

1ST CONSTITUTION BANK 86 EAST BROAD STREET

This site currently has 24,700 square feet of impervious cover, creating 723,000 gallons of stormwater runoff and flushing 127 pounds of pollutants into Beden's Brook each year.

A rain garden installed next to the walkway would capture runoff from the roof, while a bioswale in the front would capture and treat much of the runoff from the parking lot and driveway surfaces.

These measures would remediate 39.5% of the site's impervious cover and could remove 7.43 pounds of pollutants from Beden's Brook annually and restore 271,000 gallons of water to the natural water cycle.

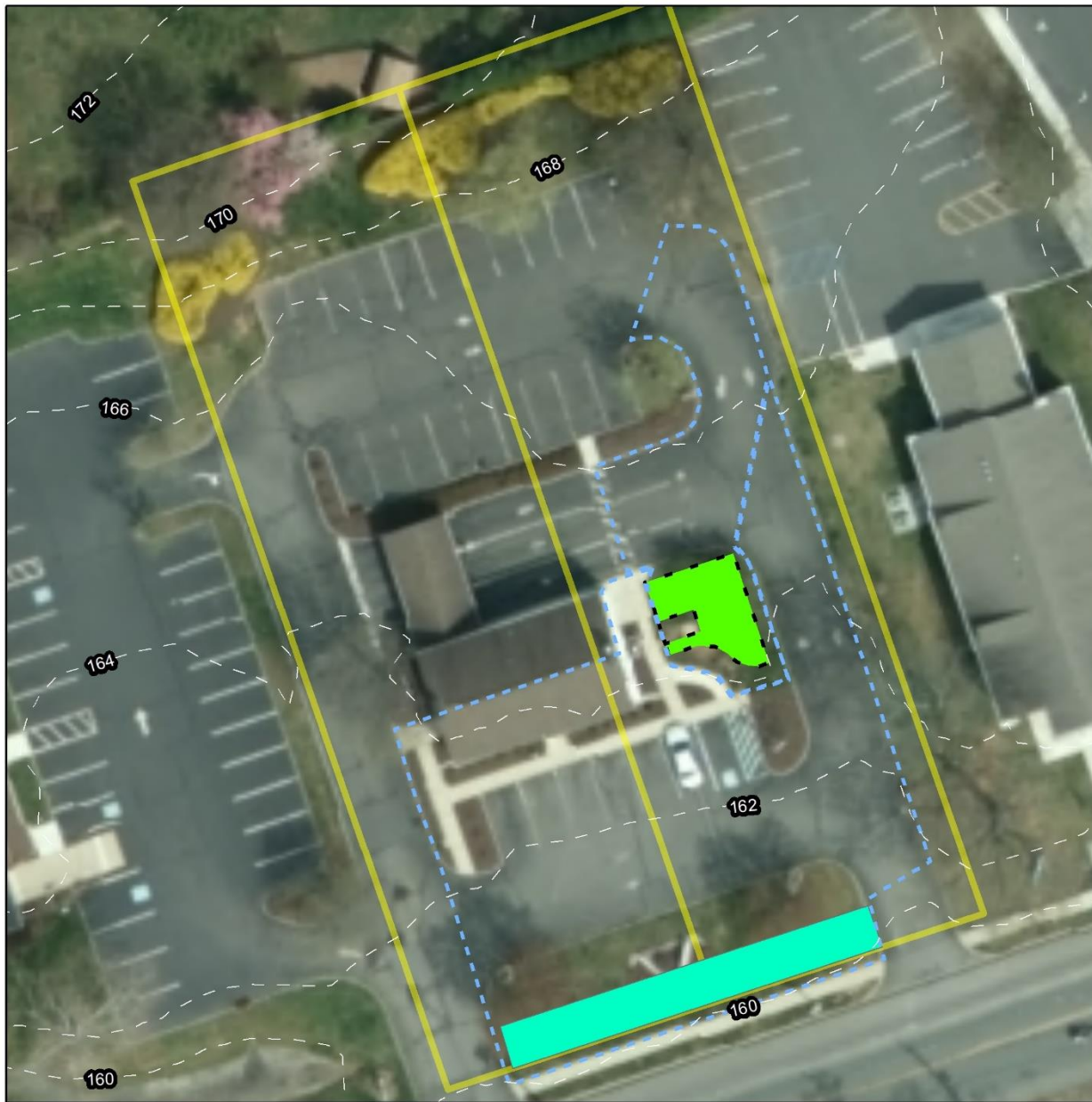


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
24,702	66.2%	1.19	12.48	113.42	19,249	50,816	722,825

Table 2: BMPs

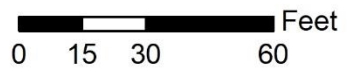
BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Bioswale	1,190	0.03	0.18	4.92	17,232	232,861	\$5,948.75
Rain Garden	533	0.02	0.08	2.20	2,846	38,452	\$2,667.15
Total	1,723	0.05	0.26	7.12	20,078	271,313	\$8,615.90



Source: Esri, DigitalGlobe,
GeoEye, Earthstar
Geographics, CNES/Airbus
DS, USDA, USGS,
AeroGRID, IGN, and the GIS

1ST CONSTITUTION BANK 86 EAST BROAD STREET

-  Property Line
-  Drainage Area
-  Bioswale
-  Rain Garden



AMY KARYN INTERIOR DESIGN

64 EAST BROAD STREET

This site currently has 18,200 square feet of impervious cover. Proposed development on this property would increase the site's impervious cover to 27,900 square feet, creating 817,000 gallons of stormwater runoff and flushing 144 pounds of pollutants into the Beden Brook each year.

