public School District**
By: _____	By: _____
Name: _____	Name: _____
Title: _____	Title: _____

SECTION K
PROPOSER'S CHECKLIST

Section K. Proposer's Checklist

PROPOSER'S CHECKLIST

THE ESCO WILL PROVIDE THE FOLLOWING CHECKLIST WHICH SHALL BE PROPERLY COMPLETED WITH THE PROPOSAL AND SUBMITTED TO THE BOARD AS PART OF THE PROPOSAL.

	Initials
ATTENDED MANDATORY PRE-BID CONFERENCE	WZZ
CONDUCTED NO LESS THAN ONE SITE INSPECTION OF EACH RFP SPECIFIED FACILITY	WZZ
REVIEWED ALL RFP DOCUMENTS AND LAWS AND REGULATIONS THAT IN ANY MANNER MAY AFFECT COST, PROGRESS, OR PERFORMANCE	WZZ
FULLY COMPLETED EACH PROPOSAL SECTION AND ADHERED TO THE PROPOSAL FORMAT PROVIDED WITHIN THIS RFP	WZZ
FULLY COMPLETED AND INCLUDED ALL PROPOSAL FORMS (I, II, III, IV, V, & VI)	WZZ
FULLY COMPLETED AND INCLUDED ALL "PROJECT QUALIFICATION CRITERIA" REQUIRED TO PROPOSE TO THIS RFP (LISTED BELOW):	WZZ
• *Security Bond*	WZZ
• *Certificate of Insurance*	WZZ
• *State of New Jersey Public Works Registration*	WZZ
• *State of New Jersey Business Registration Certificate*	WZZ
• *State of New Jersey Department of Treasury Notice of Classifications*	WZZ
• *Non-Collusion Affidavit (EXHIBIT A)*	WZZ
• *Ownership Disclosure Certification to be Submitted with Proposal (EXHIBIT B)*	WZZ
• *Certificate of Equal Opportunity (EXHIBIT C)*	WZZ
• *Affirmative Action Questionnaire (EXHIBIT D)*	WZZ
• *Proof of New Jersey Division of Property Management and Construction Contractor Classification as C036 Energy Services Company*	WZZ
• *Affidavit Regarding List of Debarred, Suspended, or Disqualified Contractors (EXHIBIT E)*	WZZ
• *Proposer Certification of Qualification and Credentials (EXHIBIT F)*	WZZ
• *Proposer Signature Form (EXHIBIT G)*	WZZ
• *Disclosure of Investment Activities in Iran Form (EXHIBIT H)*	WZZ
• *Certification Regarding Political Contributions (EXHIBIT I)*	WZZ
• *Federal Debarment Certification (EXHIBIT J)*	WZZ
• *Mandatory Equal Employment Opportunity Language*	WZZ
ACKNOWLEDGED ALL ADDENDA ON PROPOSER'S SIGNATURE FORM (EXHIBIT G)	WZZ

NOTE: FAILURE TO COMPLY WITH RFP PROCESS, COMPLETION AND SUBMITTAL OF ALL THE ABOVE DOCUMENTS ON THE FORMS PROVIDED HEREIN, WILL RESULT IN A REJECTION OF YOUR BID.

By placing my initials in the boxes provided above, I acknowledge having read and fully understand all the requirements of each of the documents referenced herein.

PROPOSER (SIGNATURE): Wayne T. Leahy DATED: June 23, 2022

PROPOSER (PRINT NAME): Wayne T. Leahy

NJ ESIP RFP Template: Public School Districts

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APPENDIX A
PRELIMINARY UTILITY ANALYSIS (PUA)

Appendix A: Preliminary Utility Analysis (PUA)

Honeywell

Preliminary Utility Analysis

Manasquan Public SD
Manasquan, NJ

Helping customers manage energy resources to improve financial performance

Executive Summary

Honeywell would like to thank you for the opportunity of providing you with this Preliminary Utility Analysis. A one year detailed billing analysis was completed for all utility data provided by your staff. The facility's electric and gas consumption were compared to a benchmark of typical facilities of similar use and location. It should be noted however, that some of Buildings which make up the benchmarking standards are not equipped with mechanical cooling (air conditioning). Therefore, these buildings may unjustly appear to be less efficient in comparison.

