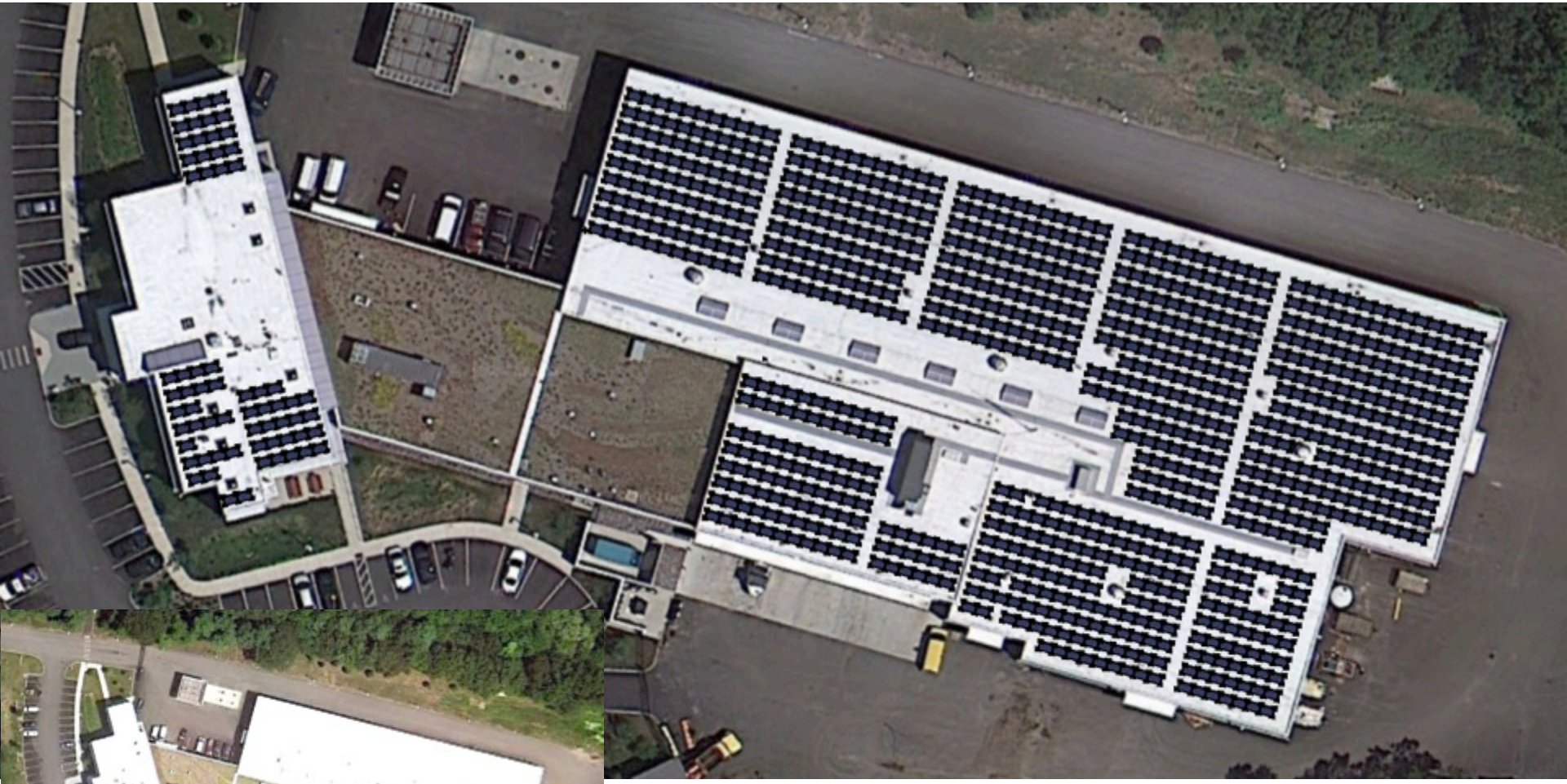
Lexington Solar Assessment Municipal & School Buildings