Installing bioswales around the perimeter of the proposed building, rain gardens in the new parking area, and using porous pavement in the new development would remediate 100% of the site's proposed impervious cover.

These measures could remove 67.3 pounds of pollutants from the Beden Brook annually and restore 777,000 gallons of water to the natural water cycle.



Table 1a: Current Site Information

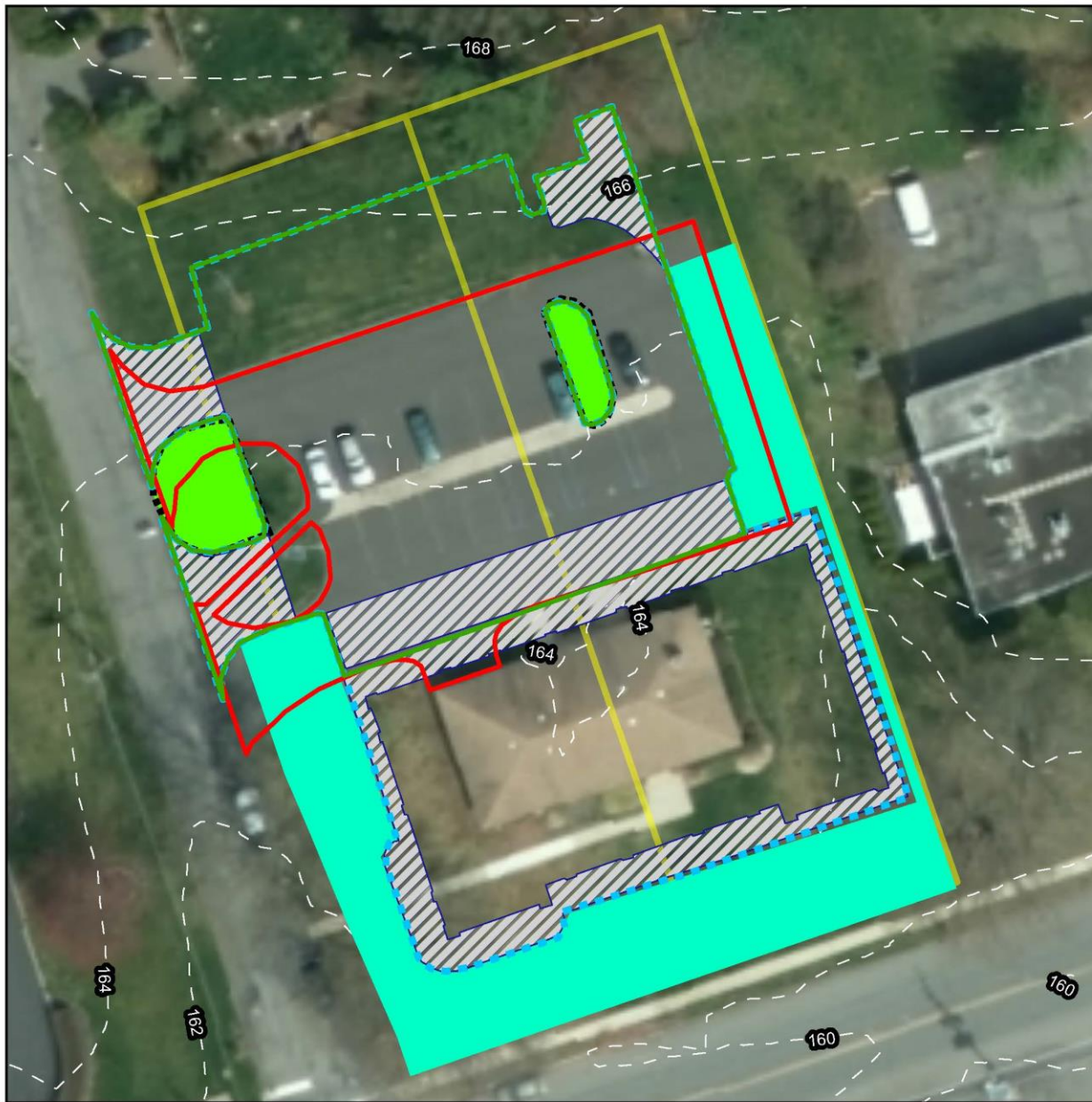
Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
18,176	47.7%	0.88	9.18	83.45	14,163	37,390	531,845

Table 1b: Proposed Development

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
27,934	73.2%	1.35	14.11	128.27	21,767	57,464	817,386

