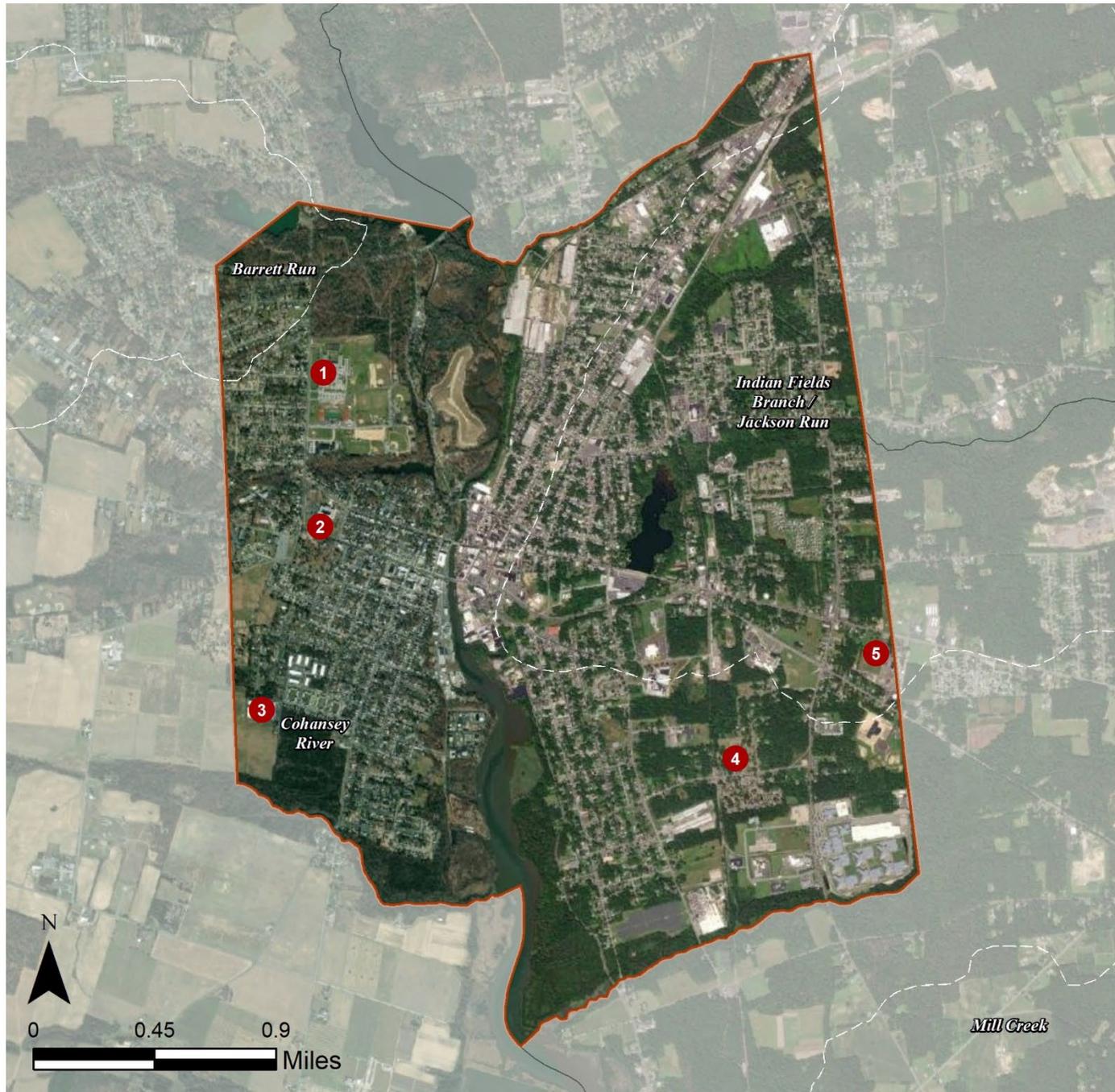


BRIDGETON CITY: GREEN INFRASTRUCTURE SITES



SITES WITHIN THE COHANSEY RIVER SUBWATERSHED

1. Bridgeton High School
2. Broad Street Elementary School & Bridgeton Middle School
3. Quarter Mile Lane School

SITES WITHIN THE INDIAN FIELDS BRANCH/JACKSON RUN SUBWATERSHED

4. Saint Phillip's Missionary Baptist Church
5. Bridgeton Public Charter School

BRIDGETON HIGH SCHOOL



Subwatershed: Cohansey River

Site Area: 2,579,490 sq. ft.