February 4, 2013

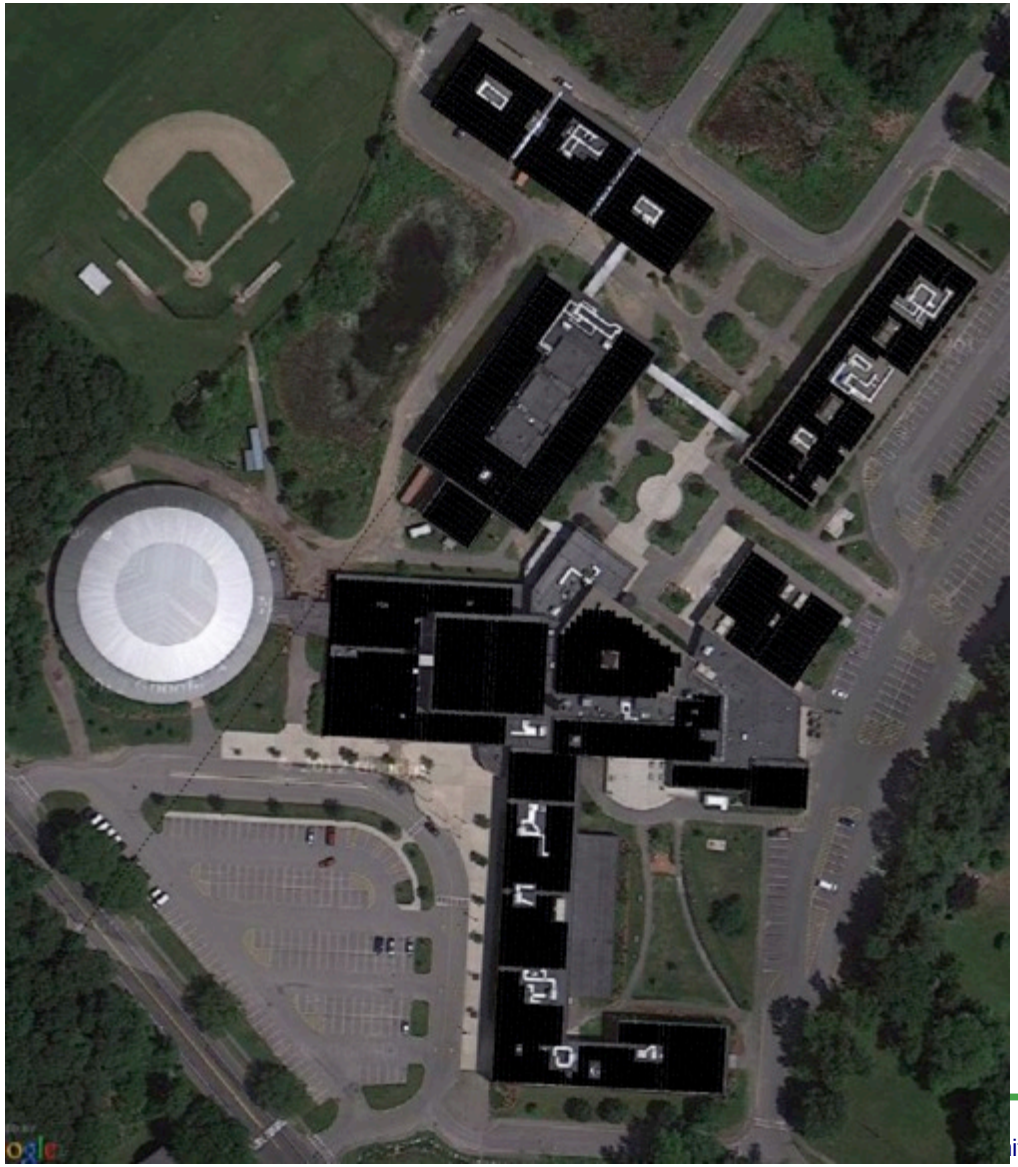
DPW Facility – 246 kW



Roof space reserved for antennas

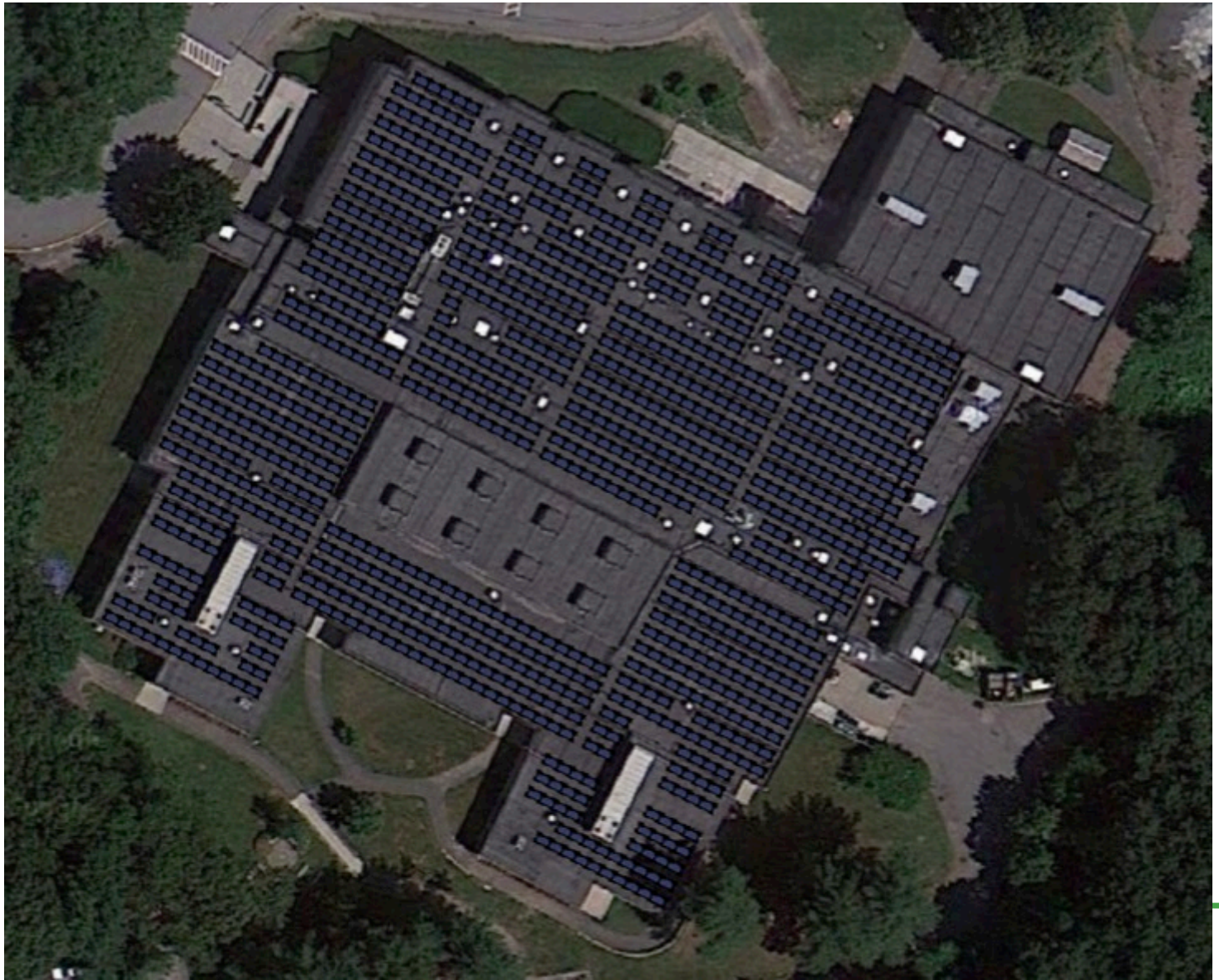
Lexington High School

Lexington High School – 791 kW



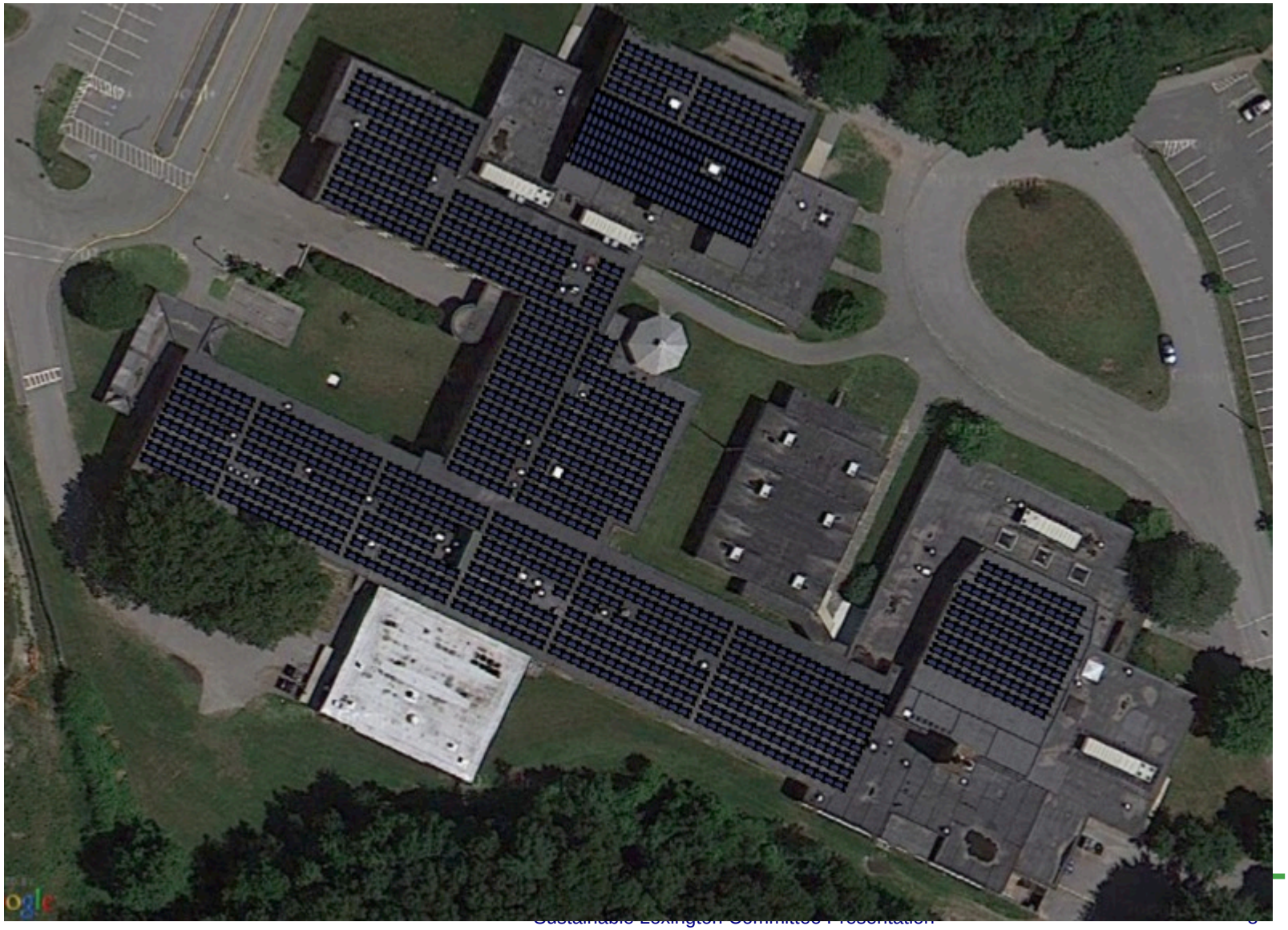
Clarke Middle School

Clarke Middle School – 252 kW



Diamond Middle School

Diamond Middle School – 306 kW



Fiske School

Fiske School – 192 kW

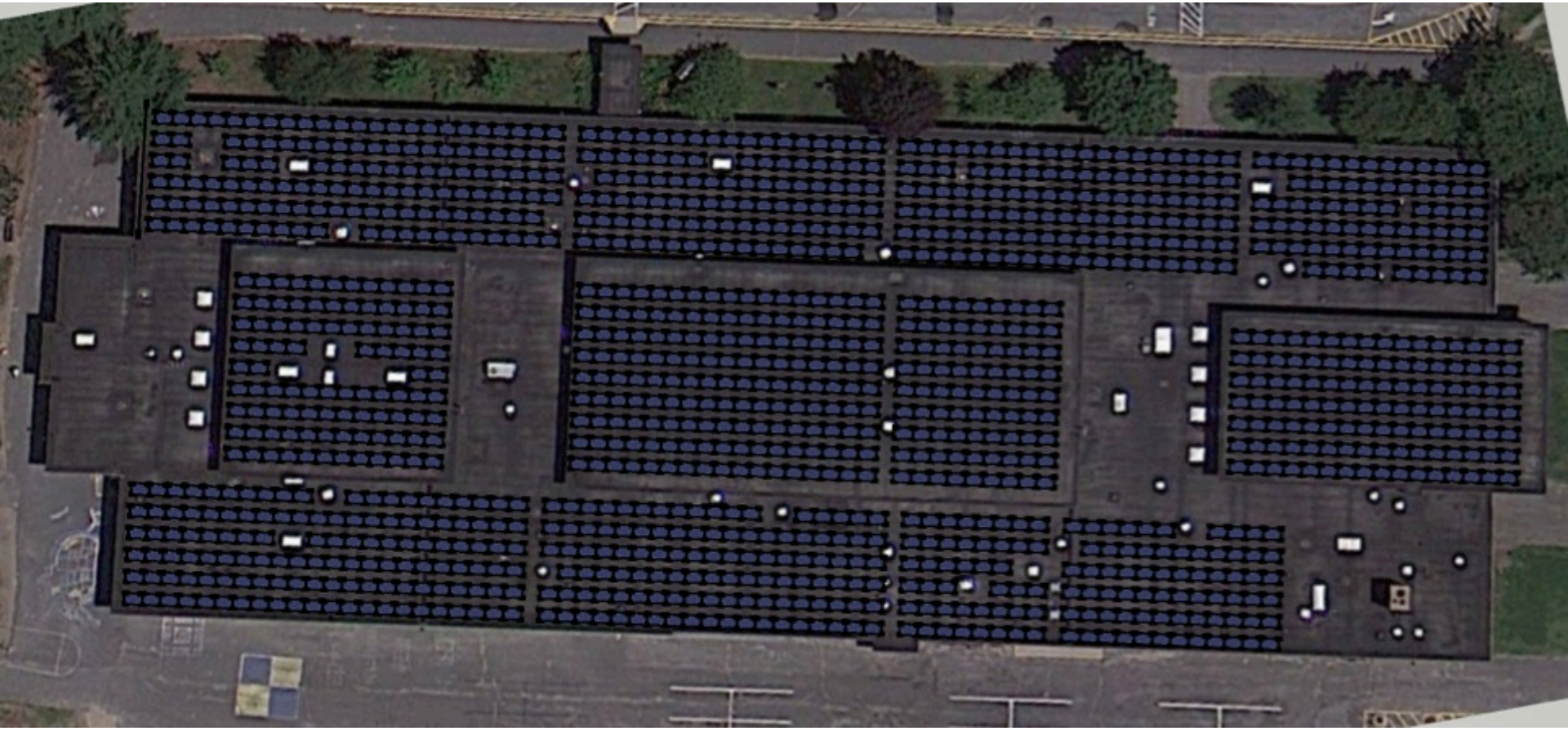
Harrington School

Harrington School – 193 kW

Hastings School – 66 kW

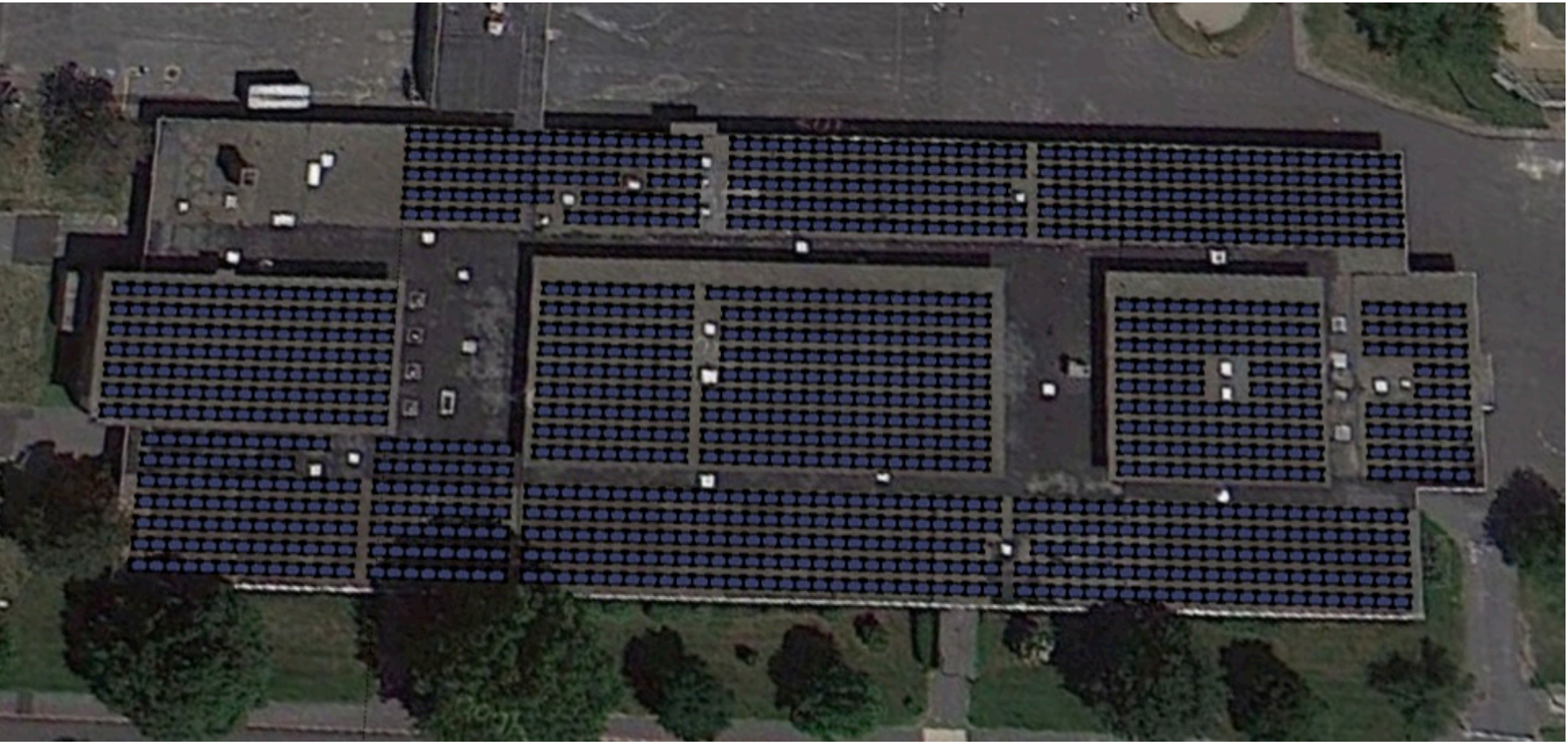
Bridge School

Bridge School – 301 kW



Bowman School

Bowman School – 294 kW