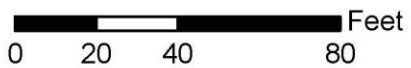
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Garden	1,193	0.03	0.18	4.93	6,470	87,430	\$5,965.00
Bioswale	8,034	0.23	1.22	33.20	25,497	344,542	\$24,102.00
Porous Pavement	6,954	0.20	1.76	25.54	25,496	344,531	\$83,448.00
Total	16,181	0.47	3.15	63.67	57,463	776,504	\$113,515.00



**AMY KARYN INTERIOR DESIGN
64 EAST BROAD STREET**

-  Proposed Parking Area
-  Original Parking Area
-  Proposed Drainage Area
-  Bioswale
-  Permeable Pavement
-  Rain Garden
-  Property Line



BAXTER

84 EAST BROAD STREET

This site currently has 19,500 square feet of impervious cover, creating 572,000 gallons of stormwater runoff and flushing 101 pounds of pollutants into Beden's Brook each year.

Naturalizing the stormwater basin would remediate 100% of the site's impervious cover and a significant portion of the neighboring property's. This could remove 15.1 pounds of pollutants from Beden's Brook annually and restore 876,000 gallons of water to the natural water cycle.

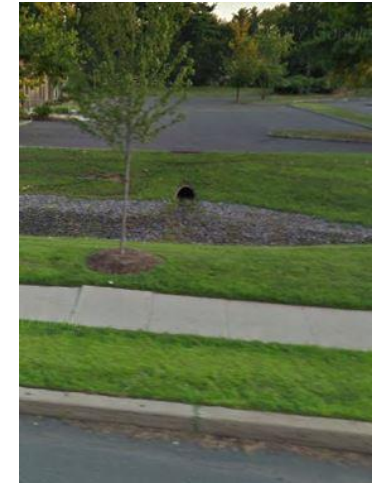
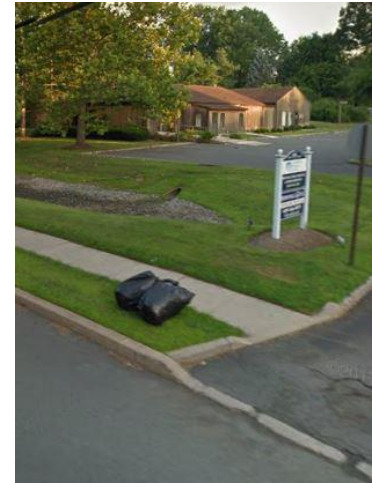


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
19,549	51.8%	0.94	9.87	89.76	15,233	40,215	572,026

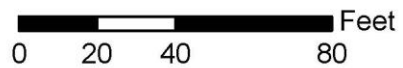
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction Potential	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Stormwater Basin Naturalization	3,492	0.10	0.53	14.43	64,828	876,017	\$17,461.20
Total	3,492	0.10	0.53	14.43	64,828	876,017	\$17,461.20



BAXTER
84 EAST BROAD STREET

-  Property Line
-  Drainage Area
-  Basin Naturalization



BORO OF HOPEWELL COURT CLERK

88 EAST BROAD STREET

This site currently has 12,100 square feet of impervious cover, creating 354,000 gallons of stormwater runoff and flushing 62.3 pounds of pollutants into Beden's Brook each year.

Installing a bioswale along a pre-existing depression on this site would capture runoff from the roof. This would be the beginning of a continuous bioswale on 7 potential restoration sites, running along East Broad Street

This measure would remediate 45.7% of the site's impervious cover and could remove 4.85 pounds of pollutants from Beden's Brook annually and restore 154,000 gallons of water to the natural water cycle.

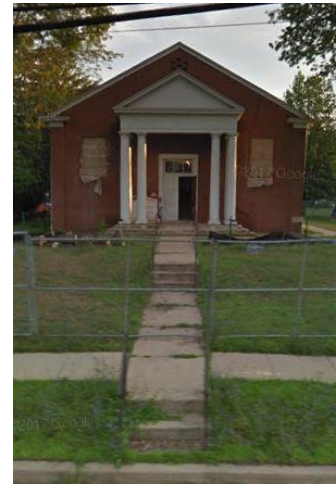


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
12,112	58.7%	0.58	6.12	55.61	9,438	24,915	354,401

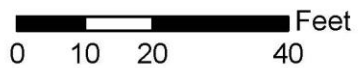
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Bioswale	1,126	0.03	0.17	4.65	11,387	153,870	\$5,627.75
Total	1,126	0.03	0.17	4.65	11,387	153,870	\$5,627.75



**BORO OF HOPEWELL
COURT CLERK
88 EAST BROAD STREET**

-  Property Line
-  Drainage Area
-  Bioswale



BRICK FARM MARKET

65 EAST BROAD STREET

This site currently has 30,200 square feet of impervious cover, creating 883,000 gallons of stormwater runoff and flushing 155 pounds of pollutants into Beden's Brook each year.

Rain columns along the side of the building would capture runoff from the roof of the main building. The roof runoff from the other two buildings on the property would be redirected to an infiltration trench below the picnic table and a bioswale strip along the back parking spaces. There is a choice between repaving the front parking spaces with porous pavement or installing a bioswale along the sidewalk to capture runoff from the parking lot.

