

Farmingdale Public Schools NY

Approved
Apr 4, 2023 8:00 PM

Consent Item 9649

Approval of Energy Performance Contract II Amendment with Johnson Controls, Inc.

Information

Department:	Assistant to the Superintendent for Business	Sponsors:
Category:	Contracts and Agreements	

Attachments

Printout
 Energy Performance Contract II Amendment with Johnson Controls, Inc. - April 4, 2023
 (Upload New Attachment)

Body

RESOLVED, that the Farmingdale Union Free School District Board of Education approve an Energy Performance Contract II amendment between the Farmingdale Union Free School District and Johnson Controls Inc., and that the Board President be authorized to sign said contract.

Meeting History

Apr 4, 2023 8:00 PM	Board of Education	Board Meeting/Adopt Budget for Voter Approval	 Draft
RESULT:	APPROVED [UNANIMOUS]		
MOVER:	Suzanne D'Amico, Vice President		
AYES:	Kathy Lively, Ralph Morales, Michael Goldberg, Anthony Giordano, Suzanne D'Amico, Arlene Soete, Sheree Jones		

Discussion

 Add Comment

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CONTRACT AMENDMENT

This Amendment (the "Amendment") is made this 4th day of April 2023 by and between:

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

and

FARMINGDALE PUBLIC SCHOOLS ("CUSTOMER")
50 VAN COTT AVENUE
FARMINGDALE, NY 11735

RECITALS

WHEREAS, JCI and Customer are parties to a Performance Contract, dated December 4, 2019 (the "Agreement");

WHEREAS, JCI and Customer desire to amend the terms of the Agreement as set forth below;

NOW, THEREFORE, in consideration of the mutual covenants and conditions contained herein, the parties agree as follows:

1. The Agreement shall be amended in accordance with the following:
 - a. **On Page 2, under "Agreement Documents" of the Agreement, replace Attachment 4 – Lighting line-by-line with the following:**

Attachment 4 – Line-by-line by Building for Farmingdale Schools Rev-I (11-19-2020)
 - b. **On Page 14 of the Agreement, under Scope of work remove the table in its entirety and replace with the following:**

ECM #	Proposed Measure	Farmingdale High School	Weldon E. Howitt Middle School (East)	Weldon E. Howitt Middle School (West)	Albany Avenue School	Northside School	Saltzman East Memorial School	Woodward Parkway School
ECM 1	Lighting - Interior Retrofit	x	x	x	x	x	x	x
ECM 2	Lighting - Exterior Retrofit	x	x		x	x	x	x
ECM 3	Building Envelope - Window Film	x	x	x	x	x	x	x
ECM 4	Renewable Energy- Photovoltaic Generation	x		x	x	x	x	x

- c. On Page 16 of the Agreement, under ECM 3: Building Envelope – Window Film, remove the table in its entirety and replace with the following:

Locations	Square ft.
Farmingdale High School	23,204
Weldon E. Howitt Middle School (East)	10,433
Weldon E. Howitt Middle School (West)	4,554
Albany Avenue School	12,178
Northside School	6,800
Saltzman East Memorial School	2,379
Woodward Parkway School	9,841
Total	69,389

- d. On Page 16 of the Agreement, under ECM 4: Renewable Energy – Photovoltaic Electric Generation remove the scope in its entirety and replace with the following:

Johnson Controls shall furnish and install Solar Photovoltaic Systems at six (6) buildings located in the Farmingdale Union Free School District. The total system size across these carport systems will be 2,029.00 KW DC that will interconnect with the existing electrical distribution system at the associated schools.