Lexington Solar – 2.64 MW

Facility Name	Address	System Size (kW)	Solar Energy Production (kWh)	CO_2 Reduction (lbs.)	Solar Azimuth (degrees)	Tilt Angle (degrees)
DPW Garage Roof	201 Massachusetts Ave.	229.50	267,341	241,944	195	15
DPW Office Roof	201 Massachusetts Ave.	16.50	19,246	17,418	165	15
Lexington High School - Math Bldg	251 Waltham Street	109.50	124,981	113,108	215	15
Lexington High School - Science Bldg	251 Waltham Street	120.75	137,821	124,728	215	15
Lexington High School - For. Lang. Bldg	251 Waltham Street	78.25	89,313	80,828	215	15
Lexington High School - Gymnasium	251 Waltham Street	63.00	73,758	66,751	182	15
Lexington High School - Phys Ed. Bldg	251 Waltham Street	112.75	132,004	119,464	182	15
Lexington High School - Auditorium	251 Waltham Street	50.50	59,124	53,507	182	15
Lexington High School - SPED Offices	251 Waltham Street	23.25	27,220	24,634	182	15
Lexington High School - Main Entrance	251 Waltham Street	38.00	44,489	40,263	182	15
Lexington High School - English Wing	251 Waltham Street	103.75	121,467	109,928	182	15
Lexington High School - Soc. Studies Wing	251 Waltham Street	45.75	53,563	48,475	182	15
Lexington High School - Commons	251 Waltham Street	46.00	52,503	47,515	215	15
Clark Middle School	17 Stedman Road	251.75	290,505	262,907	206	15