These measures would remediate 61.6% of the site's impervious cover and could remove 13.5 pounds of pollutants from Beden's Brook annually and restore 516,000 gallons of water to the natural water cycle.

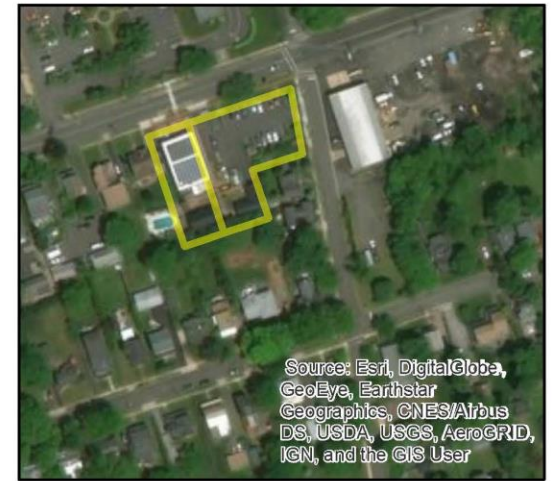
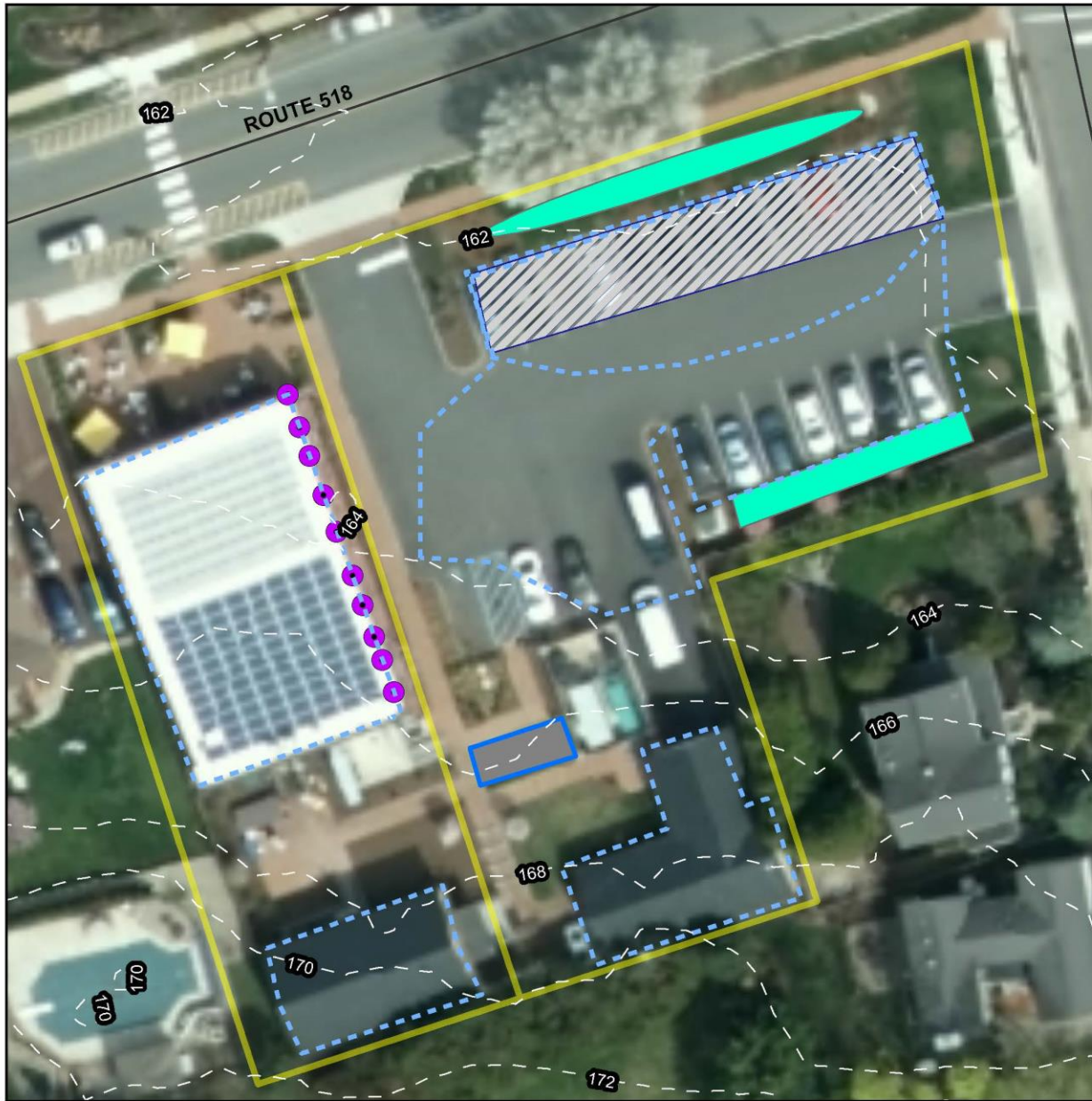


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
30,165	91.4%	1.45	15.24	138.50	23,505	62,054	882,677