The following table identifies the PV sizes and installation type at each location:

Locations	Carport / Canopy System (kW-DC)
Farmingdale High School	946.70
Weldon E. Howitt Middle School (West)	144.30
Albany Avenue School	194.40
Northside School	205.20
Saltzman East Memorial School	295.20
Woodward Parkway School	243.20
Total	2,029.00

The installation includes the following specifications for Carport, Canopy Systems:

- Carport system to have a minimum height of 14 ft. in roadway areas
- Canopy system to have a minimum height of 10 ft. in non-roadway areas
- Solar Modules to be 72 cell 400 watt QCell or JCI approved equal
- Solar Inverters to be SMA or JCI approved equal 1500 volt family.
- Solar equipment to be mounted at no less than 10 ft above grade.
- Conduit work up to 10 ft. above grade will be hard wall galvanized.
- New switchgear required will be completely fenced in with access gate. Should any new exterior switchgear be required, a 6 ft chain-link fence shall be installed with an access gate.
- New underground conduit to be PVC
- Work to conform to PSEG and regulatory or governmental agencies requirements. JCI is responsible for costs necessary to conform to these requirements.
- Carport/Canopy Racking system, including hardware and module mounting hardware to be engineered carport/canopy structure to support PV modules.
- New members and hardware are galvanized steel with Columns and Top Beams hot dipped to ASTM A123 and purlins pre-galvanized to a G140 minimum. Module hardware is stainless steel.
- New member connections shall be bolted. No on-site welding shall be required or undertaken without the prior written permission of the Customer and its Architect.
- Parking lot restoration in affected areas to be saw cut and hot patched to match existing surface conditions.
- Columns to be set directly on concrete piers with chemical anchors or wet set anchor bolts.
- Temporary fencing, barricades or storage trailers necessary to secure site
- Disposal of soil/spoil created from the foundation installation is included. JCI shall undertake necessary soil testing and properly dispose of soil at its cost and expense in accordance with all applicable laws, rules, regulations and codes in effect at the time of contract signing.
- Grounding hardware for modules and racking
- Module grounding to be per module manufacturer's installation instructions.
- Base design includes pre-punched holes in the purlin for wire management.
- Electrical Underwriters Certificate
- Electrical installation to be installed as per the NEC 2014 code, as amended and updated.
- Electrical conduit will be installed outside of concrete piers and/or baseplates.
- JCI will provide a web-based dashboard for PV production for students and staff to use and access.
- Customer to support monitoring by supplying an IT drop to a gateway location and all necessary IP addresses that the Customer will maintain for 18 years.
- SED approved system design drawings

The front main entrance at Saltzman East Memorial School will have columns and beams powder coated white. The area is shown in red box below.



Saltzman East Memorial School: Front White Powder Coated Canopies

In the event that any of the parking lots or walkways are determined to be unsuitable for carport and/or canopy PV arrays, Johnson Controls will attempt to move the arrays or portions of the arrays to another location that is suitable at any of the other buildings outlined above, subject to all necessary review and approvals.

If during the design phase the architect / engineer of record, H2M, encounter structural issues, geo-tech issues, drainage issues, underground condition issues, septic system issues with parking lots and walkways, JCI shall relocate the problem areas of solar arrays to a different location in order to maintain the 2,029 kW DC of total system size. An adjustment to the guarantee will occur of the new location is on a different electric rate.

In the event that any of the proposed locations are determined to not be a viable option, the scope of work for this ECM shall be reduced subject to Customer's written approval by deduct change order and the costs associated with the reduced scope shall be credited to the Customer. The guaranteed savings

shall also be adjusted accordingly by a formal written amendment to the agreement. All adjustments require Customer's written approval and must maintain a positive cash flow as set forth in the contract documents.

The weather station monitoring (cloud-based platform) is provided by the inverter manufacturer with lifetime free access with the installation of inverter hardware data manager as long as the internet IP address is maintained to allow access to the cloud-based portal where the information is stored and displayed. The proposed system will include the pyranometer, weather-station, ambient temperature sensor, and module temperature with the data displayed on cloud-based portal. The irradiance value will be trended and logged into the cloud.

Power to the building will be temporarily shut down by the utility for up to four (4) hours during the tie-in. Coordination with the Customer will be required at the time of the tie-in.