Through our Energy Services offerings, Honeywell's goal is to form a long term partnership for the purpose of meeting your current infrastructure needs by focusing to:

- Improve Operational Cost Structures
- Ensure Satisfaction
- Upgrade Infrastructure While Reducing Costs
- Meet Strategic Initiatives
- Leverage Teamwork
- Pursue Mutual Interests
- Provide Financing Options

How does it work?

Under an energy retrofit solution, Honeywell installs new, energy efficient equipment and optimizes your facility, as part of a multi-year service contract. Most of these improvements are cost-justified by energy and operational savings. Some of the energy conservation measures provide for a quick payback, and as such, would help offset other capital intensive energy conservation measures such as, boilers, package rooftop units, domestic hot water heaters, etc. The objective is to provide you with reduced operating costs, increased equipment reliability, optimized equipment use, and improved occupant comfort.

After review of the utility analysis, you can authorize Honeywell to proceed with the development of a detailed engineering report. The report development phase allows Honeywell to prepare an acceptable list of proposed energy conservation measures, which are specific to the selected facility. Some examples of typical Energy Conservation Measures include:

- Lighting
- Control Systems
- Boilers
- AC Units/Condensers
- Building Enevelope
- Package Rooftop Units
- Domestic Hot Water Heaters
- Plug Load Management

Why Honeywell?

- Honeywell is one of the world leaders in providing infrastructure improvements
- With Honeywell as your building partner, you gain the advantage of more than 115 years of leadership in building services
- Honeywell has the infrastructure and manpower in place to manage and successfully implement your project
- Honeywell has over 30 years experience in the energy retrofit marketplace with over $5 Billion in customer energy savings
- Honeywell provides you with "Single Source Responsibility" - from Engineering to Implementation, Servicing and Financing (if desired)

Energy Benchmarking

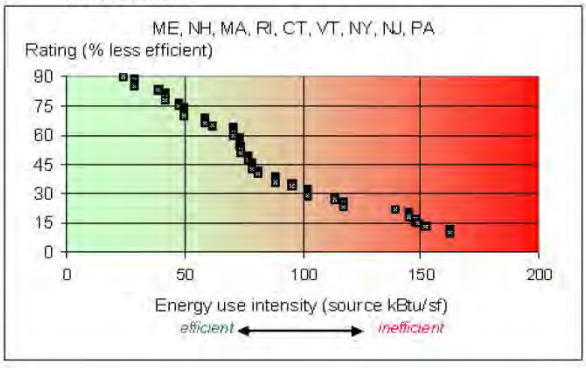
The calculation of EUI (Energy Use Intensity) is shown below. EUI, expressed in kBtu/sf, is normalized for floor area, the most dominant influence on energy use in most buildings. Its use usually provides a good approximation of how your building's energy performance compares to others. Site EUI indicates the rate at which energy is used at your building (the point of use). Source EUI indicates the rate at which energy is used at the generation sources serving your building (the point of source) and indicates the societal energy penalty due to your building The lower the EUI, the higher the rating, indicating that the building is more efficient than other buildings. The greater the EUI, the lower the rating, indicating that there is an opportunity for higher potential benefits from operational improvements.

The Source EUI below has been applied to a Department of Energy statistical model from the Oak Ridge National Laboratory. The Department of Energy has estimated energy use and cost reductions for building source EUI ratings (percentiles) in the table below. Please see the DOE Regional Source EUI Comparison graph below to rate your building in relation to the regional distribution of similar type buildings. (Note: The Source EUI includes the inefficiencies of electrical generation and transmission. A reduction in 'electrical' source EUI includes a benefit in terms of reduction of air pollution emissions and green house gases, and is thus an indicator of societal benefit.)

