

OFFICE OF THE
FIRST SELECTMAN

Telephone (203) 563-0100
Fax (203) 563-0299

Email to lynne.vanderslice@wiltonct.org



Lynne A. Vanderslice
First Selectman

Michael P. Kaelin
Second Selectman

David K. Clune
Selectman

Lori A. Bufano
Selectman

Richard J. Dubow
Selectman

TOWN HALL
238 Danbury Road
Wilton, CT 06897

RECEIVED FOR RECORD
TOWN OF WILTON
2017 APR -7 P 3:39
BY: K. Cooper

**BOARD OF SELECTMEN
MONDAY APRIL 3, 2017
TOWN HALL – MEETING ROOM B**

PRESENT: First Selectman Lynne Vanderslice, Michael Kaelin, David Clune, Lori Bufano, Richard Dubow

GUESTS: Anne Kelly-Lenz, Chris Burney, Debra Thompson-Van (Co-Chair of the Energy Commission), Mark Robbins (MHR Development), Megan Occhiogrosso (Greenskies), Pat Sesto and Charlie Taney (NRVT), Mark Ketley (Director Trackside), Artie DiRocco (President Trackside), Ann Mitrione and Members of the Trackside Board

OTHERS: Members of the Press and Members of the Public

A. Call to Order

Miss Vanderslice called the meeting to order at 7:33 PM

B. Consent Agenda

Motion made by Mr. Dubow, seconded by Ms. Bufano and carried unanimously, to approve the consent agenda as follows:

Minutes

- Board of Selectmen Public hearing – March 27, 2017
- Board of Selectmen Special Meeting – March 27, 2017

Gift

- Wilton Republican Town Committee – Wilton CERT - \$50.00

C. Public Comment

Paul Hannah commented on Millstone Farm conservation restriction and the reduction of the Trackside grant.

D. Discussion and/or Action

1. Millstone Farm – Conservation Restriction

Ms. Vanderslice noted that this item has been withdrawn from the agenda.

2. Solar Project – Miller Driscoll and Middlebrook - WEC

Deborah Thompson-Van co-chair of the Energy Commission and Chris Burney gave an overview of the project. Mark Robbins of MHR Development

(solar expert hired to assist the Energy Commission with the Solar Project and Meghan Occhiogrosso of Greenskies (rep from vendor who submitted a bid) provided comments and answered questions. (copy of presentations by MHR and Greenskies are attached). Ms. Thompson-Van requested approval of the Wilton Energy Commission proposal to host solar arrays on the roofs at Miller Driscoll, Middlebrook and possibly the High School and to hold a public hearing on the matter at the next BoS meeting. Ms. Vanderslice suggested the BOS view a solar installation in an area town. She also requested a copy of Greenskies' 2015 audited financial statements. Mr. Kaelin suggested the public hearing be held on April 17, 2017. Ms. Vanderslice asked CFO Anne Kelly-Lenz to prepare and publish the legal notice for such.

Ms. Vanderslice asked for a motion to move Item #3 (Proposed Ordinance on the sale of Alcohol in Restaurants to Item #6. Motion made by Mr. Clune, seconded by Mr. Kaelin and unanimously carried.

3. Approval of Stantec Contract for NRV T

CFO Anne Kelly-Lenz reviewed the Stantec Contract for NRV T. She noted the contract had been reviewed by Town Counsel. Motion made by Mr. Clune to approve the contract with Stantec, seconded by Mr. Kaelin and unanimously carried.

4. Reduction of the BoS FY18 Budget

Ms Vanderslice noted that the BoF voted to reduce the BoS submitted budget by \$25,000, all on the Trackside line item. She also noted a 4/5ths vote was required to reallocate all or part of the reduction. Ms. Vanderslice invited members of the Trackside board to speak. Artie DiRocco, board president, expressed his concerns that the organization could not absorb such a large cut in one year. He spoke of recent efforts which have resulted in the addition of new board members who are more focused on development. Ann Mitrione reviewed a new five-year plan currently in development. Director Mark Ketley and board member John Priest also spoke to the need to minimize the reduction. Discussion ensued among the BoS, regarding the FY18 Budget including a request by Ms. Vanderslice that Trackside provide the amount of a reduction they think they can absorb. Further discussion of the budget will be held at the April 17, 2017 BoS meeting.

5. Proposed Ordinance on the Sale of Alcohol in Restaurants

Ms. Vanderslice noted that most of the feedback they received on the proposed ordinance change was supportive. As there was no further discussion, Mr. Clune made a motion to make the Proposed Ordinance on the sale of Alcohol in Restaurants a question on the ballot for the Annual Town Meeting on May 2, 2017. Motion seconded by Ms. Bufano and unanimously carried.

6. Annual Town Meeting – Adjourned Vote Times

Ms. Vanderslice reviewed a previous request from Selectman Dubow to begin the adjourned vote at 8:00am. A discussion was held on information received from the Registrars about previous year turnouts. After discussion, motion was made by Mr. Dubow to extend the Adjourned Vote Time from 9:00am–

6:00pm to 8:00am–6:00pm. Motion seconded by Mr. Clune and unanimously carried.

7. Appointments/Vacancies

- Director of Social Services

Ms. Vanderslice provided a review of the search committee process. Ms. Vanderslice announced Sarah Heath had been appointed as the new Director of Social Services. She noted Ms. Heath will begin her new role on April 17, 2017. Mr. Dubow asks that once she is settled that she be introduced to the BoS. Ms. Vanderslice noted that she would likely have Ms. Heath attend one of the BoS meetings in either May or June of 2017.

E. Reports

1. First Selectman's Report

Ms. Vanderslice noted the Town's new Chief of Police was sworn in today and it was a great ceremony. She stated it was even more exciting as Chief John Lynch is a resident of the Town. She also noted that there will be two additional swearing in ceremonies on Wednesday April 5, 2017 as a result of the openings – Rob Cipolla promoted to Captain and Gregg Phillipson promoted to Lieutenant (position previously held by Rob Cipolla).

2. Selectman's Reports

Mr. Dubow

Mr. Dubow noted this past weekend the Democratic Town Committee honored two of the Town's model citizens – Richard Creeth and Virginia Benin. He stated that there was a great turnout and both have contributed enormously to the town for many years. Mr. Dubow thanked both for their contributions to the Town.

Mr. Kaelin

Mr. Kaelin noted he attended a Library fundraiser on Saturday, April 1, 2017. He noted the Chamber of Commerce hosted a Taste of Wilton this evening and it was well attended. He also noted the DTC breakfast was well attended by both DTC and RTC members and speakers spoke of the importance of getting involved in town government. He noted upcoming municipal elections and the numerous positions, which will be on the ballot. He suggested interested residents should contact RTC or DTC (party endorsements are due in July) or speak with the Town Clerk to petition onto the ballot. That deadline is August 9, 2017.

Mr. Clune

Mr. Clune congratulated Chief Crosby on his retirement, incoming Police Chief Lynch and Captain Cipolla and Lieutenant Phillipson on their promotions.

Ms. Bufano

Ms. Bufano noted the Economic Development Commission held their first Signage Working Group meeting with business owners of Wilton on Thursday March 30, 2017. She thanked the business owners that attended. She also noted it is the EDC's hope to have suggested changes and improvements by June 2017.

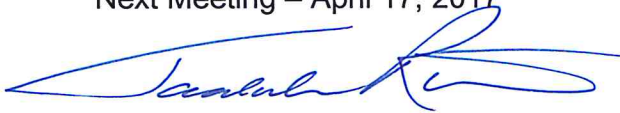
F. Public Comment

None

G. Adjournment

Having no further business, Ms. Vanderslice asked for a motion to adjourn. Motion made by Mr. Kaelin to adjourn meeting at 9:55 PM. Motion was seconded by Mr. Clune and unanimously carried.

Next Meeting – April 17, 2017

A handwritten signature in blue ink, appearing to read 'Jacqueline Rochester', with a stylized flourish at the end.