Diamond Middle School - 1	99 Hancock Street	261.50	302,679	273,924	203	15
Diamond Middle School - 2	99 Hancock Street	44.50	52,689	47,684	203	20
Bridge Elementary School	55 Middleby Road	301.50	351,845	318,420	192	15
Bowman Elementary School	9 Philip Road	293.75	341,115	308,709	158	15
Fiske Elementary School - 1	55 Adams Street	107.50	125,876	113,918	180	15
Fiske Elementary School - 2	55 Adams Street	85.00	98,847	89,457	160	15
Harrington Elementary School	328 Lowell Street	193.00	225,992	204,523	180	15
Hastings Elementary School - 1	2618 Massachusetts Ave.	38.75	42,976	38,893	236	20
Hastings Elementary School - 2	2618 Massachusetts Ave.	27.25	32,517	29,428	162	20
Total		**2,642**	**3,067,871**	**2,776,423**		

Annual Clean Energy Benefits

Clean Energy Benefits

3,067,871	Annual Solar energy production (kWh)
2,776,423	Annual CO_2 reduction (lbs.)
266	Passenger vehicles' equivalent annual emissions
156,535	gallons of gasoline
35,685	trees grown for 10 years
297	acres of pine forest
13	acres of old growth forest
937,541	pounds of recycling

3,756,841 miles of driving

Source: http://www.epa.gov/cleanenergy/energy-resources/calculator.html
http://www.mass.gov/eea/docs/eea/lbe/lbe-ghg-emissions-inventory-document-final.pdf