Address: 111 West Avenue North
Bridgeton, NJ 08302

Block and Lot: Blocks 283; 284; 285
Lots 2; 1 & 2; 1

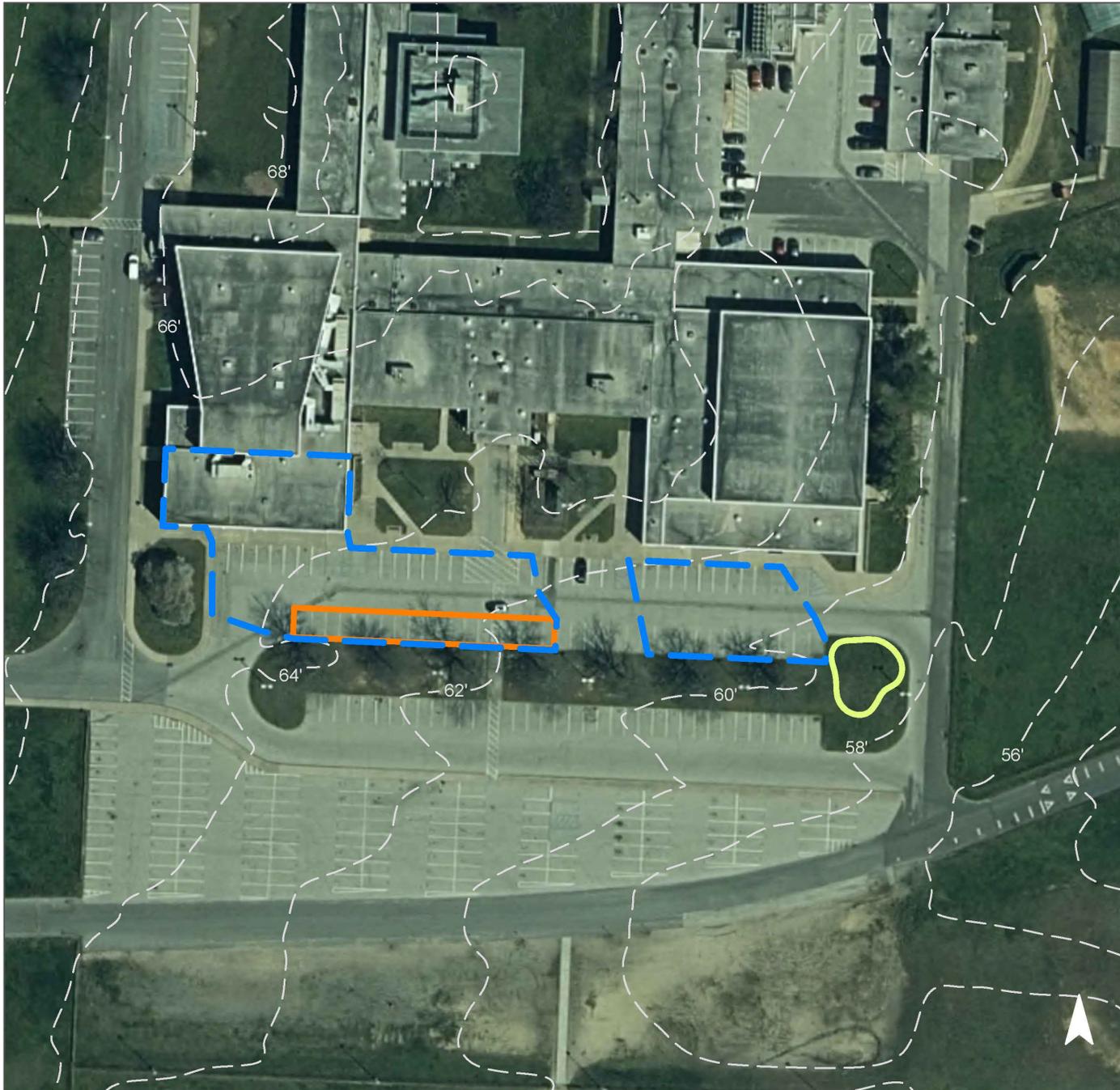


Three downspouts at the southwest corner of the building can be disconnected to a section of pervious pavement parking spots to treat and infiltrate the stormwater runoff from both the building and parking lot. A rain garden can be installed in the eastern island to capture, treat, and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
33	858,410	41.4	433.5	3,941.3	0.669	23.54

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.174	29	12,650	0.48	1,645	\$8,225
Pervious pavement	0.496	83	36,050	1.35	3,400	\$85,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Bridgeton High School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



BROAD STREET ELEMENTARY SCHOOL & BRIDGETON MIDDLE SCHOOL



Subwatershed: Cohansey River

Site Area: 549,305 sq. ft.