Jacqueline Rochester
Recording Secretary
Taken from Video

Board of Selectman, April 3, 2017

**Municipal Solar Project for Middlebrook, Miller Driscoll
and Wilton High School**

April 3 BOS – WEC nomination of Municipal Solar RFP Bidder

- Activity since last BOS meeting
 - October 17 - approved structuring the Solar RFP to solicit bids for a Turnkey Power Purchase Agreement Proposal
 - December 19, 2016- Approved hiring Solar RFP Experts MHR Development
 - February 2017- Issued RFP – 9 Responders, better than expected pricing, solid organizations
 - March 22- Conducted 4 FtF interviews, Ranked respondents
 - March 29- Voted to nominate Greenskies as Municipal Solar Project Awardee
- Key Dates:
 - April 3 Presentation to Board of Selectman
 - April 17 Public Hearing
 - April/May Apply for ZRECs for WHS
 - By May 1, BOS approval and Formal Award made to winning vendor
 - By May 22, Sign Power Purchase Agreement (PPA)
 - Post June 18 – onsite construction starts at Middlebrook and Miller Driscoll
 - Oct 2017 – Middlebrook and Miller Driscoll in full production

Municipal Solar Project Highlights

- Power Purchase Agreement rates were 50-80% lower than today's rates
- Greenskies proposal yields \$2.2M* in total savings and \$84k* savings in Year 1
- Greenskies vertically integrated business model- PPA provider, Solar Installer, Operations and Maintenance vendor over 20 year PPA contract is best fit approach
- WEC recommends Greenskies for Municipal Solar Project Award
- All Anticipated Costs included in PPA:
 - Includes consultant fee
 - If required, Option to include electric upgrade or life extending roofing upgrade options into PPA

*Greenskies PPA rate of \$0.019 PPA is for all 3 schools (Middlebrook, Miller/Driscoll, WHS) at \$124/ZRECs

**Current electric rate is blend of 3 schools actual based on transcanada & eversource rates

Pricing Tiers	\$/kwh	# of bids	% of Current rate
Current Rate**	\$0.106		
Tier 1	Under \$0.025	2	~20-25%
Tier 2	\$0.025-0.05	4	~35-50%
Tier 3	Over \$0.05	3	~50%

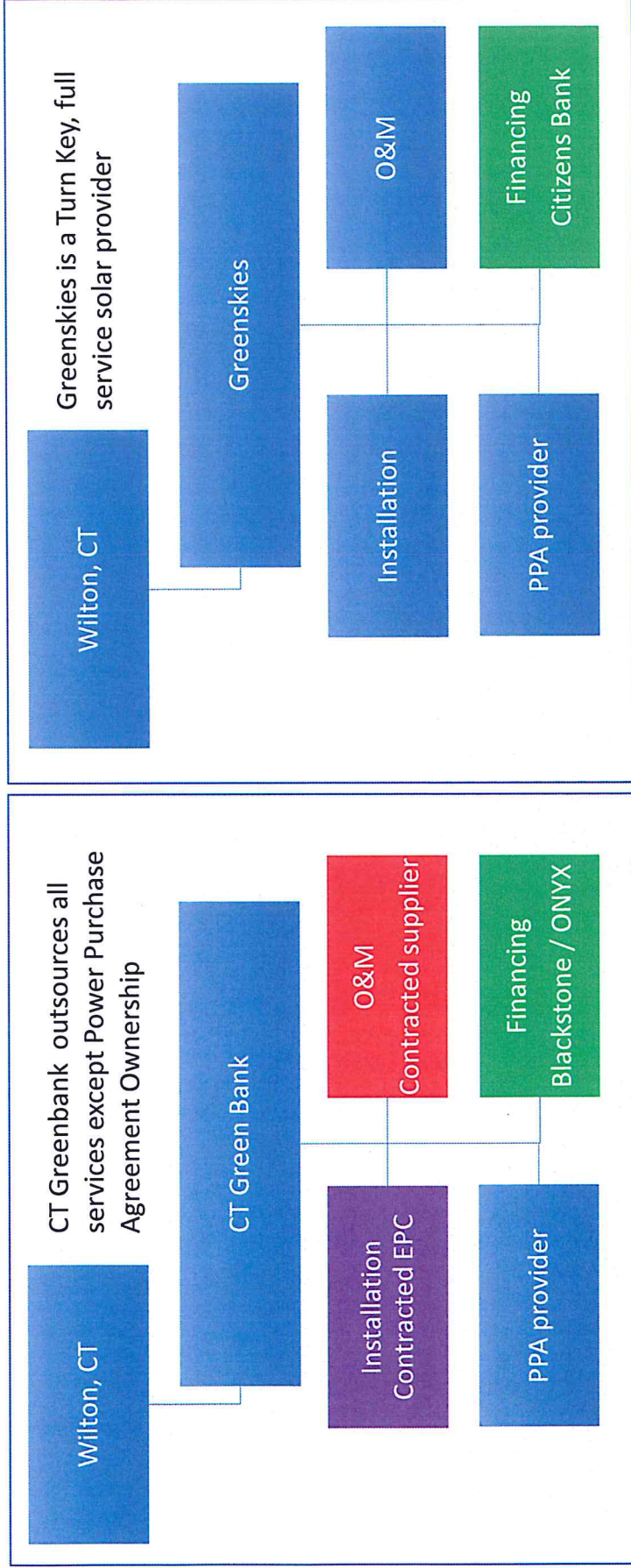
	Average	Greenskies
20 Year Savings Estimate	\$1.9M	\$2.2M* (@4%, NPV \$437,841)
1 st Year Savings Estimate		\$84,667*
System Size kw DC	833	765

Production to yield 973,180kwh
 ➤ 26% of Annual Usage

Estimated Annual Usage kWh 3,710,000

WEC recommends Greenskies as the best fit solution to the Town of Wilton's Municipal Solar Turnkey Power Purchase Agreement RFP.

Of 9 bidders, 5 represented PPA offers from CT Greenbank and 4 were independent PPA Providers.



In all scenarios, Town of Wilton responsibilities remained the same to 1) Sign 20 year PPA, 2) Assign ZRECs to PPA provider , and 3) Lease rooftops

As an Integrated Supplier – Solar PPA, EPC, O&M- Greenskies proposal reflects the lowest risk and most consistent service provider across these criteria

Financial Criteria

- PPA price
- 20-year annual production estimates (kwh)
- 20-year maintenance, equipment and production guarantees.
- The penalty payment for underperformance of the system.
- Optimization of the Awarded Z-REC

PPA Provider Criteria

- The proposed Extent of services offered after Solar Installation and during the lifetime of the PPA agreement.
- The PPA's demonstrated experience with municipal projects in general and specifically projects of a similar, size, scope, and nature.
- Financial Viability of firm.

Solar Installer Criteria

- The project approach and how staff and consultants will be organized during key phases of the project
- Preliminary schedule of time needed to initiate and complete to ensure the timely success of the project
- The respondent's qualifications, experience, and demonstrated familiarity with municipal projects in general and specifically projects of a similar, size, scope, and nature
- Quality of references from previous clients.
- Financial Viability of firm.

Bonus Criteria

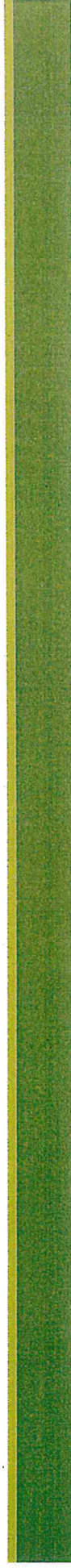
- The respondent's experience (track record), and demonstrated familiarity with the State of Connecticut Renewable Energy program

Total

Town of Wilton Municipal Schools Solar Project

BOARD OF SELECTMAN MEETING

APRIL 3, 2017



Sequence Summary – to date

- **February 1:** RFP posted to the Town of Wilton website
 - February 28: Supplemental information including utility bills and supporting roof documents provided
 - March 2: Document containing answers to questions submitted in connection with the RFP was provided
- **February 17:** Thirteen vendors attended the “Pre-Proposal Conference”, after previously submitting “Intent to Respond”
- **February 21:** Twelve vendors attended the “Site Walk-Through”
- **March 9:** Nine vendors submitted bids
 - Company size ranged from less than ten employees to over 1,000 worldwide.
 - The PPA costs ranged from less than 2 cents to approximately 6 cents
 - System size ranged from 765kW DC - 1,022kW DC.
- **March 15:** Quantitative and qualitative analysis bid analysis performed and vendor recommendations presented to WEC
- **March 22:** Four candidates were invited to present their bids to the WEC: Ameresco, 64 Solar, Kingspan, and Greenskies
- **March 29:** Wilton Energy Commission (WEC) – Meeting with Greenskies and MHR to review bid
- Project expected to save over \$2 million over the term of the PPA
- Significant consideration given to evaluate the PPA financing options: EPC financed via CT Green Bank vs. Integrated Developer / Owner