Table 2: BMPs

BMP Type	BMP Area (sq ft) or Capacity (gal)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Columns	1,500	0.00	0.00	0.00	8,184	110,594	\$6,000.00
Porous Pavement	2,126	0.06	0.54	7.81	17,601	237,847	\$25,506.48
Bioswale 1	530	0.02	0.08	2.19	6,790	91,759	\$2,648.10
Bioswale 2	437	0.01	0.07	1.80	3,279	44,306	\$2,182.85
Infiltration Trench	210	0.01	0.03	0.87	2,365	31,956	\$1,051.95
Total	4,802	0.10	0.72	12.67	38,220	516,462	\$37,389.38



BRICK FARM MARKET 65 EAST BROAD STREET

-  Property Line
-  Drainage Area
-  Rain Column
-  Bioswale
-  Infiltration Trench
-  Porous Pavement

0 15 30 60 Feet



HOPEWELL CENTER 57 HAMILTON AVENUE

This site currently has 105,000 square feet of impervious cover, creating 3.07 million gallons of stormwater runoff and flushing 316 pounds of pollutants into Beden's Brook each year.

Repaving the parking spots along the road with porous pavement would capture and treat runoff from the main parking lot. A cistern would capture runoff from the roof, and replacing the lawn in the back of the property with a vegetated filter would capture some runoff from the rear parking lot and capture stormwater before it reaches the pavement, alleviating the erosion there.

These measures would remediate 87.4% of the site's impervious cover and could remove 40.5 pounds of pollutants from Beden's Brook annually and restore 2.55 million gallons of water to the natural water cycle.



Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
105,046	74.8%	2.41	24.12	289.38	81,854	216,095	3,073,785

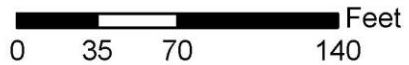
Table 2: BMPs

BMP Type	BMP Area (sq ft) or Capacity (gal)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Porous Pavement	5,157	0.07	0.59	11.36	36,431	492,294	\$61,878.48
Vegetative Filter	11,105	0.15	0.76	27.53	20,345	274,922	\$55,523.96
Cistern	135,000	0.00	0.00	0.00	132,159	1,785,873	\$270,000.00
Total	151,261	0.22	1.36	38.90	188,935	2,553,089	\$387,402.44



**HOPEWELL CENTER
57 HAMILTON AVENUE**

-  Property Line
-  Drainage Area
-  Cistern
-  Porous Pavement
-  Vegetated Swale



HOPEWELL CENTER PARKING 62 SOMERSET STREET

This site currently has 32,000 square feet of impervious cover, creating 938,000 gallons of stormwater runoff and flushing 96.4 pounds of pollutants into Beden's Brook each year.

Installing porous pavement in the parking spaces would remediate 90.9% of the site's impervious cover and could remove 29.3 pounds of pollutants from Beden's Brook annually and restore 809,000 gallons of water to the natural water cycle.

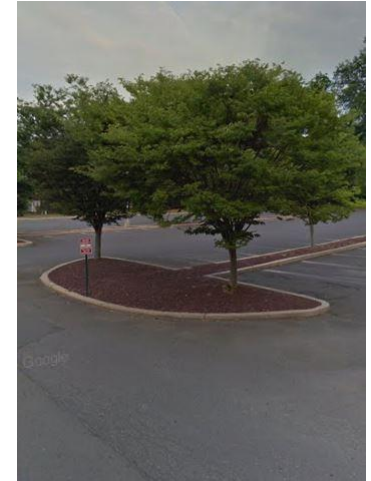


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
32,042	84.5%	0.74	7.36	88.27	24,968	65,916	937,603

Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Porous Pavement 1	4,004	0.06	0.46	8.83	20,414	275,860	\$48,053.78
Porous Pavement 2	4,488	0.06	0.52	9.89	19,713	266,388	\$53,853.30
Porous Pavement 3	4,063	0.06	0.47	8.95	19,763	267,057	\$48,753.79
Total	12,555	0.17	1.44	27.67	59,891	809,305	\$150,660.88



**HOPEWELL CENTER PARKING
62 SOMERSET STREET**

-  Property Line
-  Drainage Area
-  Porous Pavement

0 15 30 60 Feet



HOPEWELL MEMORIAL HOME

71 EAST PROSPECT STREET

This site currently has 13,900 square feet of impervious cover, creating 406,00 gallons of stormwater runoff and flushing 41.7 pounds of pollutants into Beden's Brook each year.

A rain garden in the front would capture runoff from the roof, while a bioswale along the side of the property would capture runoff from the driveway and surrounding compacted lawn. Replacing the lawn in the back with a vegetated filter would capture much of the runoff from the parking lot.

These measures would remediate 100% of the site's impervious cover and could remove 27 pounds of pollutants from Beden's Brook annually and restore 490,000 gallons of water to the natural water cycle.



Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
13,875	37.9%	0.32	3.19	38.22	10,812	28,543	405,997

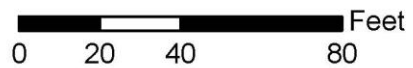
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Garden	763	0.01	0.05	1.89	4,976	67,235	\$3,815.44
Bioswale	1,350	0.02	0.09	3.35	17,998	243,206	\$6,748.60
Vegetated Filter	8,371	0.12	0.58	20.75	13,276	179,396	\$41,852.60
Total	10,483	0.14	0.72	25.99	36,249	489,837	\$52,416.64



**HOPEWELL MEMORIAL HOME
71 EAST PROSPECT STREET**

-  Property Line
-  Drainage Area
-  Bioswale
-  Rain Garden
-  Vegetated Filter



HOPEWELL PRESBYTERIAN CHURCH

80 WEST BROAD STREET

This site currently has 19,800 square feet of impervious cover, creating 580,000 gallons of stormwater runoff and flushing 59.6 pounds of pollutants into Beden's Brook each year.

Two rain gardens and a bioswale along the yard would capture runoff from the roof as well as from surrounding compacted grass

These measures would remediate 28.4% of the site's impervious cover and could remove 4.90 pounds of pollutants from Beden's Brook annually and restore 157,000 gallons of water to the natural water cycle.



Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
19,824	33.4%	0.46	4.55	54.61	15,447	40,781	580,082

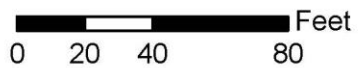
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Garden	787	0.01	0.05	1.95	4,705	63,582	\$3,935.95
Rain Garden	726	0.01	0.05	1.80	2,882	38,940	\$3,627.92
Bioswale	399	0.01	0.03	0.99	4,006	54,128	\$1,993.80
Total	1,912	0.03	0.13	4.74	11,592	156,650	\$9,557.67



**HOPEWELL PRESBYTERIAN CHURCH
80 WEST BROAD STREET**

-  Property Line
-  Drainage Area
-  Bioswale
-  Rain Garden



HOPEWELL VILLAGE SQUARE 52 EAST BROAD STREET

This site currently has 71,900 square feet of impervious cover, creating 2.1 million gallons of stormwater runoff and flushing 370 pounds of pollutants into Beden's Brook each year.

Rain columns and bioswales in the front of the building would capture some of the roof runoff, while strategically placed rain gardens would capture and treat runoff from some parking areas and driveways.

These measures would remediate 21.2% of the site's impervious cover and could remove 22.2 pounds of pollutants from Beden's Brook annually and restore 424,000 gallons of water to the natural water cycle.

