

5.10 Study Area 10 – Turtle Creek / East Pittsburgh

These findings apply ALCOSAN Points of Connection T-01 through T-04, which include combined sewer systems in Wilkins Township, North Braddock Borough, East Pittsburgh Borough and Turtle Creek Borough.

Turtle Creek / East Pittsburgh - BMP GIS Features

The SUSTAIN BMP siting tool analysis resulted in identification of a total of 2,278 BMP GIS Features covering 168 acres, which consisted of the following:

Table 5.10-1 - TOTAL SUSTAIN BMP Features Output

SUSTAIN BMP Feature Type	Number of Features	Area of BMP Features (Acres)
Permeable Pavement	369	23
Bioretention	665	41
Infiltration Basin/Trenches	276	46
Vegetated Filter Strips	379	38
Grass Swales	512	19
Constructed Wetlands	77	2

Locations of all identified BMP GIS features are presented on the SUSTAIN BMP Features Figure.

Turtle Creek / East Pittsburgh - Concept Municipal GSI Projects

Based on the BMP features, 62 concept Municipal GSI Projects were identified covering 9 total acres with a corresponding drainage area delineation of 113 total acres and consisted of the following:

Table 5.10-2 - Summary of Identified Concept Municipal GSI Projects

Concept GSI Technology	Number of Projects	GSI Project Area (Acres)	Project Drainage Area (Acres)
Permeable Pavement	29	8	65
Bioretention	32	1	46
Infiltration Basin/Trenches	1	< 1	2
Vegetated Filter Strips	0	0	0
Grass Swales	0	0	0
Constructed Wetlands	0	0	0

Project statistics including ALCOSAN POC, model subcatchment, BMP type, project area, area of project inside and outside of the public right-of-way, tributary drainage area, and tributary impervious drainage area are provided in the Concept Municipal Projects Table. Locations of all identified Concept Municipal GSI projects are presented in the Concept Municipal GSI Projects Figure (1) and the corresponding delineated tributary drainage areas are presented by BMP in the Individual Project Drainage Area Figures (3).

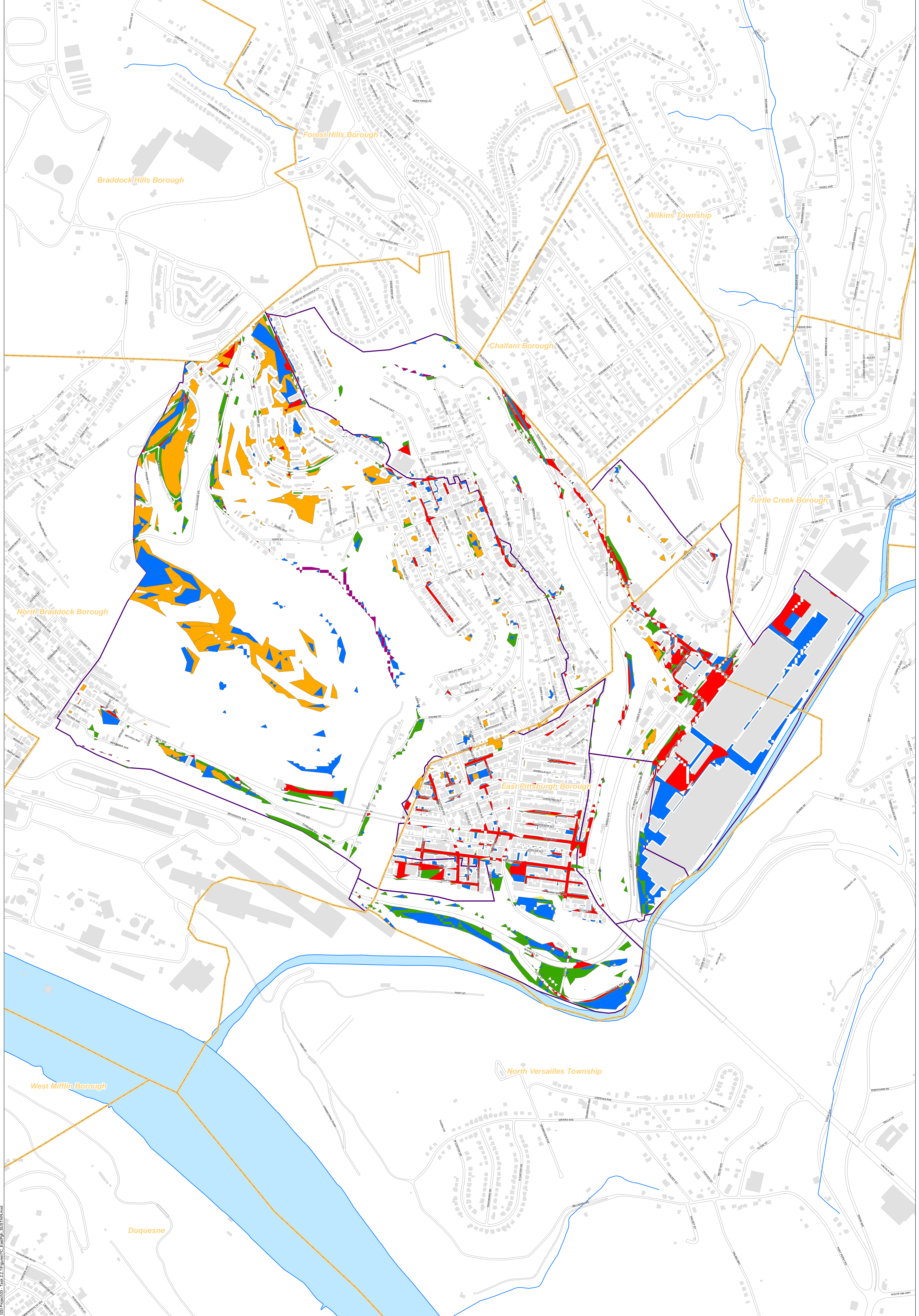
Turtle Creek / East Pittsburgh - Concept Commercial/Institutional and Special Case GSI Projects