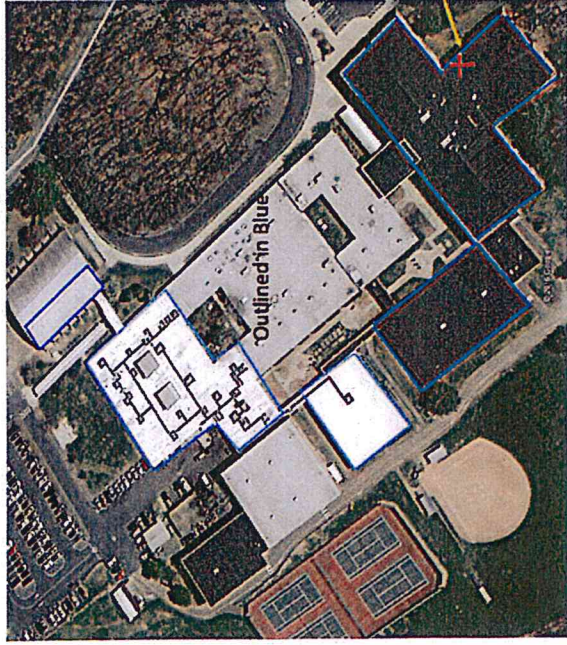
Solar Bidders

- Ross Solar
- 64 Solar
- Ameresco
- Greenskies
- Kingspan
- PurePoint Energy
- Direct Energy Solar
- Davis Hill Development
- Standard Solar



Wilton Schools Roofs

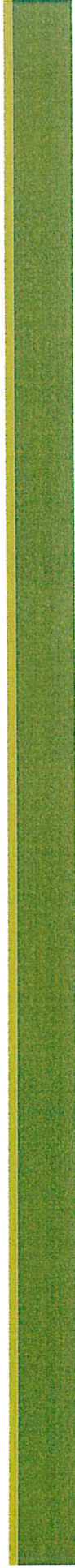
— Middlebrook School- Allowable Locations for Solar: Outlined in Blue



— Wilton High School- Allowable Solar Locations: Outlined in Blue



Miller Driscoll School – All Roofs are New



[illegible]

20-Year Electrical Savings Estimate

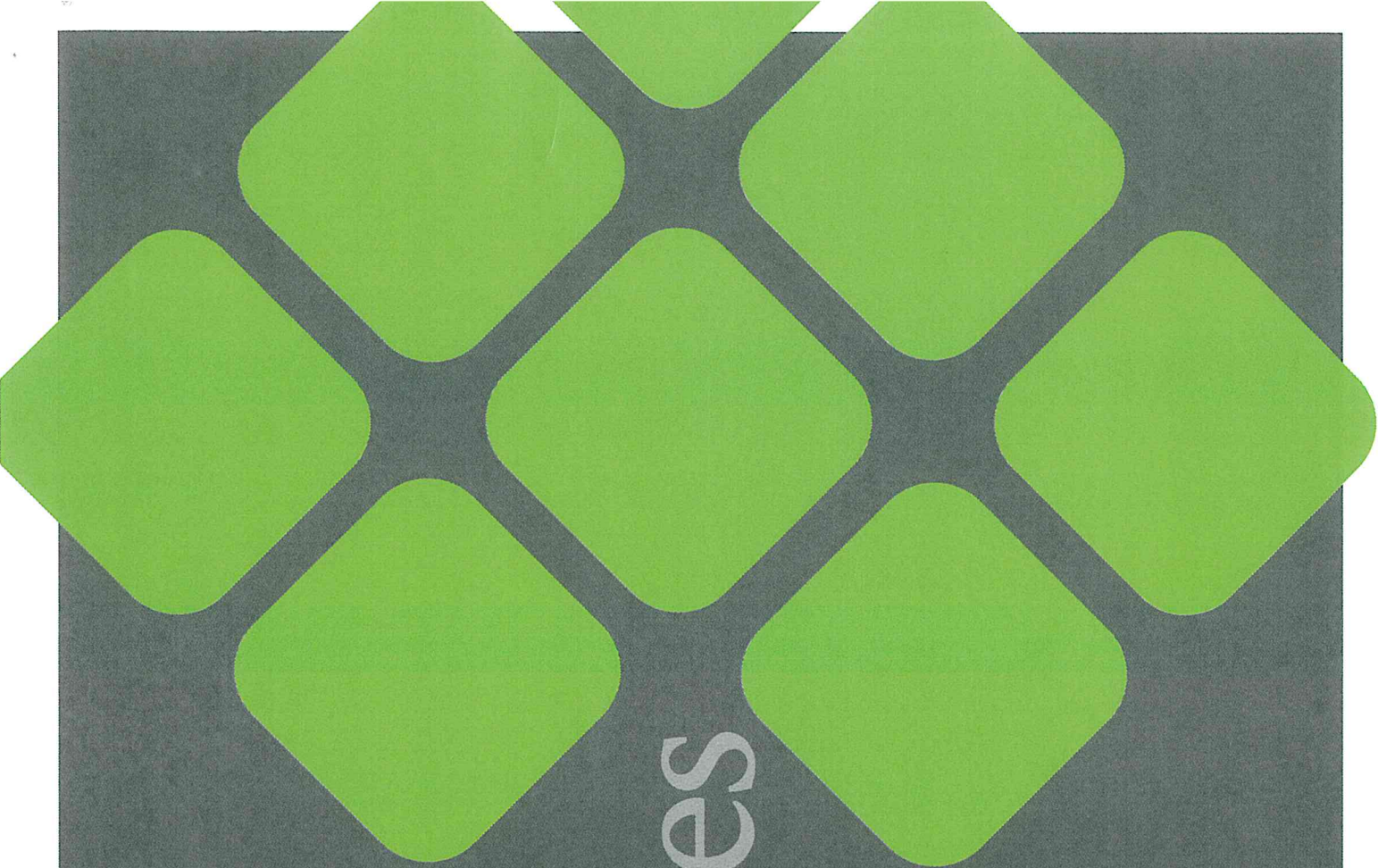
All 3 Schools with \$124.75 Z-RECs				System	1st Year
	Electrical Savings*	PPA/kWh	Size (kW)	Production (kWh)	
Direct E Solar	\$ 1,492,709	\$ 0.055	805.70	940,300	
Ross Solar	\$ 1,616,587	\$ 0.058	905.30	1,055,000	
Standard Solar	\$ 1,663,218	\$ 0.058	** 1,022.00	1,270,650	
Ameresco	\$ 1,918,793	\$ 0.047	936.35	1,106,184	
PurePoint	\$ 2,025,444	\$ 0.043	970.20	1,120,164	
64 Solar	\$ 2,031,862	\$ 0.039	894.82	1,079,784	
Davis Hill	\$ 2,077,154	\$ 0.041	834.30	1,125,860	
Greenskies	\$ 2,190,945	\$ 0.019	765.00	973,180	
Kingspan	\$ 2,300,201	\$ 0.021	819.75	1,039,517	
Greenskies, HS at \$110 Z-REC	\$ 2,135,516	\$ 0.022	765.00	973,180	
Kingspan, HS at \$110 Z-REC	\$ 2,300,201	\$ 0.021	819.75	1,039,517	

*Based on kWh savings only (\$0.106/kWh current cost); no "Demand" savings considered.

**w/2% escalation

Qualitative Summary – Greenskies

References - Seven Endorsements	Positive references: Conducted detailed reference review with four towns and one university & Target No failures or maintenance issues were reported. Better Business Bureau (BBB): No complaints or reviews submitted for Greenskies, Veeco, or DTC found.
Agreements- PPA & Production Guaranty	Greenskies uses a single PPA agreement that does not require a separate site lease to be recorded. Integrated EPC / Owner: installation, financing and maintenance – benefit to off taker
Equipment Quality - Modules, Inverters & Racking	Module: JA Solar 320W BNEF Tier 1 Polysilicon 72-cell Racking: DCE Solar Eco-Top products Inverters: SMA 20000TL-US, 24000TL-US, and/or 30000TL-US inverters
Installation & Maintenance – An Integrated Team	Greenskies employs an integrated approach using in-house installers. Subcontractors are Veeco Inc. for electrical and DTC for structural engineering. Greenskies' installers have NABCEP certification. System are maintained by installer – not a third party
Roof Integrity	DTC will confirm structural capacity and coordinate racking system design. Slip-sheets will be used to protect roof.
Billing & Yield	Town of Wilton will receive monthly bills. URL will be issued to monitor production and performance.



