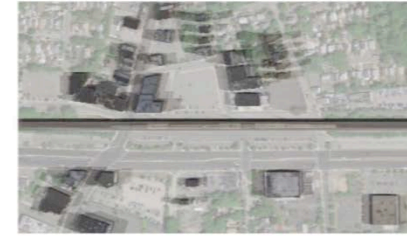




MARCH



JUNE



SUMMARY

Overlaid shadow cases on a typical spring, Summer, fall, and winter day.

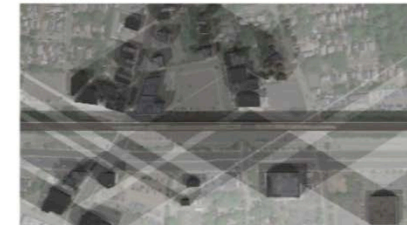
The overlies consist of the shadow condition at 7am, 9am, 12pm, 3pm, and 5pm on each of the typical season days.

CONCLUSION:

- The buildable areas are **MILDLY** affected by the shading from surrounding infrastructure throughout most of the year.

- On average, less than **20%** of the buildable area receives shading from surrounding infrastructure during the active part of the day.

DECEMBER



SEPTEMBER



Table 1. Summary of Estimated Annual Benefits of Parks and Protected Open Space on Long Island

Benefit Category	Benefit Subcategory	Land Use Category	Nassau County	Suffolk County	Total
Reduced Cost of Government Services	Additional property value*	Parks	\$169,000,000	\$17,000,000	\$186,000,000
	Additional property value*	Protected open space	\$17,000,000	\$27,000,000	\$44,000,000
Increased property value	Additional property value	Parks	\$4,200,000	\$25,900,000	\$30,100,000
	Additional property value	Protected open space	\$1,000,000	\$15,000,000	\$16,000,000
Recreation and Tourism					
Parks	Traveler spending	Parks		Combined	\$67,000,000
	Traveler spending	Protected open space		Combined	\$27,300,000
Other Use Value					
Other use value	Other use value	Parks	\$69,000,000	\$70,000,000	\$139,000,000
	Other use value	Protected open space	\$15,000,000	\$10,000,000	\$25,000,000
Agriculture Industry					
Agriculture Industry	Value of agricultural land	Agricultural land	\$40,000,000	\$40,000,000	\$80,000,000
	Value of agricultural land	Protected open space	\$10,000,000	\$10,000,000	\$20,000,000
Government Cost Savings					
Drinking water protection	Parks and open space	Parks and open space	\$1,000,000	\$1,000,000	\$2,000,000
	Parks and open space	Protected open space	\$1,000,000	\$1,000,000	\$2,000,000
Summer air conditioning	Parks	Parks	\$1,000,000	\$1,000,000	\$2,000,000
	Parks	Protected open space	\$1,000,000	\$1,000,000	\$2,000,000
Air pollution control	Parks	Parks	\$1,000,000	\$1,000,000	\$2,000,000
	Parks	Protected open space	\$1,000,000	\$1,000,000	\$2,000,000
Summary					
Total gross value	Parks	Parks	\$169,000,000	\$17,000,000	\$186,000,000
	Parks	Protected open space	\$17,000,000	\$27,000,000	\$44,000,000
Net	Parks	Agricultural land	\$40,000,000	\$40,000,000	\$80,000,000
	Parks	Protected open space	\$10,000,000	\$10,000,000	\$20,000,000

* Additional property value created by parks is not included in the total gross value because it is a one-time benefit to the property owner, and does not create any park value to the local economy, unlike recreation spending which creates a continuous flow of income.