Address: 251 West Broad Street
Bridgeton, NJ 08302

Block and Lot: Block 271, Lot 1

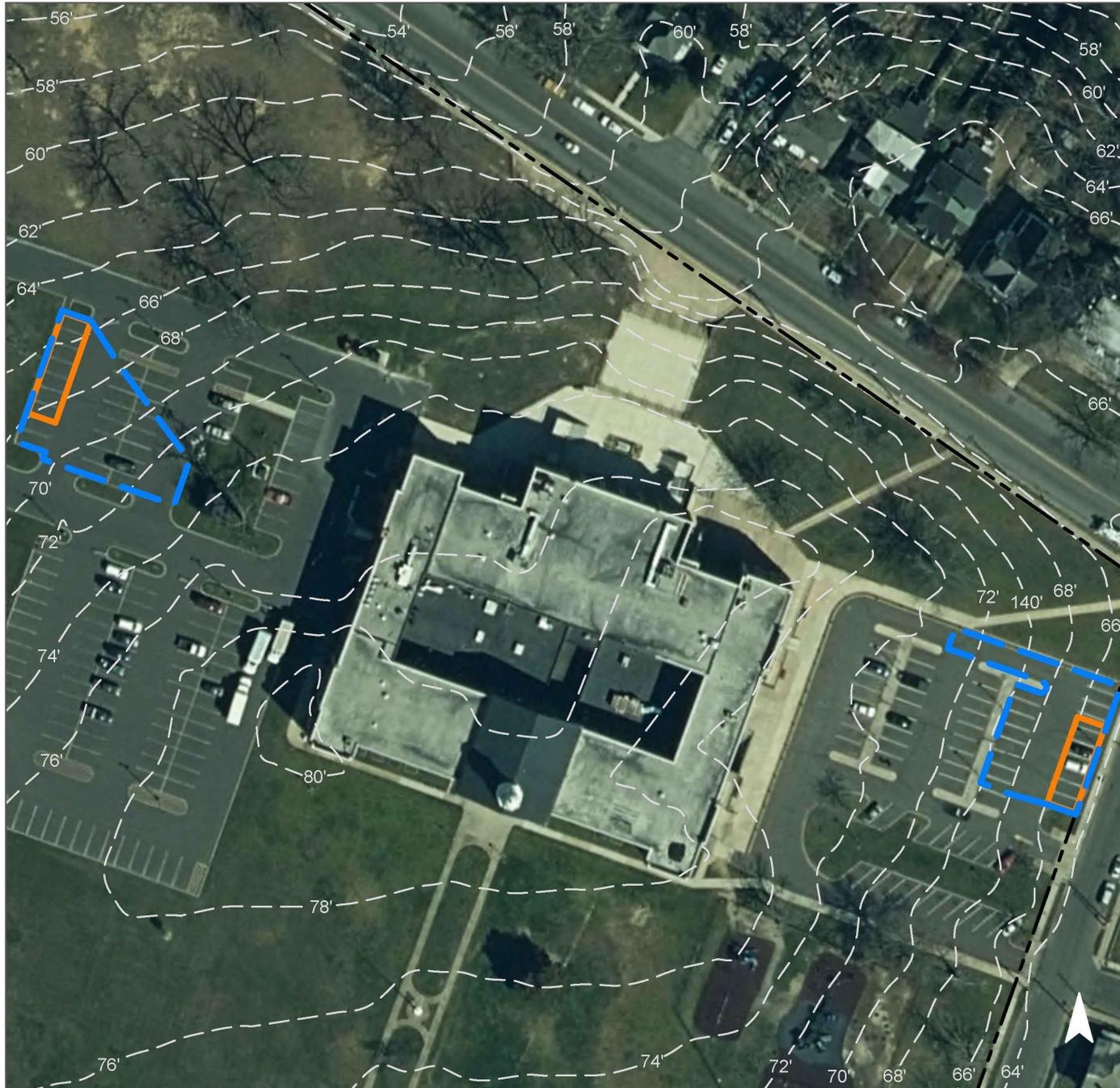


Two sections of pervious pavement parking spaces can be installed at the low side of the parking lots. This will capture and infiltrate parking lot runoff. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
56	306,115	14.8	154.6	1,405.5	0.239	8.40

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.356	60	25,890	0.97	2,600	\$65,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Broad Street Elementary School & Bridgeton Middle School

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



QUARTER MILE LANE SCHOOL



Subwatershed: Cohansey River

Site Area: 290,620 sq. ft.