Greenskies

Town of Wilton
Board of Selectman
Municipal Solar Project Overview
April 3, 2017

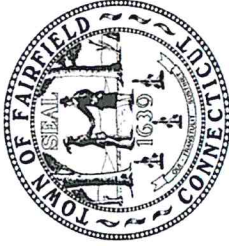
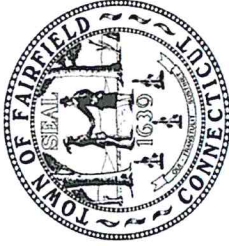


❖ **A Leading Commercial, Industrial and Municipal solar developer in the U.S.**

- Founded in 2008 and based in Middletown, Greenskies has over eight years of experience with an exclusive focus on Commercial & Industrial and Municipal solar projects. As a privately held firm since its inception, executive level involvement is involved throughout every step of the process, resulting in the highest level of accountability in our work product.
- Greenskies has become one of the five largest commercial solar developers in the United States according to Greentech Media
- Greenskies has over 136 MW of Solar Assets in construction and operation across the United States developed for Fortune 500 companies, municipalities, schools and universities
- Greenskies is on track to complete an additional 67 MW over the next six months, pushing total installed capacity to over 200 MW
- Our in-house engineering, procurement and construction (EPC) management personnel oversee all aspects of system design, technology selection, installation cost management and subcontractor oversight

❖ **Build-and-hold business model provides long-term financial sustainability**

- Approximately 92% of installed systems are owned by Greenskies
- 100% of the owned existing projects are with investment grade off-takers, providing valuable and predictable long-term cash flow

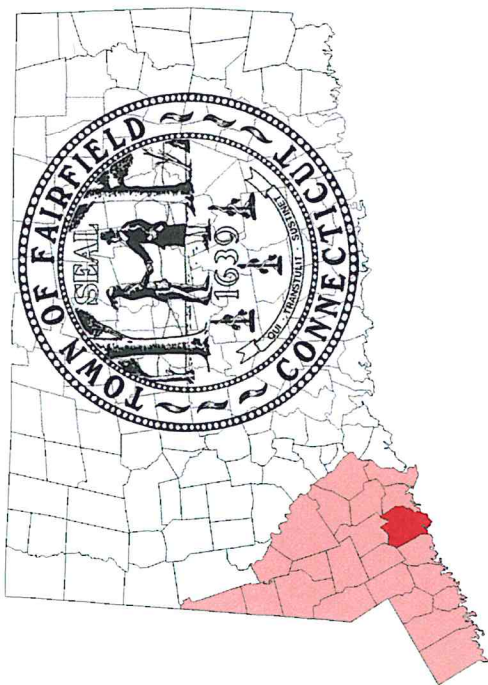
Commercial	         
Municipal	          

Municipal Success Story: Fairfield, Connecticut



Overview

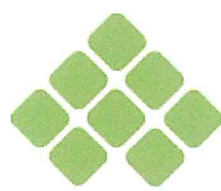
- ❖ The Town of Fairfield, Connecticut has been a Greenskies customer since 2013
- ❖ The relationship has allowed for 3.429 MW of solar project development to date
- ❖ The relationship is an example of the range of installation opportunities available in most municipalities: school facilities, water treatment plants, landfills, municipal buildings and parking canopies



Project	Type of Array	System Size (kW)
Fairfield Landfill - WT Facility	Ground - Ballasted - Micro-grid	1,296
Fairfield Bus Garage	Roof Mounted Array	156
Warde High School	Roof Mounted Array	725
Ludlowe High School	Roof Mounted Array	527
Tomlinson Middle School	Carport - (DEV)	324
Fairfield Woods Middle School	Roof Mounted Array (DEV)	175
Mill Hill Elementary School	Roof Mounted Array (DEV)	64
Fairfield Senior Center	Roof Mounted Array (DEV)	162
Total:		3,429

Greenskies Partners with our Clients to Provide a Comprehensive Solar Solution

Sample Installations



Wesleyan University
Middletown, CT – 992.25 kW



Kennedy Middle School
Southington, CT – 327 kW



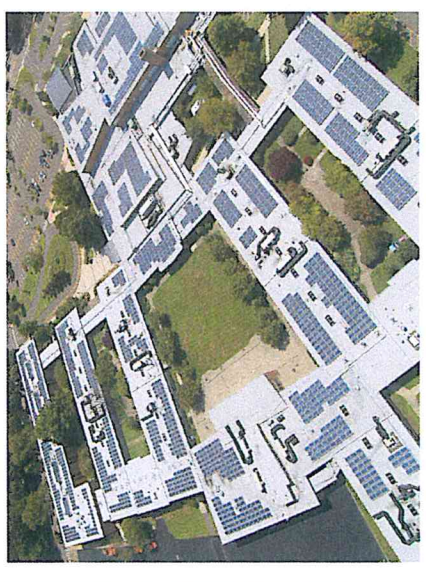
Remington Building
Middletown, CT – 329 kW



Target Corporation
Stoughton, MA – 692 kW



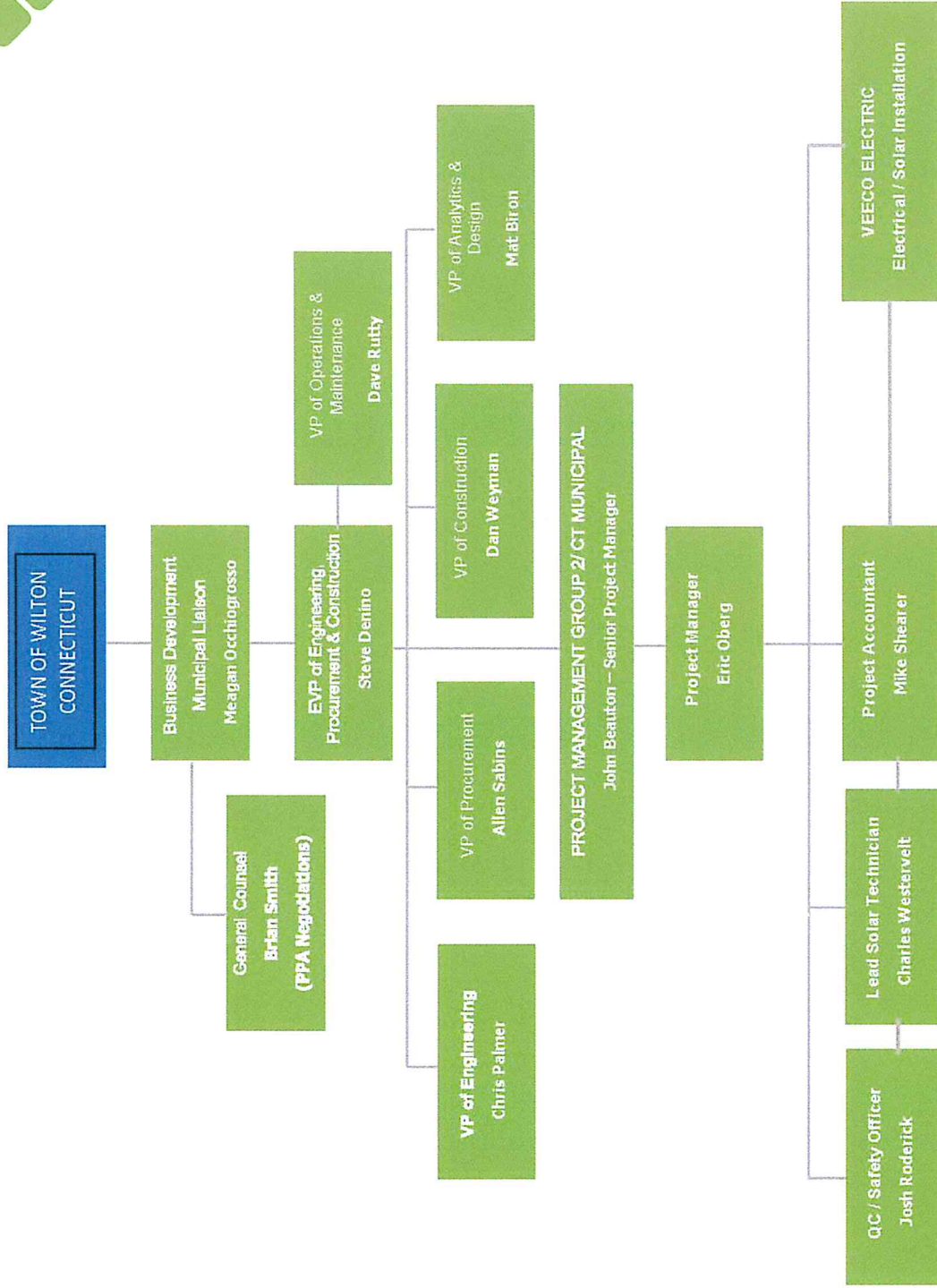
Joel Elementary School
Clinton, CT – 132 kW



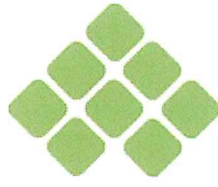
Fairfield Warde High School
Fairfield, CT – 648 kW



Greenskies



Financial Overview



Middlebrook School:

PPA Rate: \$0.025, 0% escalation
Year 1 Estimated Annual Production: 255,070 kWh
Year 1 Estimated Savings: \$17,445.00
Total Estimated Production for 20 Years: 4,866,201 kWh
Total Estimated Savings: \$485,337.00

Miller-Driscoll School:

PPA Rate: \$0.020, 0% escalation
Year 1 Estimated Annual Production: 357,910 kWh
Year 1 Estimated Savings: \$26,561.00
Total Estimated Production for 20 Years: 6,828,173 kWh
Total Estimated Savings: \$721,832.00

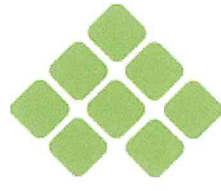
Middlebrook, Miller-Driscoll, Wilton High School (\$124.75 ZREC):

PPA Rate: \$0.019, 0% escalation
Year 1 Estimated Annual Production: 973,180 kWh
Year 1 Estimated Savings: \$72,428.00
Total Estimated Production for 20 Years: 18,566,235 kWh
Total Estimated Savings: \$1,965,990.00

Middlebrook, Miller-Driscoll, Wilton High School (\$110.00 ZREC):

PPA Rate: \$0.022, 0% escalation
Year 1 Estimated Annual Production: 973,180 kWh
Year 1 Estimated Savings: \$69,741.00
Total Estimated Production for 20 Years: 18,566,235 kWh
Total Estimated Savings: \$1,914,726.00

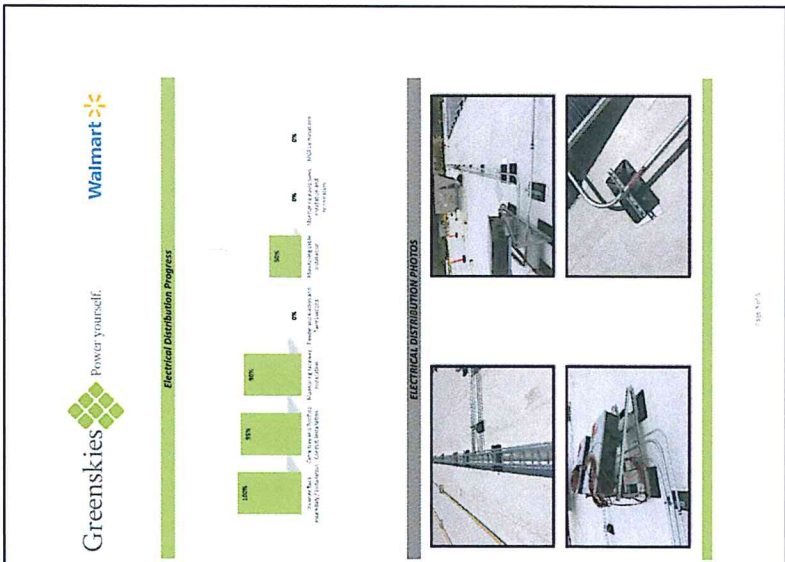
Production Assurance Guarantee

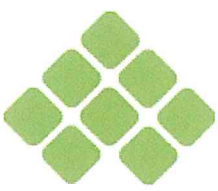


- ❖ Provider will guarantee a minimum amount of annual production from the solar system each contract year.
- ❖ The Solar Power & Services Agreement (SPSA) will contain a schedule that details the Estimated Annual Production for each contract year and the associated Guaranteed Production level, which shall be 85% of the Estimated Annual Production
- ❖ If the actual annual production for a given contract year falls below the Guaranteed Production for that year, Provider will credit the Host (Wilton) for such shortfall in subsequent monthly invoices until the credit has been fully applied.
- ❖ Any credit will be equal to: $[(\text{Average } \$/\text{kWh rate charged by the local electric utility}) - (\text{kWh Rate under the SPSA})] \times [\text{Difference in kWh between Guaranteed Annual Production minus Actual Annual Production}]$
- ❖ If the shortfall occurs in the final contract year, then Provider will make a payment to the Host for the dollar amount of the foregone credit.

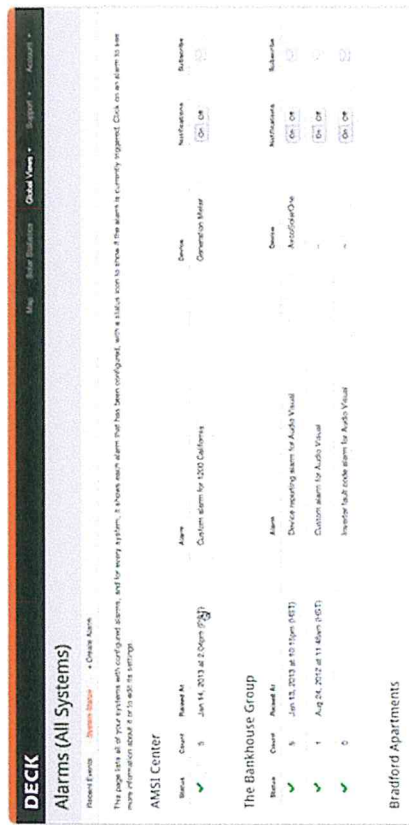
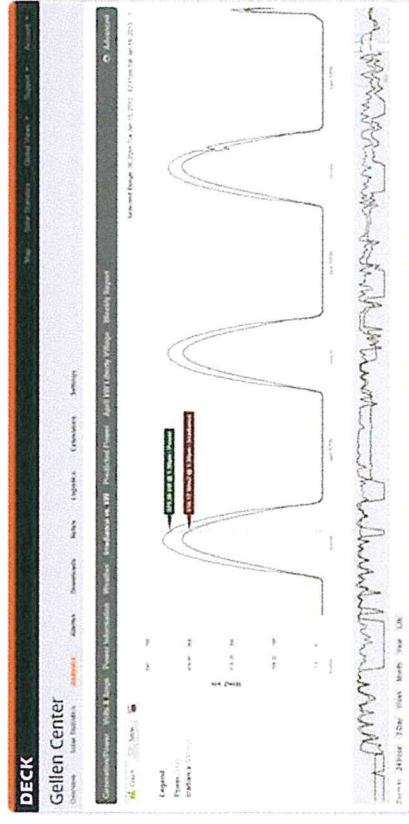
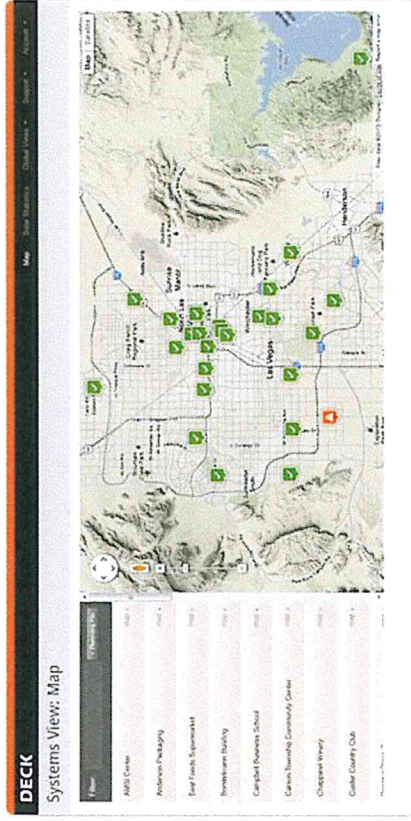
- Greenskies**  Power yourself. 

Weekly Construction Report
 Walmart Store 2184
 10000 Old Dominion Rd.
 Fairfax, VA 22033
 Site Name: VA-02774
 6/7/2015
- OVERALL SUMMARY**
- We are in the 5th week of the Jackson Walmart project. Overall progress has jumped to almost 80%. The array is nearing completion and strong site progress. The store and drive around are 4/11-4/12. This project has been accelerated to ensure final completion by end of June.
-
- Overall Installation
- | Category | Percentage |
|-------------|------------|
| Completed | 79% |
| In Progress | 14% |
| Not Started | 7% |
- Photo: Site Manager - Alexey B. B. B.
- Page 1 of 5



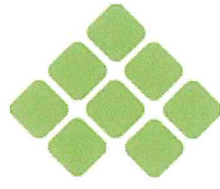


Operations & Maintenance Reporting Dashboard



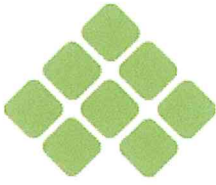
Greenskies uses DECK Monitoring to provide web based real-time system performance data that is used to verify systems are performing as designed. Projects are monitored in our Network Operations Center.