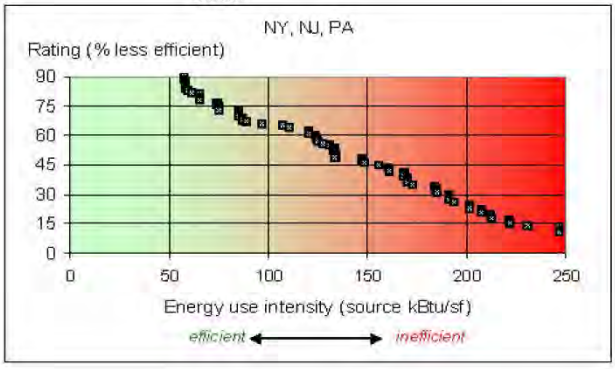
Source EUI Rating for your Building	Energy use and cost reduction potential (%)	Walk-thru energy assessment recommended?
above 60%	below 25%	No
40 to 60%	20 to 35%	Maybe
20 to 40%	35 to 50%	Yes
Below 20%	above 50%	Definitely

Site EUI Rank		Annual Total Electrical Use (kWh)	Annual Total Non-Electrical Fuel Use (Therms)	Building Gross Floor Area (sq-ft)	Site EUI Rating	Source EUI: Annual Total Source Energy Use per Sq-Ft (kBtu/sf)	Rating (Regional Source EUI Comparison)
1	Administrative Building	31,840	2,633	2,050	181	289	80%
2	Manasquan High School	924,400	46,222	126,807	61	112	20%
3	Manasquan Elementary School	974,200	61,009	100,129	94	162	15%
4	Alternative School	10,443	964	2,201	60	93	30%
5	Industrial Arts Building	38,520	5,536	4,920	139	193	30%
6	MHS Warehouse/Weightroom	3,997	1,514	1,850	89	104	30%
		1,983,400					

School Facilities



Offices



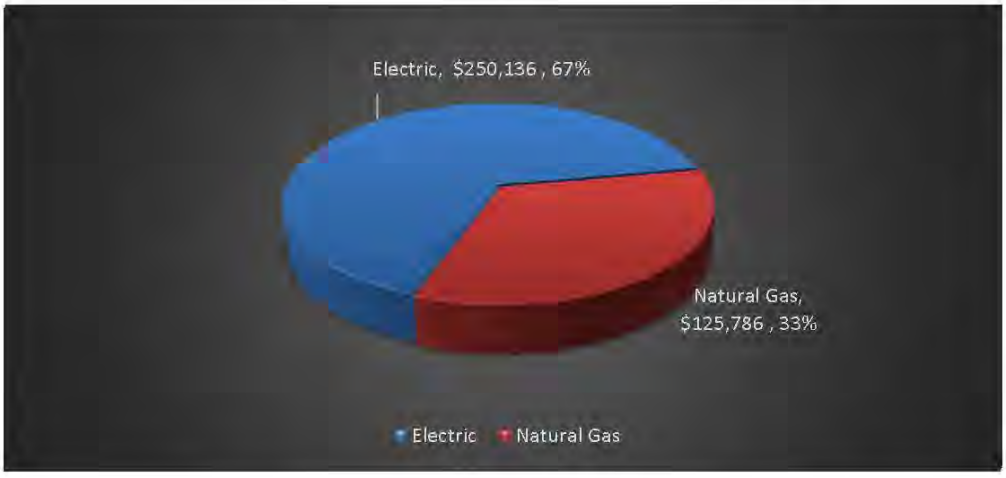
Historical Summary

Utility Analysis Period:
December 2018 - November 2019

	Electric	Natural Gas
Utility Costs*	$250,136	$125,786
Utility Usage (kWh, Therms)	1,983,400	117,878
$ Cost/Unit (kWh, Therms)	$0.12611	$1.067
Annual Electric Demand (kW)	10,294	

* Costs include energy and demand components, as well as taxes, surcharges, etc.