Exclusions:

1. Resolution of existing design, service, and or distribution conditions known or unknown.
2. Correction of any existing applicable building code violations and Federal Americans with Disabilities Act (ADA) violations identified by JCI during the execution of the Work. Such violations will be brought to the attention of the Customer for remedy.
3. Temporary power during tie-in.
4. Repair or replacement of defective electrical equipment and electrical distribution system, except the equipment described in the Scope of Work (Defective equipment identified by JCI during implementation of the Scope of Work will be brought to the attention of the Customer).

e. **On Page 30 of the Agreement, under EXHIBIT III: MEASURED PROJECT BENEFITS, remove Table 2.3: Measured Project Benefits Summary in its entirety and replace with following:**

ECM #	Proposed Measure	Electric Savings			Thermal Savings		Total Savings
		\$/yr.	kWh/yr	kW / yr	\$/yr	MMBTU / yr	\$/yr
1	Lighting - Interior Retrofit	\$213,798	1,228,679	353	(\$8,667)	-1,158	\$205,132
2	Lighting - Exterior Retrofit	\$6,783	47,404	0	\$0	0	\$6,783
3	Building Envelope - Window Film	\$9,645	67,102	0	\$27,412	3,690	\$37,057
4	Renewable Energy- Photovoltaic Generation	\$361,067	2,526,243	0	\$0	0	\$361,067
Totals		\$591,294	3,869,428	353	\$18,745	2,532	\$610,039

f. **On Page 33 of the Agreement, under Exhibit VI. BASELINE CALCULATIONS AND UTILITY RATES remove the Table 2.4.1: Baseline Electrical Consumption Data & Rates in its entirety and replace with the following:**

Name	Electric Usage and Cost					
	Demand kW	Avg kW Cost	Electric Usage kWh	Usage kWh Cost	Unblended \$/kWh	Total Electric Cost
Farmingdale High School	399	\$12.02	1,710,000	\$235,147	\$0.138	\$292,703
Weldon E. Howitt Middle School - East	242	\$11.72	875,700	\$123,154	\$0.141	\$157,205
Weldon E. Howitt Middle School -West	113	\$10.69	391,200	\$57,064	\$0.146	\$71,527
Albany Avenue School	130	\$12.13	385,440	\$57,208	\$0.148	\$76,071
Northside School	111	\$11.04	348,000	\$56,048	\$0.161	\$70,776
Saltzman East Memorial School	141	\$10.61	556,480	\$80,075	\$0.144	\$98,043
Woodward Parkway School	152	\$11.04	497,600	\$70,842	\$0.142	\$90,946
	1,288	\$11.32	4,764,420	\$679,538	\$0.146	\$857,269

- g. On Page 34 of the Agreement, under Exhibit VI. BASELINE CALCULATIONS AND UTILITY RATES remove the Table 2.4.2: Baseline Gas Consumption Data & Rates in its entirety and replace with the following:

Name	Nat Gas Usage and Cost		
	Gas Usage Therms	Gas Cost	Cost per Therm
Farmingdale High School	190,504	\$121,110	\$0.64
Weldon E. Howitt Middle School - East	132,929	\$75,876	\$0.57
Weldon E. Howitt Middle School -West	12,520	\$11,165	\$0.89
Albany Avenue School	69,487	\$44,112	\$0.63
Northside School	33,812	\$30,390	\$0.90
Saltzman East Memorial School	66,022	\$53,508	\$0.81
Woodward Parkway School	91,536	\$53,477	\$0.58
	596,810	\$389,639	\$0.65

- h. On Page 35 of the Agreement, under Exhibit VI. BASELINE CALCULATIONS AND UTILITY RATES remove any reference to 2.6.3 in its entirety and replace with the following:

2.4.3

- i. On Page 35 of the Agreement, under Exhibit VI. BASELINE CALCULATIONS AND UTILITY RATES remove the Table 2.6.3: Baseline Fuel Oil Rates in its entirety and replace with the following:

Table 2.4.3: Baseline Fuel Oil Rates

Name	Oil Usage and Cost		
	Oil Usage Gallons	Oil Cost	Cost per Gallon
Farmingdale High School	15,948	\$33,922	\$ 2.13
Weldon E. Howitt Middle School - East	11,471	\$23,087	\$ 2.01
Weldon E. Howitt Middle School -West	0	\$0	
Albany Avenue School	4,550	\$9,737	\$ 2.14
Northside School	0	\$0	
Saltzman East Memorial School	0	\$0	
Woodward Parkway School	10,994	\$22,972	\$ 2.09
	42,963	\$89,717	\$ 2.09

- j. On Page 36 of the Agreement, under Exhibit VII. PRIMARY OPERATIONS SCHEDULE PRE & POST RETROFIT remove all the tables on this page in its entirety and replace with the following:

Monthly occupancy schedule

Month	Weeks Per Month						
	Farmingdale High School	Weldon E. Howitt Middle School (East)	Weldon E. Howitt Middle School (West)	Albany Avenue School	Northside School	Saltzman East Memorial School	Woodward Parkway School
Jan	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Feb	4	4	4	4	4	4	4
Mar	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Apr	4.29	4.29	4.29	4.29	4.29	4.29	4.29
May	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Jun	4.29	4.29	4.29	4.29	4.29	4.29	4.29
Jul	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Aug	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Sep	4.29	4.29	4.29	4.29	4.29	4.29	4.29
Oct	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Nov	4.29	4.29	4.29	4.29	4.29	4.29	4.29
Dec	4.43	4.43	4.43	4.43	4.43	4.43	4.43

Weekly Operating Schedule

Day	Days of the week						
	Farmingdale High School	Weldon E. Howitt Middle School (East)	Weldon E. Howitt Middle School (West)	Albany Avenue School	Northside School	Saltzman East Memorial School	Woodward Parkway School
Monday	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
Tuesday	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
Wednesday	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
Thursday	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
Friday	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied	Occupied
Saturday	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied
Sunday	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied	Unoccupied

Daily Operating hours

School/Building	Midnight - 8 AM	8 AM - 4 PM	4 PM - Midnight
Farmingdale High School	1	8	2
Weldon E. Howitt Middle School (East)	1	8	2
Weldon E. Howitt Middle School (West)	1	8	2
Albany Avenue School	1	8	2
Northside School	1	8	2
Saltzman East Memorial School	1	8	2
Woodward Parkway School	1	8	2

Existing set point Schedule

School/Building	Summer Inside Setpoint (F)		Winter Inside Setpoint (F)	
	Existing Occupied	Existing Unoccupied	Existing Occupied	Existing Unoccupied
Farmingdale High School	72	78	68	55
Weldon E. Howitt Middle School (East)	72	78	68	55
Weldon E. Howitt Middle School (West)	72	78	68	55
Albany Avenue School	72	78	68	55
Northside School	72	78	68	55
Saltzman East Memorial School	72	78	68	55
Woodward Parkway School	72	78	68	55

2. Nothing contained herein shall be deemed a waiver of any of the terms, provisions or conditions of the Agreement.

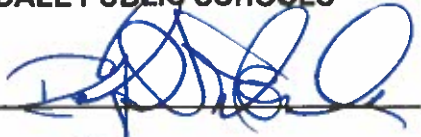
3. Except as expressly provided in this Amendment, all other terms, conditions and provisions of the Agreement shall continue in full force and effect as provided therein.

4. In executing this Amendment, the parties acknowledge that they have the authority to enter into this Amendment, and that all necessary action has been taken to cause this Amendment to become legal, valid and binding.

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

IN WITNESS WHEREOF, JCI and Customer have entered this Amendment, effective as of the date first set forth above.

FARMINGDALE PUBLIC SCHOOLS

Signature: 

Printed Name: Ralph Morales

Title: BOE President

Date: April 4, 2023

JOHNSON CONTROLS, INC.

Signature: 

Printed Name: ROBERT J. STEELE

Title: AREA GENERAL MANAGER

Date: 1/23/2023