Educational Component



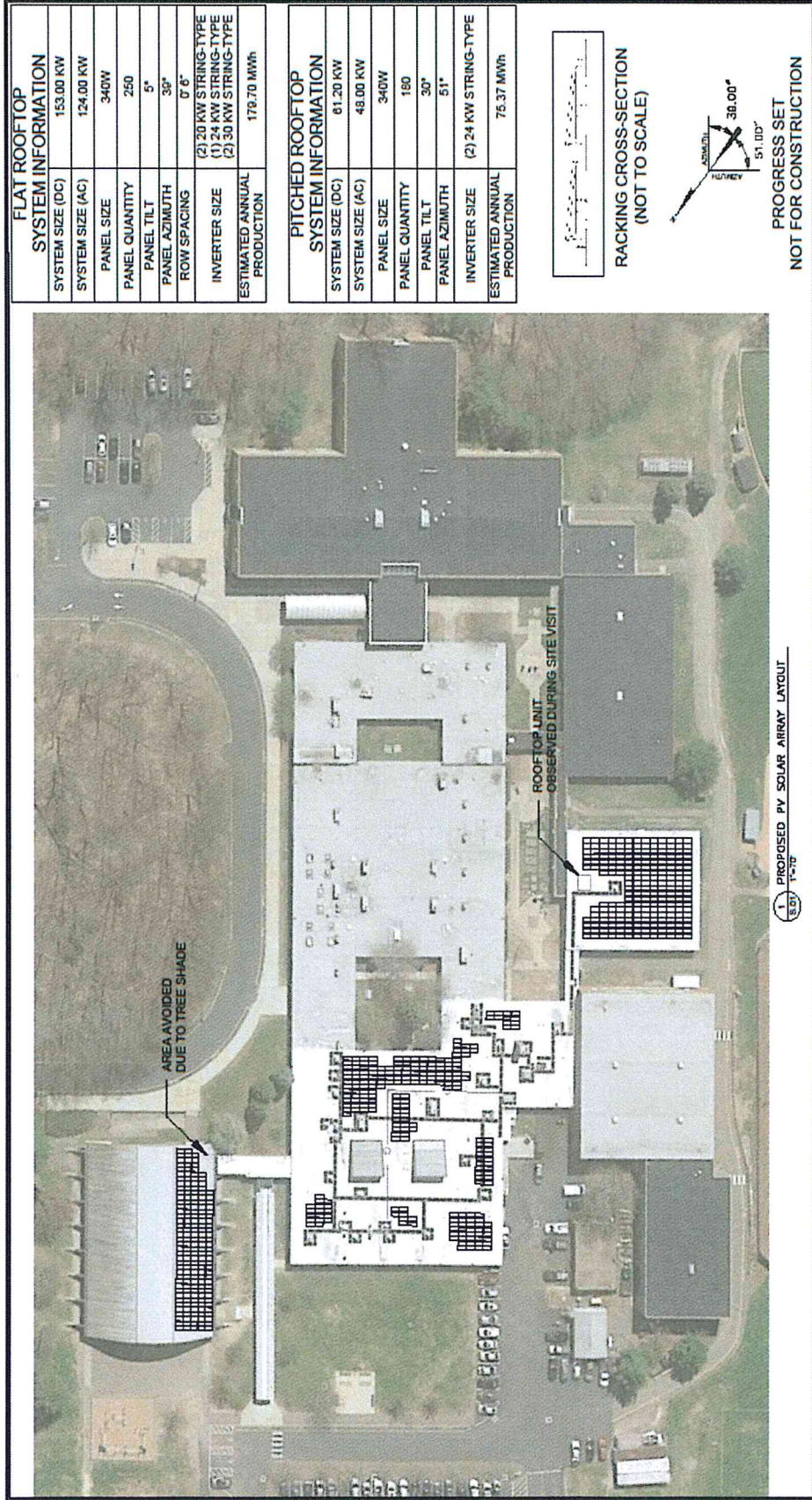
- ❖ Greenskies is determined to help solar become the dominant energy source of the future, and school projects in particular provide us with the opportunity to couple immediate energy savings with the education of future decision-makers. As such, Greenskies is willing to provide several added educational services at no cost to the town or schools.
- ❖ Greenskies would be happy to support each school in building an educational curriculum around solar and renewable energy. To achieve this Greenskies provides each school with web-based access to view real-time performance data for its respective project. Greenskies also installs viewing screens at each school to further facilitate a collaborative and exciting learning experience for students, also at no cost to the town or schools.
- ❖ Greenskies offers in-house support to districts, at no cost, to assist schools in utilizing the PV installation as an asset to education; including support in lesson development. In addition, Greenskies makes high-level executives and team members available to schools, if desired, to speak to students and participate in career-based learning. As we employ professionals with a wide-variety of specializations, we offer speakers to schools on wide-variety of topics from entrepreneurship, to engineering, to politics, to finance and of course renewable energy.

Appendices



Middlebrook School

Site Address 131 School Road, Wilton CT
Type of Solar Array Roof
Array Size 214.12 kW (DC) 172.00 (AC)

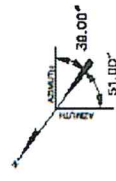


FLAT ROOFTOP SYSTEM INFORMATION	
SYSTEM SIZE (DC)	153.00 KW
SYSTEM SIZE (AC)	124.00 KW
PANEL SIZE	340W
PANEL QUANTITY	250
PANEL TILT	5°
PANEL AZIMUTH	36°
ROW SPACING	0' 6"
INVERTER SIZE	(2) 20 KW STRING-TYPE (1) 24 KW STRING-TYPE (2) 30 KW STRING-TYPE
ESTIMATED ANNUAL PRODUCTION	178.70 MWh

PITCHED ROOFTOP SYSTEM INFORMATION	
SYSTEM SIZE (DC)	81.20 KW
SYSTEM SIZE (AC)	48.00 KW
PANEL SIZE	340W
PANEL QUANTITY	180
PANEL TILT	30°
PANEL AZIMUTH	51°
INVERTER SIZE	(2) 24 KW STRING-TYPE
ESTIMATED ANNUAL PRODUCTION	75.37 MWh



RACKING CROSS-SECTION
(NOT TO SCALE)



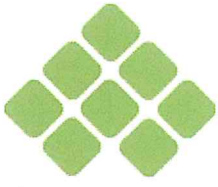
PROGRESS SET
NOT FOR CONSTRUCTION

REVISIONS:		PROPOSED SITE PLAN		PV.01	
NO.	DATE	DESCRIPTION	BATCH NO.:	PROPOSAL	
			DRAWN BY:	SL	
			SCALE:	AS NOTED	
			DATE:	27 FEBRUARY 2017	

1. PROPOSED PV SOLAR ARRAY LAYOUT

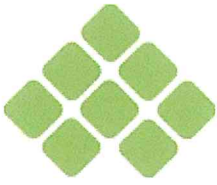
MIDDLEBROOK SCHOOL
PV SOLAR ARRAY
131 SCHOOL ROAD
WILTON, CT 06897

Greenskies
10 Main Street Suite E
Middletown, CT 06457
PH - 860.398.5408
FAX - 860.398.5423