Address: 300 Quarter Mile Lane
Bridgeton, NJ 08302

Block and Lot: Block 207, Lot 2

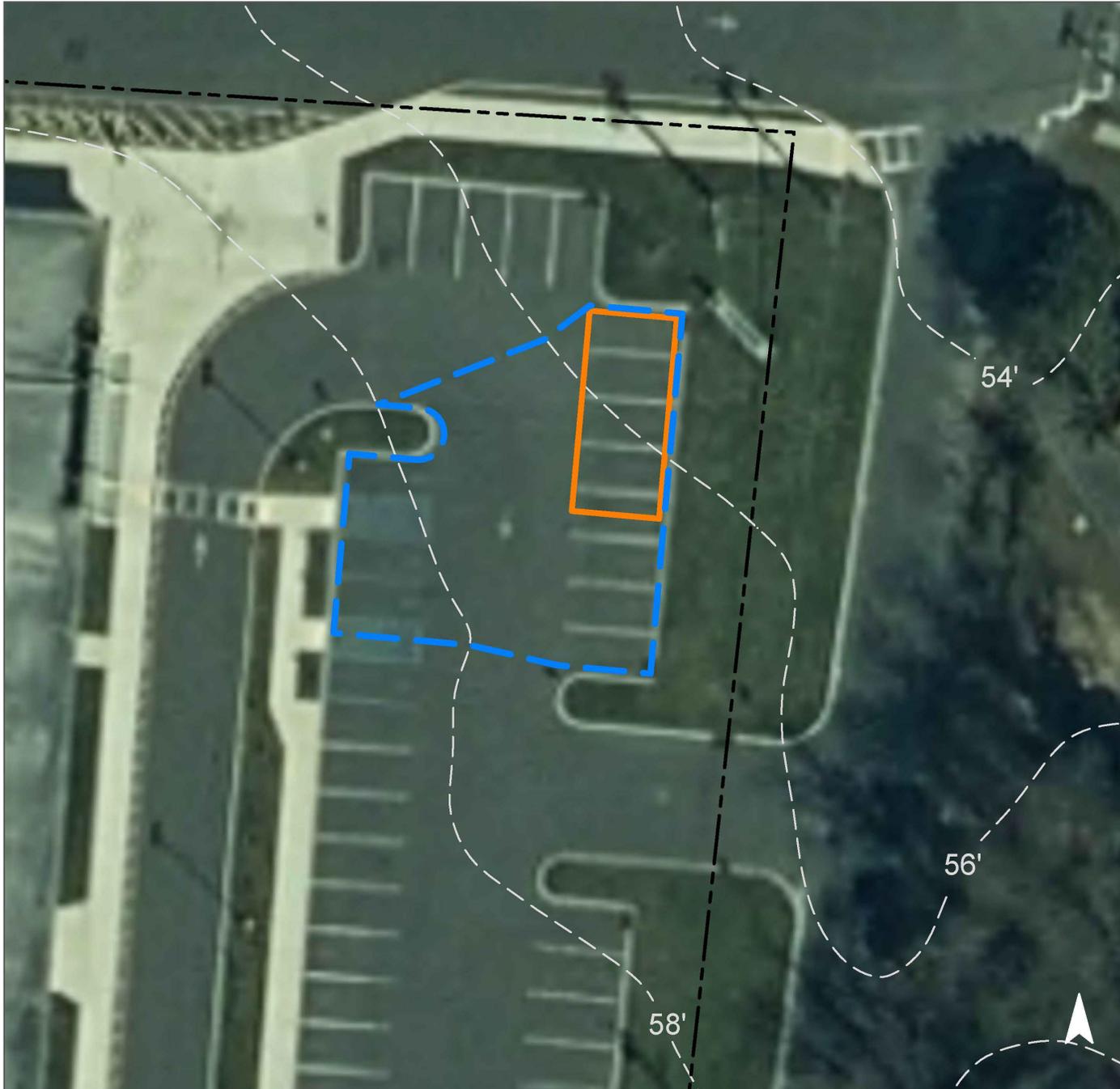


To manage parking lot runoff, parking spaces in the northeastern corner of the parking lot can be converted to pervious pavement. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
89	258,895	12.5	130.8	1,188.7	0.202	7.10

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.091	15	6,590	0.25	720	\$18,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Quarter Mile Lane School

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



SAINT PHILLIP'S MISSIONARY BAPTIST CHURCH



Subwatershed: Cohansey River

Site Area: 44,945 sq. ft.