Actual Cost by Utility
December 2018 - November 2019

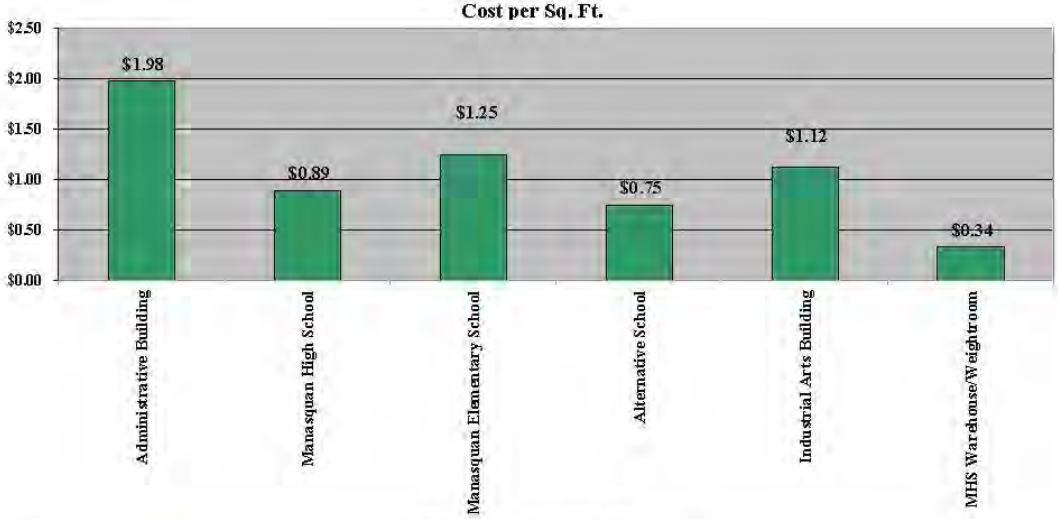


Total Cost
$375,922

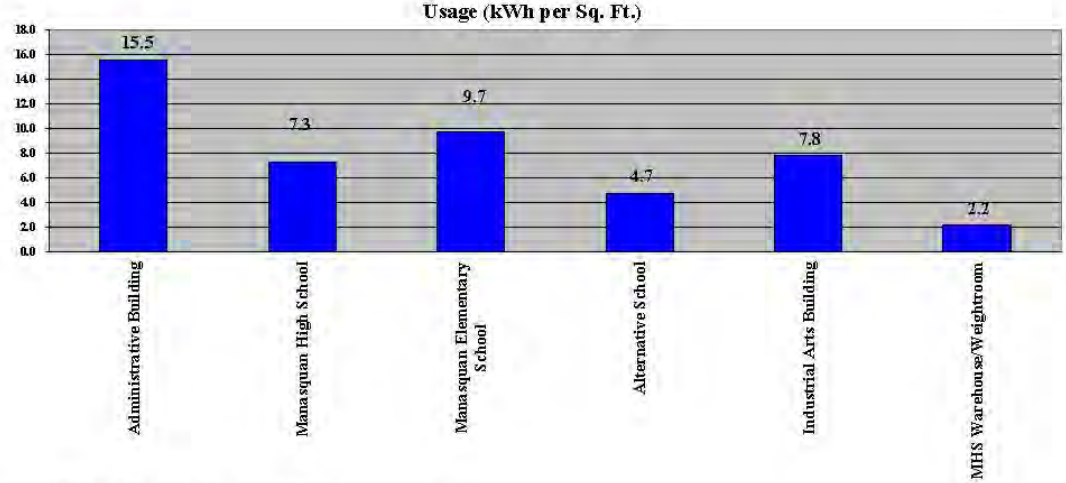
Utility Analysis
Electric

Square Footage Analysis

Cost per Sq. Ft.