Table 2. Estimated Health Benefits of Physical Activity in Parks

Cost Description	Nassau County	Suffolk County
Adults Younger Than 65 Years of Age		
Average annual medical care cost difference between active and inactive persons	\$220	\$220
Physically active persons*	\$20,000	\$20,000
Annual health care savings	\$18,780	\$18,780
Adults 65 Years of Age and Older		
Average annual medical care cost difference between active and inactive persons over 65 years of age	\$100	\$100
Physically active persons*	\$11,780	\$11,780
Annual health care savings	\$10,680	\$10,680
Subtotal Nassau County	\$18,780	\$18,780
Subtotal Suffolk County	\$10,680	\$10,680
Total annual value of health benefits from parks	\$29,460	\$29,460
Total, Nassau and Suffolk Counties	\$58,920	\$58,920

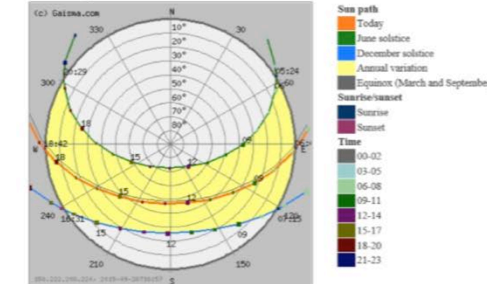
Table 3. The Economic Value of Direct Use of Parks on Long Island

Facility/Activity	Person Visits	Average Value per Visit	Value
Nassau County			
General park use (playgrounds, trails, dog walking, swimming, etc.)	17,500,000	\$2.39	\$41,825,000
Special events (concerts, festivals, etc.)	1,500,000	\$4.30	\$6,450,000
Special uses (weddings, banquets, etc.)	1,500,000	\$9.38	\$14,070,000
Subtotal, Nassau County			\$62,345,000
Suffolk County			
General park use (playgrounds, trails, dog walking, swimming, etc.)	13,500,000	\$2.37	\$31,965,000
Special events (concerts, festivals, etc.)	1,500,000	\$9.38	\$14,070,000
Special uses (weddings, banquets, etc.)	1,500,000	\$9.38	\$14,070,000
Subtotal, Suffolk County			\$50,105,000
Total, Nassau and Suffolk Counties			\$112,450,000

Economic Benefits and Fiscal Impact of Park and Open Space in Nassau County, New York

VALLEY STREAM

Sun Path Diagram

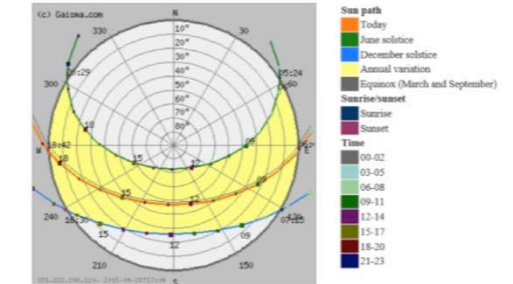


Solar Energy and Surface Meteorology

Variable	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Insolation, kWh/m ² /day	1.79	2.66	3.66	4.44	5.21	5.70	5.65	5.00	3.98	2.89	1.89	1.57
Clearness, 0 - 1	0.45	0.49	0.49	0.47	0.48	0.49	0.50	0.50	0.48	0.47	0.43	0.44
Temperature, °C	-3.49	-1.86	2.75	9.00	15.63	20.98	23.43	22.41	18.34	11.60	5.60	-0.39
Wind speed, m/s	6.12	6.19	6.27	5.96	5.23	4.83	4.39	4.25	4.52	4.99	5.72	6.04
Precipitation, mm	84	79	95	100	99	91	98	92	85	76	96	91
Wet days, d	10.3	9.5	10.9	10.5	11.1	10.2	9.3	9.3	8.1	7.2	10.0	11.0