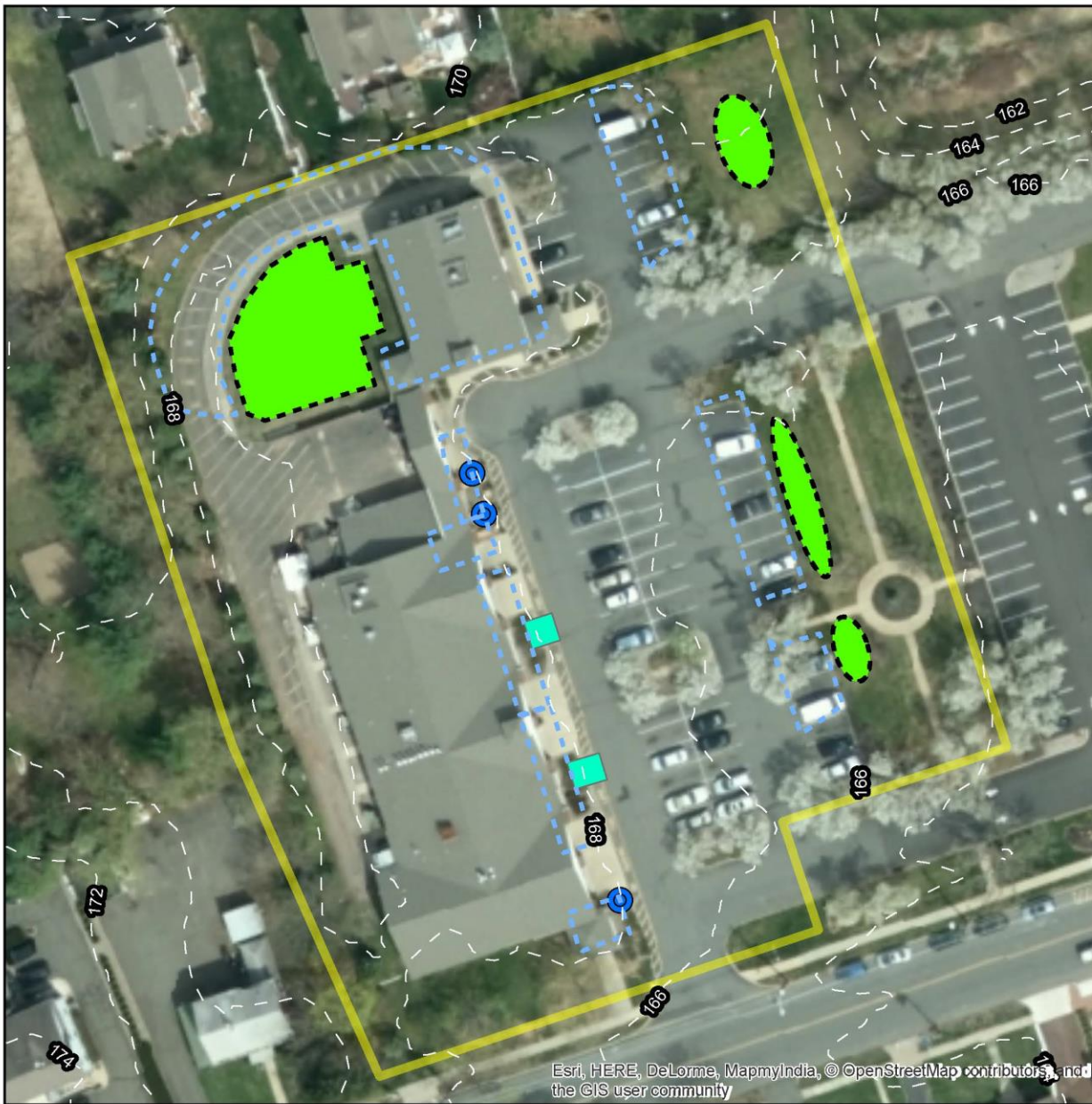


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
71,935	69.8%	3.47	36.33	330.28	56,053	147,981	2,104,918

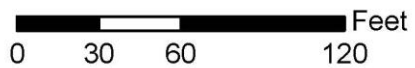
Table 2: BMPs

BMP Type	BMP Area (sq ft) or Capacity (gal)	Reduction Potential (lb/yr)			Maximum Volume Reduction Potential (gal/storm)	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Bioswales	298	0.01	0.05	1.23	3,166	42,781	\$1,488.73
Rain Gardens	4,852	0.14	0.74	20.05	24,869	336,050	\$24,259.87
Rain Columns (3)	450	0.00	0.00	0.00	3,353	45,311	\$1,800.00
Total	5,600	0.15	0.78	21.28	31,388	424,142	\$27,548.60



HOPEWELL VILLAGE SQUARE 52 EAST BROAD STREET

-  Property Line
-  Drainage Area
-  Rain Column
-  Bioswale
-  Rain Garden



PNC BANK

62 EAST BROAD STREET

This site currently has 41,100 square feet of impervious cover, creating 1.20 million gallons of stormwater runoff and flushing 123 pounds of pollutants into Beden's Brook each year.

Rain gardens would capture and treat runoff from the roof, while a bioswale along the roadway would treat runoff from the paved surfaces before it reaches storm drains.

These measures would remediate 90.4% of the site's impervious cover and could remove 34.5 pounds of pollutants from Beden's Brook annually and restore 1.03 million gallons of water to the natural water cycle.

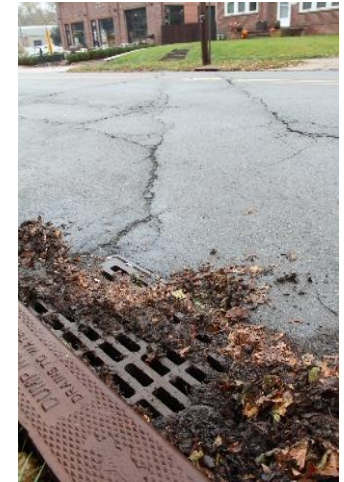


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
41,056	40.4%	0.94	9.43	113.10	31,992	84,458	1,201,351

Table 2: BMPs

BMP Type	BMP Area (sq ft)	Removal Potential (lb/yr)			Maximum Volume Reduction Potential (gal/storm)	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Gardens	2,517	0.03	0.17	6.24	12,338	166,729	\$12,587.34
Bioswale	10,933	0.15	0.75	27.11	62,613	846,094	\$54,666.30
Depaving	678	0.00	0.00	0.00	1,394	18,836	\$2,032.83
Total	14,128	0.19	0.93	33.35	76,346	1,031,659	\$69,286.47



**PNC BANK
62 EAST BROAD STREET**

-  Property Line
-  Drainage Area
-  Bioswale
-  Depave
-  Rain Garden
-  Basin Naturalization

0 35 70 140 Feet



THE TOMATO FACTORY

2 SOMERSET STREET

This site currently has 16,500 square feet of impervious cover, creating 483,000 gallons of stormwater runoff and flushing 49.6 pounds of pollutants into Beden's Brook each year.

Replacing the compacted gravel parking lot with porous pavement would capture runoff from the roof. Depaving the unused pavement in the rear of the property would remove a significant portion of impervious cover and a rain garden installed in a problem area of the property would treat runoff from the railroad tracks and prevent further erosion.

These measures would remediate 100% of the site's impervious cover and could remove 18.4 pounds of pollutants from Beden's Brook annually and restore 481,000 gallons of water to the natural water cycle.



Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
16,492	54.2%	0.38	3.79	45.43	12,851	33,926	482,570

Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction Potential (gal/storm)	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Rain Garden	452	0.01	0.03	1.12	2,375	32,091	\$2,261.12
Porous Pavement	7,377	0.10	0.85	16.26	30,408	410,908	\$88,521.84
Depaving	1,373	0.00	0.00	0.00	2,824	38,166	\$2,745.92
Total	9,202	0.11	0.88	17.38	35,607	481,165	\$93,528.88



THE TOMATO FACTORY 2 SOMERSET STREET

-  Property Line
-  Drainage Area
-  Depave
-  Porous Pavement
-  Rain Garden

0 15 30 60 Feet



VALLEY OIL 54 SOMERSET STREET

This site currently has 36,600 square feet of impervious cover, creating 1.07 million gallons of stormwater runoff and flushing 110 pounds of pollutants into Beden's Brook each year.

Replacing the compacted gravel parking area with porous pavement would treat runoff from the driveway, while a drywell installed along the side of the building would capture runoff from the roof.

This measure would remediate 50.4% of the site's impervious cover and could remove 4.91 pounds of pollutants from Beden's Brook annually and restore 513,000 gallons of water to the natural water cycle.



Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
36,589	89.6%	0.84	8.40	100.80	28,511	75,268	1,070,636

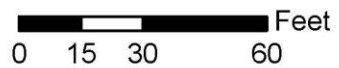
Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction Potential (gal/storm)	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Porous Pavement	2,106	0.03	0.24	4.64	24,196	326,965	\$25,268.38
Dry Well	379	0.00	0.00	0.00	13,770	186,081	\$3,787.30
Total	2,484	0.03	0.24	4.64	37,967	513,046	\$29,055.68



**VALLEY OIL
54 SOMERSET STREET**

-  Property Line
-  Drainage Area
-  Dry Well
-  Porous Pavement



VERIZON WIRELESS

68 EAST BROAD STREET

This site currently has 12,700 square feet of impervious cover, creating 370,000 gallons of stormwater runoff and flushing 65.1 pounds of pollutants into Beden's Brook each year.

A bioswale, part of a contiguous bioswale along East Broad Street, would remediate 100% of the site's impervious cover and could remove 10.2 pounds of pollutants from Beden's Brook annually and restore 380,000 gallons of water to the natural water cycle.

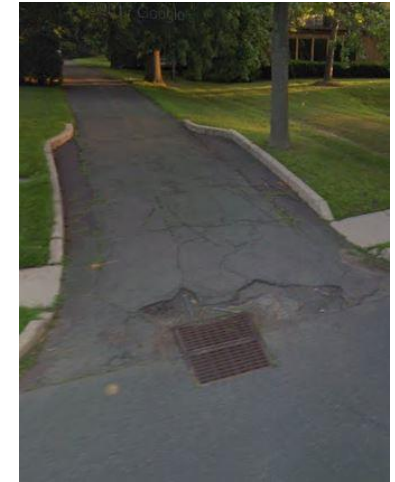
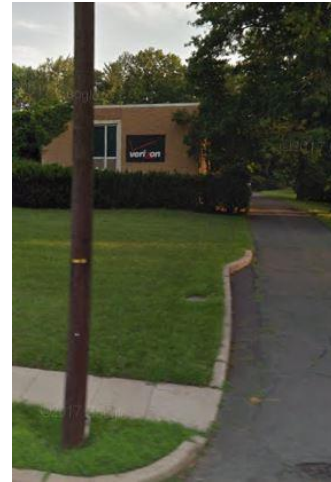
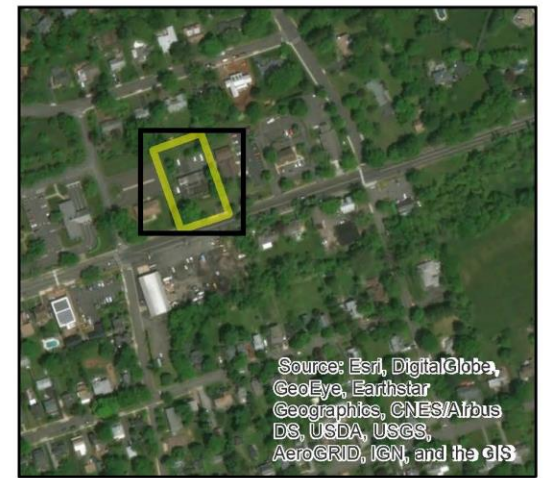


Table 1: Site Information

Impervious Cover		Existing Annual Loads (lb/yr)			Runoff Volume (gal)		
Square Footage	Percentage	TP	TN	TSS	Water Quality Storm	Two Year Storm	Annual Rainfall
12,651	33.9%	0.61	6.39	58.08	9,858	26,024	370,173

Table 2: BMPs

BMP Type	BMP Area (sq ft)	Reduction Potential (lb/yr)			Maximum Volume Reduction Potential (gal/storm)	Recharge Potential (gal/year)	Estimated Cost
		TP	TN	TSS			
Bioswale	2,373	0.07	0.36	9.80	28,153	380,437	\$11,862.56
Total	2,373	0.07	0.36	9.80	28,153	380,437	\$11,862.56



VERIZON WIRELESS 68 EAST BROAD STREET

-  Property Line
-  Drainage Area
-  Bioswale

0 20 40 80 Feet