Address: 275 Richardson Avenue
Bridgeton, NJ 08302

Block and Lot: Block 181,
Lots 5-9 & 18-21

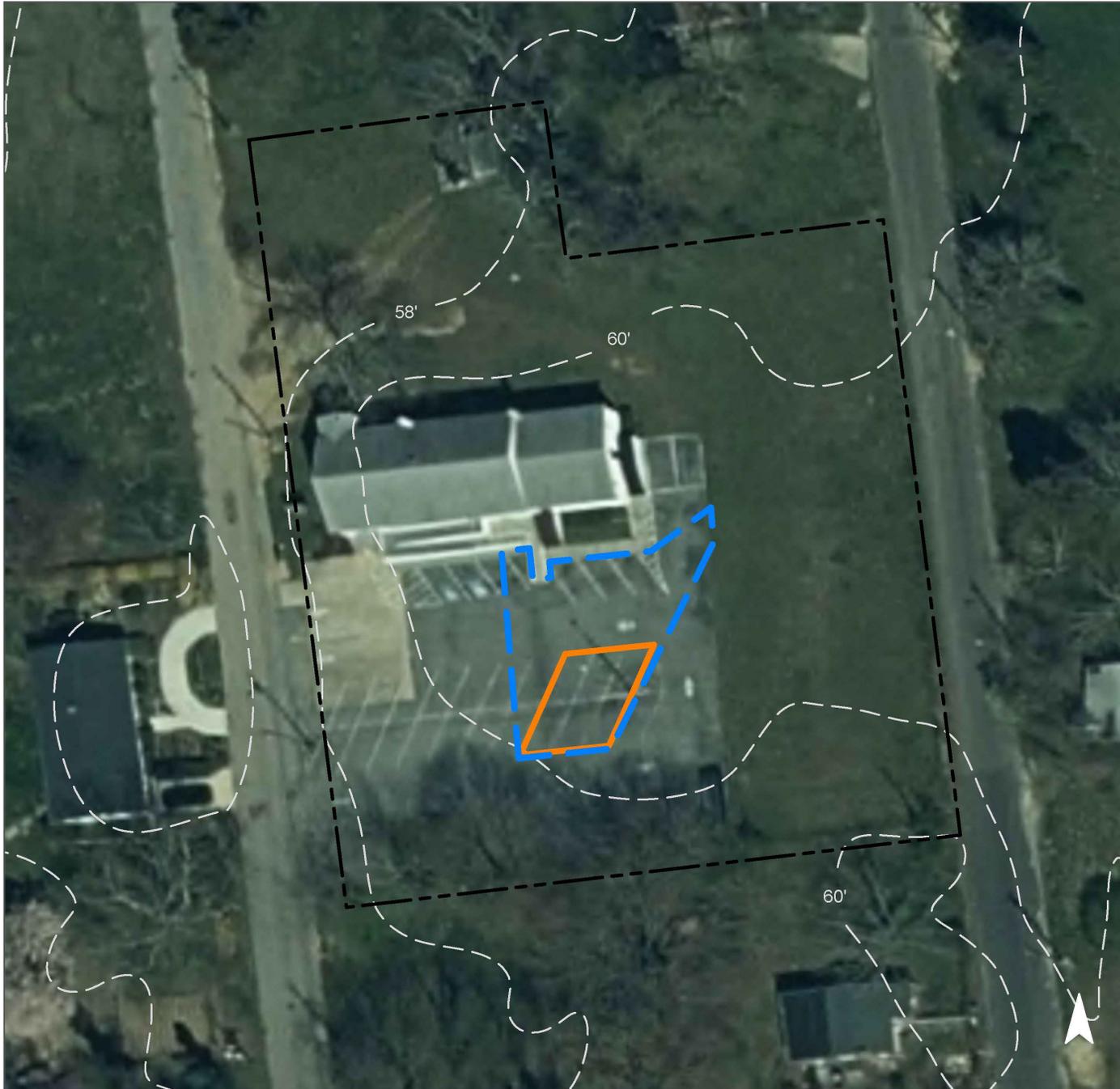


Parking spaces in the center of the lot can be replaced with pervious pavement to capture and infiltrate the stormwater runoff from the parking lot. A preliminary soil assessment suggests that the soils have suitable drainage characteristics for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
48	21,505	1.0	10.9	98.7	0.017	0.59

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Pervious pavement	0.083	14	6,020	0.23	960	\$24,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Saint Phillip's Missionary Baptist Church

-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



BRIDGETON PUBLIC CHARTER SCHOOL



Subwatershed: Indian Fields
Branch/Jackson Run

Site Area: 818,125 sq. ft.

Address: 790 East Commerce Street
Bridgeton, NJ 08302

Block and Lot: Block 186, Lots 17-25



A section of parking spaces on the north side of the parking lot can be replaced with pervious pavement to capture parking lot runoff. A rain garden can be placed in the western section of the island to capture, treat, and infiltrate the parking lot runoff. A preliminary soil assessment suggests that more soil testing would be required before determining the soil's suitability for green infrastructure.

Impervious Cover		Existing Loads from Impervious Cover (lbs/yr)			Runoff Volume from Impervious Cover (Mgal)	
%	sq. ft.	TP	TN	TSS	For the 1.25" Water Quality Storm	For an Annual Rainfall of 44"
51	416,980	20.1	210.6	1,914.5	0.325	11.44

Recommended Green Infrastructure Practices	Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Maximum Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cu. ft./second)	Estimated Size (sq. ft.)	Estimated Cost
Bioretention system	0.050	8	3,600	0.14	475	\$2,375
Pervious pavement	0.402	67	29,190	1.10	2,800	\$70,000

GREEN INFRASTRUCTURE RECOMMENDATIONS



Bridgeton Public Charter School

-  bioretention system
-  pervious pavement
-  drainage area
-  property line
-  2015 Aerial: NJOIT, OGIS