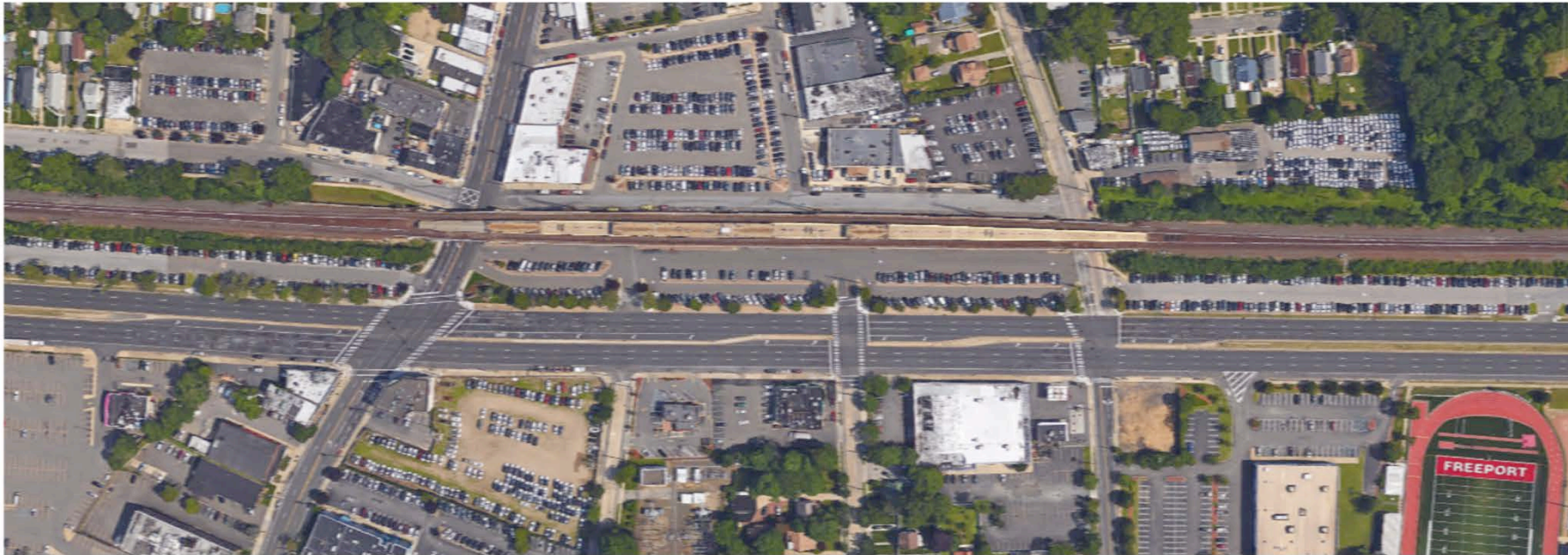
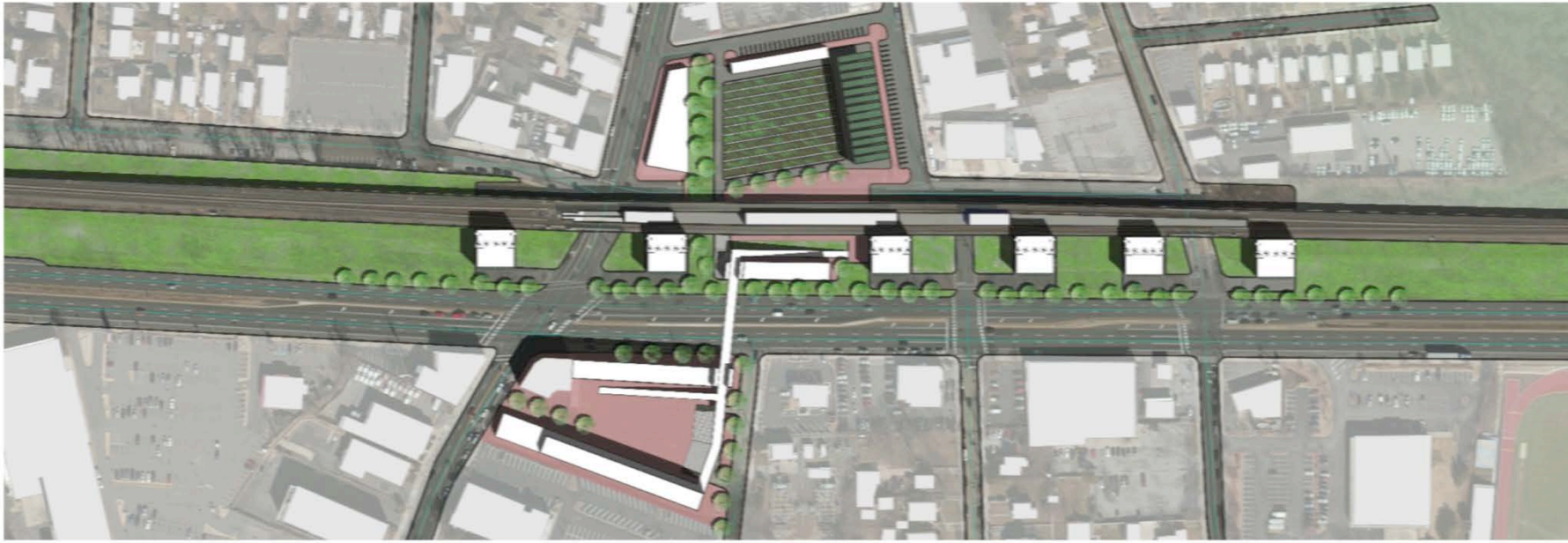
BALDWIN