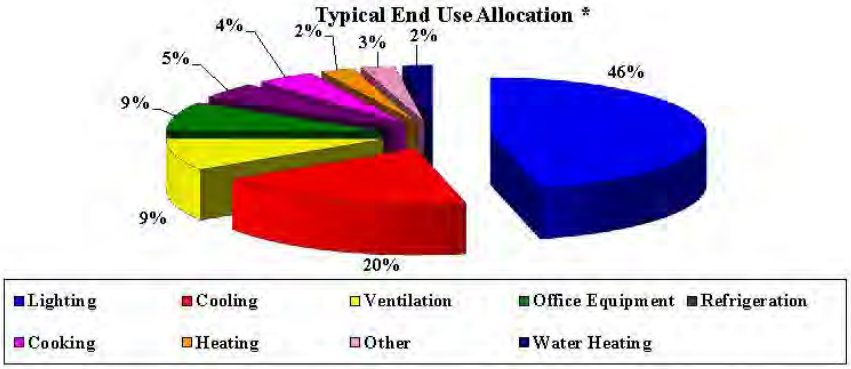
Usage (kWh per Sq. Ft.)



Note: Average kWh/SF for School buildings in this climate zone is 9.0

Electric

Sources of Electric Consumption



**This allocation is generic and is not a representation of the actual end use in your buildings included in this report.

Typical Allocation Applied to Your Electric Cost**

	Lighting	$115,813
	Cooling	$49,027
	Ventilation	$23,013
	Office Equipment	$21,512
	Refrigeration	$11,756
	Cooking	$11,006
	Heating	$6,253
	Other	$6,253
	Water Heating	$5,503
Your Total Cost	**December 2018 - November 201**	**$250,136**

Potential Retrofits

Retrofit Description	Utility/Fuel Type	Common Recommendations for Action
Lighting Retrofit and Motion Sensors	Electric/Natural Gas	Upgrade lighting and lighting controls
De-Stratification Fans	Electric/Natural Gas	Redistribution of Conditioned Air
Boiler Replacement	Natural Gas	Install high efficient, modular, condensing boilers
DHW Boiler/Tank Replacements	Electric/Natural Gas	Higher Efficiency Units
RTU Replacements	Electric/Natural Gas	Higher Efficiency Units
Building Management System Upgrades	Electric/Natural Gas	Reduce equipment run-time and provide better comfort
Building Envelope Improvements	Electric/Natural Gas	Reduce building leakage
Roof Replacements	Electric/Natural Gas	Reduce building leakage
Computer Controllers	Electric	Put computers to sleep when building is unoccupied
Install Premium Efficient Motors/Variable Frequency Drives	Electric	Provide more efficient motors and variable frequency drives
Transformer Replacements	Electric	Provide more efficient transformers with reduced amounts of excess heat to the spaces
Water Thermal Conservation	Natural Gas	Lower water thermal consumption

Annual Emissions & Environmental Impact

Manasquan Public SD

December 2018 - November 2019

Based on the US Environmental Protection Agency -
Greenhouse Gas Equivalencies Calculator
http://www.epa.gov/cleanenergy/energy-resources/calculator.html

The following energy usage, cost and pollution have been quantified:

Total Annual Electric usage	1,983,400	kWh
Annual Natural Gas usage	117,878	Therms

Electric Emissions	
0.00070742	$MTeCO_2$ per kWh saved
Natural Gas Emissions	
0.05302541	$MTeCO_2$ per MMBtu saved
Equillivent Cars	
0.214132762	Cars/ 1MTeCO2
Forrested Acres	
1.3063142	Forested Acres Factor/ 1MTeCO2

Annual Greenhouse Gas Emissions (Metric tons of equivalent of CO2)		
eCO2 (Electric)	1,403	MT
eCO2 (Gas)	623	MT
Total eCO2	2,026.152	MT

This is equivalent to one of the following:	
437	No. of passenger vehicles - annual greenhouse gas emissions
2647	No. of acres of U.S. forests - carbon sequestered annually

Thank you for considering our proposal. We look forward to working with you in the future.