Summary of Existing Conditions

Subwatershed/Site Name/Total Site Info/GI Practice	Area (ac)	Area (SF)	Block	Lot	I.C. %	I.C. Area (ac)	I.C. Area (SF)	Existing Annual Loads (Commercial)			Runoff Volumes from I.C.		Runoff Volumes from I.C.	
								TP (lb/yr)	TN (lb/yr)	TSS (lb/yr)	Water Quality Storm (1.25" over 2-hours)	Annual (cu.ft.)	Water Quality Storm (1.25" over 2-hours)	Annual (Mgal)
											(cu.ft.)	(cu.ft.)	(Mgal)	(Mgal)
Cohansey River Sites	78.50	3,419,415				32.68	1,423,420	68.6	718.9	6535.4	148,273	5,219,207	1.109	39.04
1 Bridgeton High School Total Site Info	59.22	2,579,490	33; 284; 21	2; 1; 2; 1	33.2783	19.71	858,410	41.4	433.5	3941.3	89,418	3,147,503	0.669	23.54
2 Broad Street Elementary School & Bridgeton Middle School Total Site Info	12.61	549,305	271	1	55.7277	7.03	306,115	14.8	154.6	1405.5	31,887	1,122,422	0.239	8.40
3 Quarter Mile Lane School Total Site Info	6.67	290,620	207	2	89.0837	5.94	258,895	12.5	130.8	1188.7	26,968	949,282	0.202	7.10
4 Saint Phillip's Missionary Baptist Church Total Site Info	1.03	44,945	181	5-9, 18-21	47.8474	0.49	21,505	1.0	10.9	98.7	2,240	78,852	0.017	0.59
Indian Fields Branch/Jackson Run Sites	18.78	818,125				9.57	416,980	20.1	210.6	1914.5	43,435	1,528,927	0.325	11.44
5 Bridgeton Public Charter School Total Site Info	18.78	818,125	186	17 - 25	50.9678	9.57	416,980	20.1	210.6	1914.5	43,435	1,528,927	0.325	11.44

Summary of Proposed Green Infrastructure Practices

Subwatershed/Site Name/Total Site Info/GI Practice	Potential Management Area		Recharge Potential (Mgal/yr)	TSS Removal Potential (lbs/yr)	Max Volume Reduction Potential (gal/storm)	Peak Discharge Reduction Potential (cfs)	Size of BMP	Unit Cost (\$/unit)	Unit	Total Cost (\$)	I.C. Treated %
	Area (SF)	Area (ac)									
Cohansey River Sites	42,875	0.98	1.117	187	81,180	3.05				\$176,225	3%
1 Bridgeton High School											
Bioretention system	6,680	0.15	0.174	29	12,650	0.48	1,645	\$5	SF	\$8,225	1%
Pervious pavement	19,040	0.44	0.496	83	36,050	1.35	3,400	\$25	SF	\$85,000	2%
Total Site Info	25,720	0.59	0.670	112	48,700	1.83				\$93,225	3%
2 Broad Street Elementary School & Bridgeton Middle Sch											
Pervious pavement	13,675	0.31	0.356	60	25,890	0.97	2,600	\$25	SF	\$65,000	4%
Total Site Info	13,675	0.31	0.356	60	25,890	0.97				\$65,000	4%
3 Quarter Mile Lane School											
Pervious pavement	3,480	0.08	0.091	15	6,590	0.25	720	\$25	SF	\$18,000	1%
Total Site Info	3,480	0.08	0.091	15	6,590	0.25				\$18,000	1%
4 Saint Phillip's Missionary Baptist Church											
Pervious pavement	3,180	0.07	0.083	14	6,020	0.23	960	\$25	SF	\$24,000	15%
Total Site Info	3,180	0.07	0.083	14	6,020	0.23				\$24,000	15%
Indian Fields Branch/Jackson Run Sites	17,320	0.40	0.451	76	32,790	1.24				\$72,375	4%
5 Bridgeton Public Charter School											
Bioretention system	1,900	0.04	0.050	8	3,600	0.14	475	\$5	SF	\$2,375	0%
Pervious pavement	15,420	0.35	0.402	67	29,190	1.10	2,800	\$25	SF	\$70,000	4%
Total Site Info	17,320	0.40	0.451	76	32,790	1.24				\$72,375	4%