Sun Path Diagram

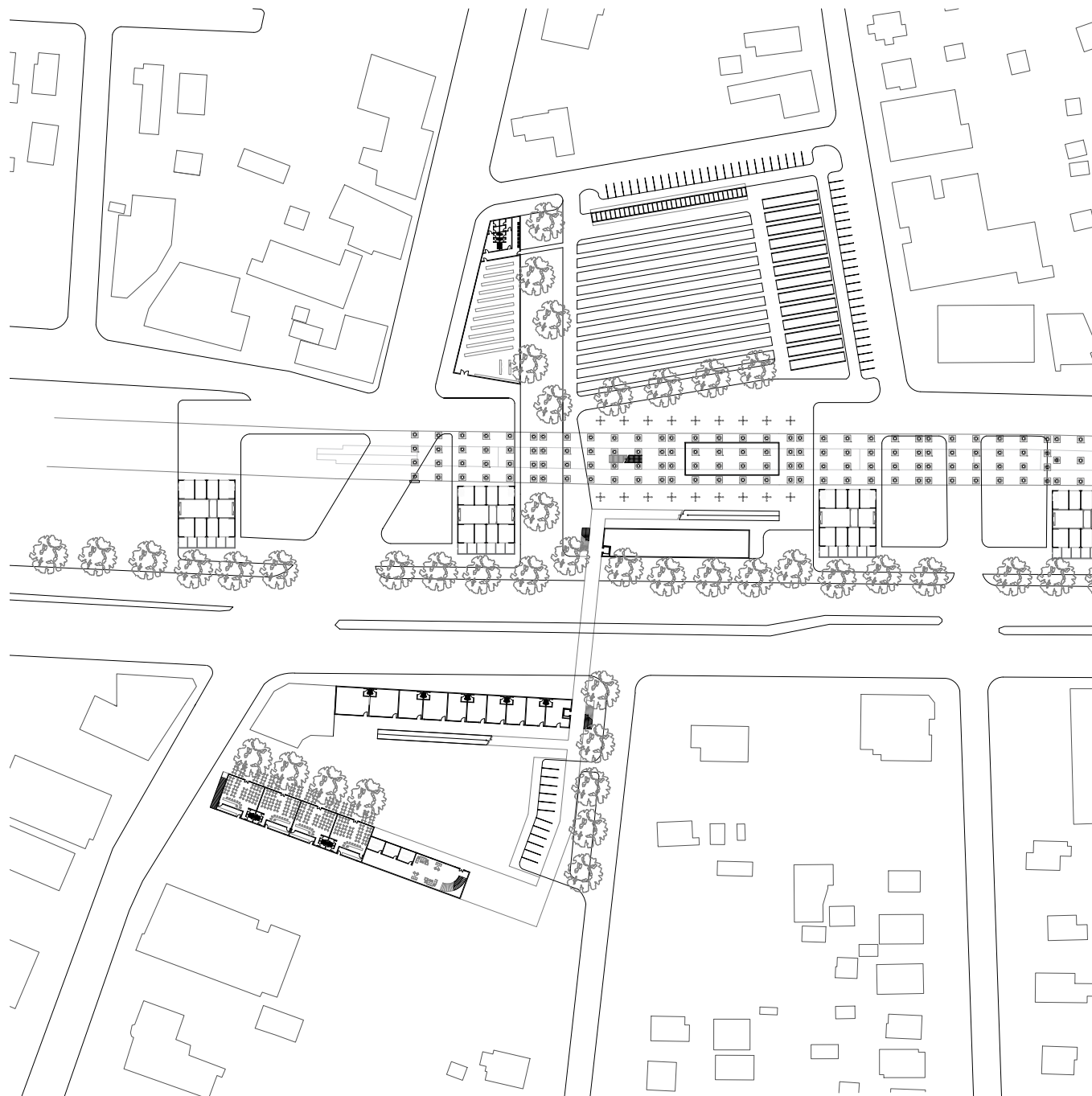


Solar Energy and Surface Meteorology

Variable	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
Insolation, kWh/m ² /day	1.79	2.66	3.66	4.44	5.21	5.70	5.65	5.00	3.98	2.89	1.89	1.57
Clearness, 0 - 1	0.45	0.49	0.49	0.47	0.48	0.49	0.50	0.50	0.48	0.47	0.43	0.44
Temperature, °C	-3.49	-1.86	2.75	9.00	15.63	20.98	23.43	22.41	18.34	11.60	5.60	-0.39
Wind speed, m/s	6.12	6.19	6.27	5.96	5.23	4.83	4.39	4.25	4.52	4.99	5.72	6.04
Precipitation, mm	84	79	95	100	99	91	98	92	85	76	96	91
Wet days, d	10.3	9.5	10.9	10.4	11.0	10.1	9.1	9.3	8.1	7.2	10.0	11.0