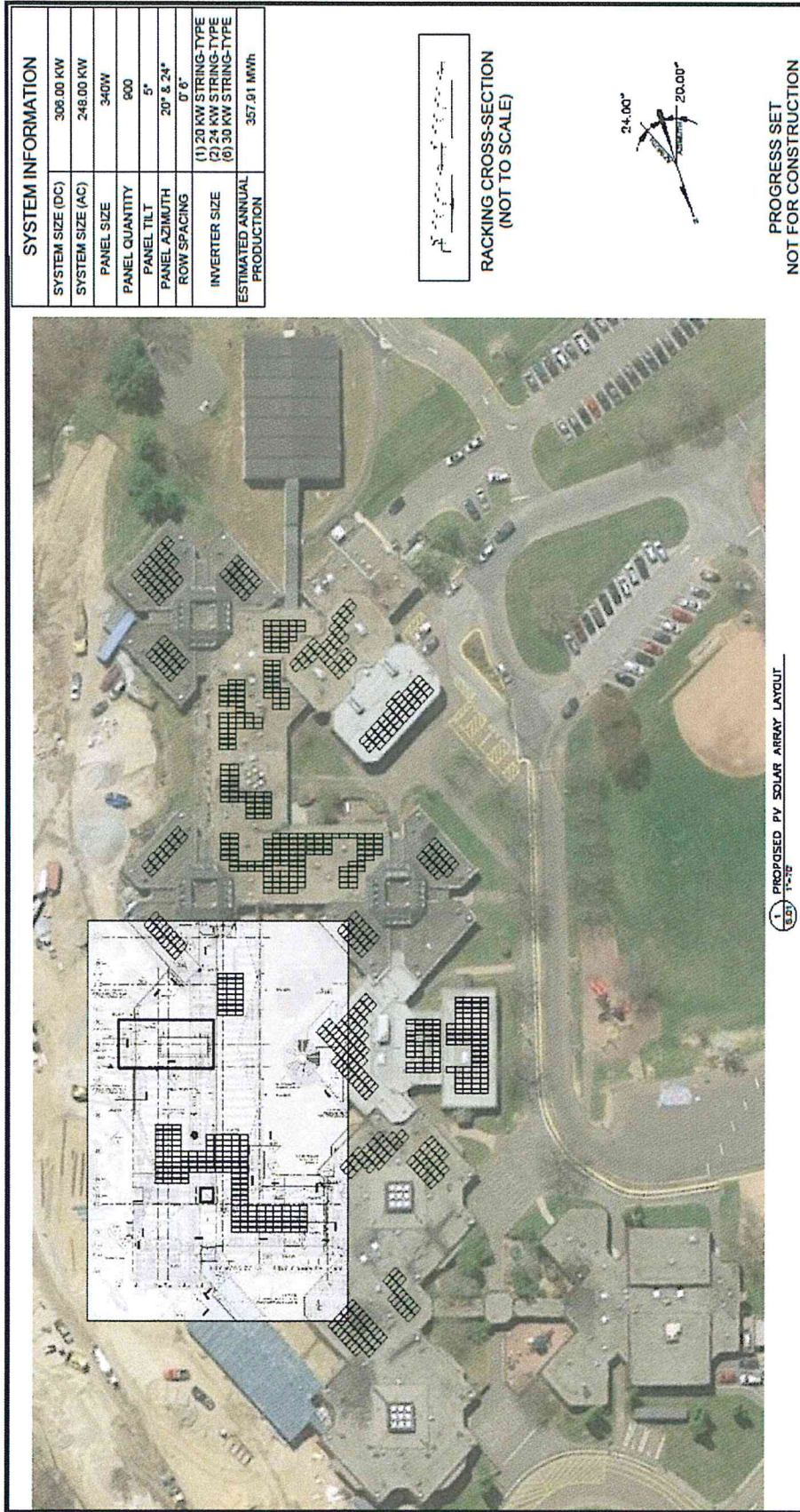
Middlebrook School

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	255,070	0.025	0.093	0.068	\$17,445
2	253,795	0.025	0.096	0.071	\$18,067
3	252,526	0.025	0.099	0.074	\$18,702
4	251,263	0.025	0.102	0.077	\$19,353
5	250,007	0.025	0.105	0.080	\$20,019
6	248,757	0.025	0.108	0.083	\$20,700
7	247,513	0.025	0.111	0.086	\$21,398
8	246,275	0.025	0.115	0.090	\$22,111
9	245,044	0.025	0.118	0.093	\$22,842
10	243,819	0.025	0.122	0.097	\$23,590
11	242,600	0.025	0.125	0.100	\$24,355
12	241,387	0.025	0.129	0.104	\$25,138
13	240,180	0.025	0.133	0.108	\$25,940
14	238,979	0.025	0.137	0.112	\$26,760
15	237,784	0.025	0.141	0.116	\$27,600
16	236,595	0.025	0.145	0.120	\$28,460
17	235,412	0.025	0.150	0.125	\$29,341
18	234,235	0.025	0.154	0.129	\$30,242
19	233,064	0.025	0.159	0.134	\$31,165
20	231,898	0.025	0.163	0.138	\$32,109
Total	4,866,201	0.025	0.125	0.100	\$485,337



Miller-Driscoll School

Site Address 217 Wolfpitt Road, Wilton, CT
Type of Solar Array Roof
Array Size 306.00 kW (DC) 248.00 kW (AC)



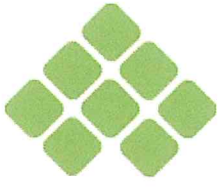
REVISIONS:		PROPOSED SITE PLAN		PV.01	
NO.	DATE	DESCRIPTION	BATCH NO.:	PROPOSAL	
			DRAWN BY:	SD	
			SCALE:	AS NOTED	
			DATE:	13 FEBRUARY 2017	

1 PROPOSED PV SOLAR ARRAY LAYOUT
8.5' 1'-0"

PROGRESS SET
NOT FOR CONSTRUCTION

Greenskies
10 Main Street Suite E
Middletown, CT 06457
PH - 860.398.5408
FAX - 860.398.5423

MILLER-DRISCOLL SCHOOL
PV SOLAR ARRAY
217 WOLFPIIT ROAD
WILTON, CT 06897



Miller-Driscoll School

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	357,910	0.020	0.094	0.074	\$26,561
2	356,120	0.020	0.097	0.077	\$27,427
3	354,340	0.020	0.100	0.080	\$28,314
4	352,568	0.020	0.103	0.083	\$29,222
5	350,805	0.020	0.106	0.086	\$30,152
6	349,051	0.020	0.109	0.089	\$31,103
7	347,306	0.020	0.112	0.092	\$32,077
8	345,569	0.020	0.115	0.096	\$33,074
9	343,842	0.020	0.119	0.099	\$34,095
10	342,122	0.020	0.122	0.103	\$35,140
11	340,412	0.020	0.126	0.106	\$36,210
12	338,710	0.020	0.130	0.110	\$37,305
13	337,016	0.020	0.134	0.114	\$38,427
14	335,331	0.020	0.138	0.118	\$39,575
15	333,654	0.020	0.142	0.122	\$40,751
16	331,986	0.020	0.146	0.126	\$41,954
17	330,326	0.020	0.150	0.131	\$43,187
18	328,675	0.020	0.155	0.135	\$44,449
19	327,031	0.020	0.160	0.140	\$45,741
20	325,396	0.020	0.164	0.145	\$47,065
Total	6,828,173	0.020	0.126	0.106	\$721,832

Drawing File: W:\Greenfield Development\Market Sectors\Municipal\Million_Ct_EngInsering\Drawing\Millon High School - Wilton CT - Layout.dwg
 Plotted Date: Feb 10, 2017 - 12:27pm
 Plotted by: asbeshon


Greenskies
10 Main Street Suite E
Middletown, CT 06457
PH - 860.398.5408
FAX - 860.398.5423

REVISIONS:		
NO.	DATE	DESCRIPTION

**WILTON HIGH SCHOOL
PV SOLAR ARRAY
395 DANBURY ROAD
WILTON, CT 06897**

	BATCH NO.:	PROPOSAL
	DRAWN BY:	SD
	SCALE:	AS NOTED
	DATE:	10 FEBRUARY 2017

PV.01

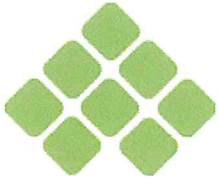


1 PROPOSED PV SOLAR ARRAY LAYOUT

SYSTEM INFORMATION	
SYSTEM SIZE (DC)	300.00 KW
SYSTEM SIZE (AC)	248.00 KW
PANEL SIZE	340W
PANEL QUANTITY	900
PANEL TILT	5°
PANEL AZIMUTH	16°
ROW SPACING	0°
INVERTER SIZE	(1) 20 KW STRING-TYPE
	(2) 24 KW STRING-TYPE
	(6) 30 KW STRING-TYPE
ESTIMATED ANNUAL PRODUCTION	360.20 MWH

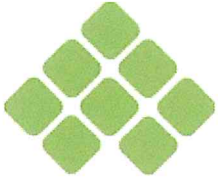


PROGRESS SET
NOT FOR CONSTRUCTION



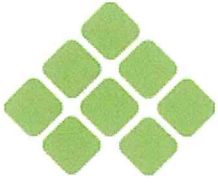
Wilton High School with \$124.75 ZREC

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	360,200	0.015	0.094	0.079	\$28,423
2	358,399	0.015	0.097	0.082	\$29,287
3	356,607	0.015	0.100	0.085	\$30,172
4	354,824	0.015	0.103	0.088	\$31,078
5	353,050	0.015	0.106	0.091	\$32,005
6	351,285	0.015	0.109	0.094	\$32,955
7	349,528	0.015	0.112	0.097	\$33,927
8	347,781	0.015	0.115	0.100	\$34,923
9	346,042	0.015	0.119	0.104	\$35,943
10	344,311	0.015	0.122	0.107	\$36,987
11	342,590	0.015	0.126	0.111	\$38,056
12	340,877	0.015	0.130	0.115	\$39,150
13	339,173	0.015	0.134	0.119	\$40,272
14	337,477	0.015	0.138	0.123	\$41,420
15	335,789	0.015	0.142	0.127	\$42,595
16	334,110	0.015	0.146	0.131	\$43,799
17	332,440	0.015	0.150	0.135	\$45,033
18	330,778	0.015	0.155	0.140	\$46,296
19	329,124	0.015	0.160	0.145	\$47,589
20	327,478	0.015	0.164	0.149	\$48,914
Total	6,871,861	0.015	0.126	0.111	\$758,821