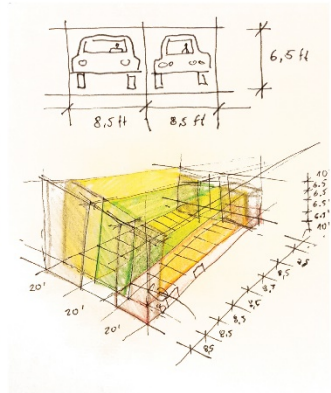
TOWARDS A NEW GREENER PARKING TYPOLOFY



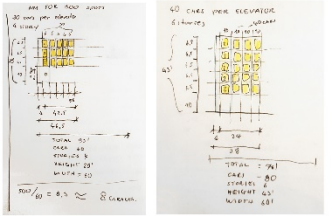
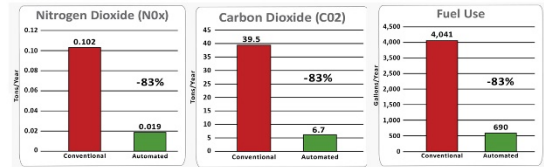
AUTOMATED PARKING



CALCULATIONS



Environmental Benefits



Spatial Benefits

100' x 100'			
Parking System	Automated Parking	Conventional Ramp	Ratio
Height or Depth	85'	145'	4.8
	50'	226'	4.5
	70'	343'	4.9

100' x 100'			
Parking System	Automated Parking	Conventional Ramp	Ratio
Height or Depth	85'	75'	2.7
	50'	290'	2.3
	70'	418'	3.4

100' x 100'			
Parking System	Automated Parking	Conventional Ramp	Ratio
Height or Depth	85'	269'	3.0
	50'	268'	2.8
	70'	332'	3.5

Concept