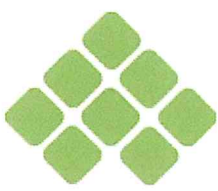
Wilton High School with \$110.00 ZREC

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	360,200	0.022	0.094	0.071	\$25,736
2	358,399	0.022	0.097	0.074	\$26,613
3	356,607	0.022	0.100	0.077	\$27,511
4	354,824	0.022	0.103	0.080	\$28,431
5	353,050	0.022	0.106	0.083	\$29,371
6	351,285	0.022	0.109	0.086	\$30,334
7	349,528	0.022	0.112	0.090	\$31,320
8	347,781	0.022	0.115	0.093	\$32,329
9	346,042	0.022	0.119	0.096	\$33,361
10	344,311	0.022	0.122	0.100	\$34,418
11	342,590	0.022	0.126	0.104	\$35,500
12	340,877	0.022	0.130	0.107	\$36,607
13	339,173	0.022	0.134	0.111	\$37,741
14	337,477	0.022	0.138	0.115	\$38,902
15	335,789	0.022	0.142	0.119	\$40,090
16	334,110	0.022	0.146	0.124	\$41,307
17	332,440	0.022	0.150	0.128	\$42,553
18	330,778	0.022	0.155	0.132	\$43,828
19	329,124	0.022	0.160	0.137	\$45,134
20	327,478	0.022	0.164	0.142	\$46,471
Total	6,871,861	0.022	0.126	0.104	\$707,557



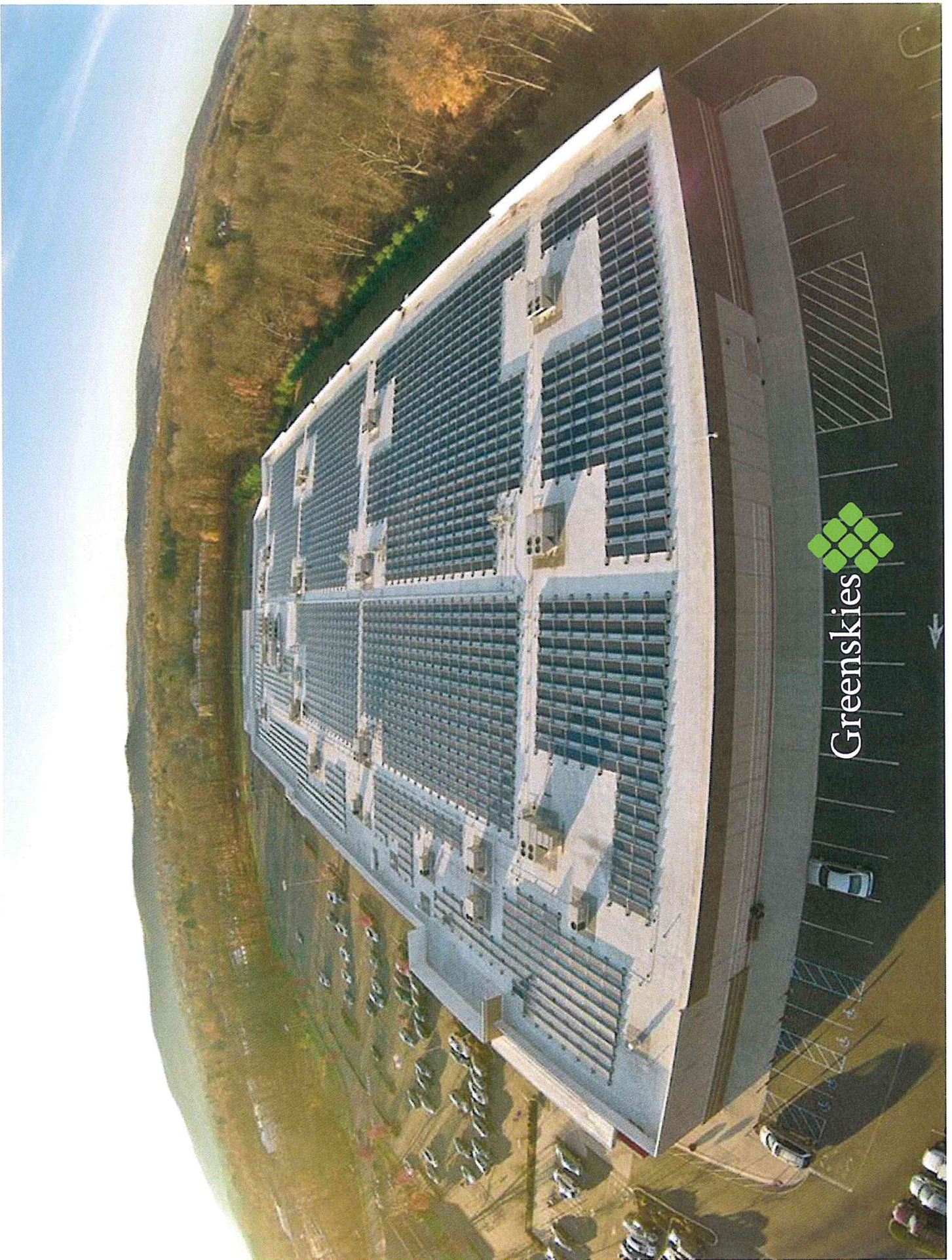
Aggregate with all schools @ \$124.75 ZREC

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	973,180	0.019	0.094	0.074	\$72,428
2	968,314	0.019	0.097	0.077	\$74,781
3	963,473	0.019	0.099	0.080	\$77,189
4	958,655	0.019	0.102	0.083	\$79,653
5	953,862	0.019	0.105	0.086	\$82,176
6	949,093	0.019	0.109	0.089	\$84,759
7	944,347	0.019	0.112	0.093	\$87,402
8	939,625	0.019	0.115	0.096	\$90,109
9	934,927	0.019	0.119	0.099	\$92,880
10	930,253	0.019	0.122	0.103	\$95,716
11	925,601	0.019	0.126	0.107	\$98,620
12	920,973	0.019	0.130	0.110	\$101,594
13	916,368	0.019	0.134	0.114	\$104,638
14	911,787	0.019	0.138	0.118	\$107,755
15	907,228	0.019	0.142	0.122	\$110,946
16	902,692	0.019	0.146	0.127	\$114,214
17	898,178	0.019	0.150	0.131	\$117,560
18	893,687	0.019	0.155	0.135	\$120,987
19	889,219	0.019	0.159	0.140	\$124,495
20	884,773	0.019	0.164	0.145	\$128,088
Total	18,566,235	0.019	0.126	0.107	\$1,965,990



Aggregate with Wilton High School \$110.00 ZREC

Year	Solar Output with 0.50% Degradation Factor	Solar Electricity Cost	Estimated Utility Rate with 3.0 % Escalation Factor	Rate Savings (Current Utility rate minus Solar rate)	Savings with Solar
	Solar kWh/ Year	\$/kWh	\$/kWh	\$/kWh	\$
1	973,180	0.022	0.094	0.072	\$69,741
2	968,314	0.022	0.097	0.074	\$72,107
3	963,473	0.022	0.099	0.077	\$74,528
4	958,655	0.022	0.102	0.080	\$77,006
5	953,862	0.022	0.105	0.083	\$79,542
6	949,093	0.022	0.109	0.087	\$82,138
7	944,347	0.022	0.112	0.090	\$84,795
8	939,625	0.022	0.115	0.093	\$87,514
9	934,927	0.022	0.119	0.097	\$90,298
10	930,253	0.022	0.122	0.100	\$93,148
11	925,601	0.022	0.126	0.104	\$96,065
12	920,973	0.022	0.130	0.108	\$99,051
13	916,368	0.022	0.134	0.111	\$102,108
14	911,787	0.022	0.138	0.115	\$105,237
15	907,228	0.022	0.142	0.120	\$108,441
16	902,692	0.022	0.146	0.124	\$111,722
17	898,178	0.022	0.150	0.128	\$115,080
18	893,687	0.022	0.155	0.133	\$118,519
19	889,219	0.022	0.159	0.137	\$122,040
20	884,773	0.022	0.164	0.142	\$125,645
Total	18,566,235	0.022	0.126	0.104	\$1,914,726




Greenskies