Based on the BMP features, 39 concept Commercial/Institutional and Special Case GSI Projects were identified covering 21 total acres and consisted of the following:

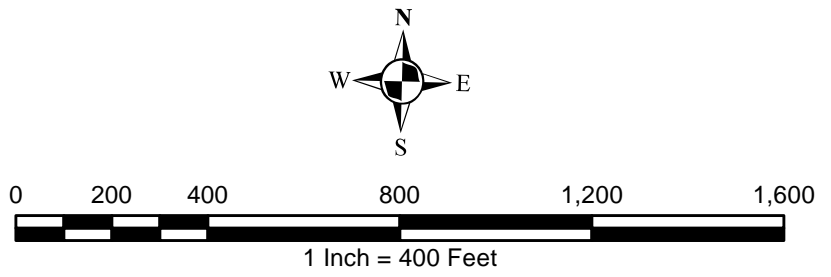
Table 5.10-3 - Summary of Identified Concept Commercial/Institutional and Special Case GSI Projects

Concept GSI Technology or Special Case Project Category	Number of Projects	GSI Project Area (Acres)
Commercial/Institutional Permeable Pavement	12	6
Commercial/Institutional Green Roofs	19	8
State Route Permeable Pavement	8	7
Busway Permeable Pavement	0	0
Busway Bioretention	0	0

Project statistics including ALCOSAN POC, model subcatchment, BMP type, project area, area of project taxable, exempt, provisionally exempt and in the public right-of-way are provided in Concept Commercial / Institutional GSI Projects Table. Locations of all identified Concept Commercial / Institutional GSI projects are presented in the Concept Commercial / Institutional GSI Projects Figure (1).



- Permeable Pavement
- Bioretention Basin
- Infiltration Basin / Trench
- Vegetated Filter Strips
- Grass Swales
- Constructed Wetlands
- Combined Sewer Subcatchment
- Municipal Boundaries



ALCOSAN GSI Project
Turtle Creek - East Pittsburgh T-01 thru T-04
SUSTAIN BMP Features

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Turtle Creek-East Pittsburgh Concept Municipal Projects

May 21, 2014

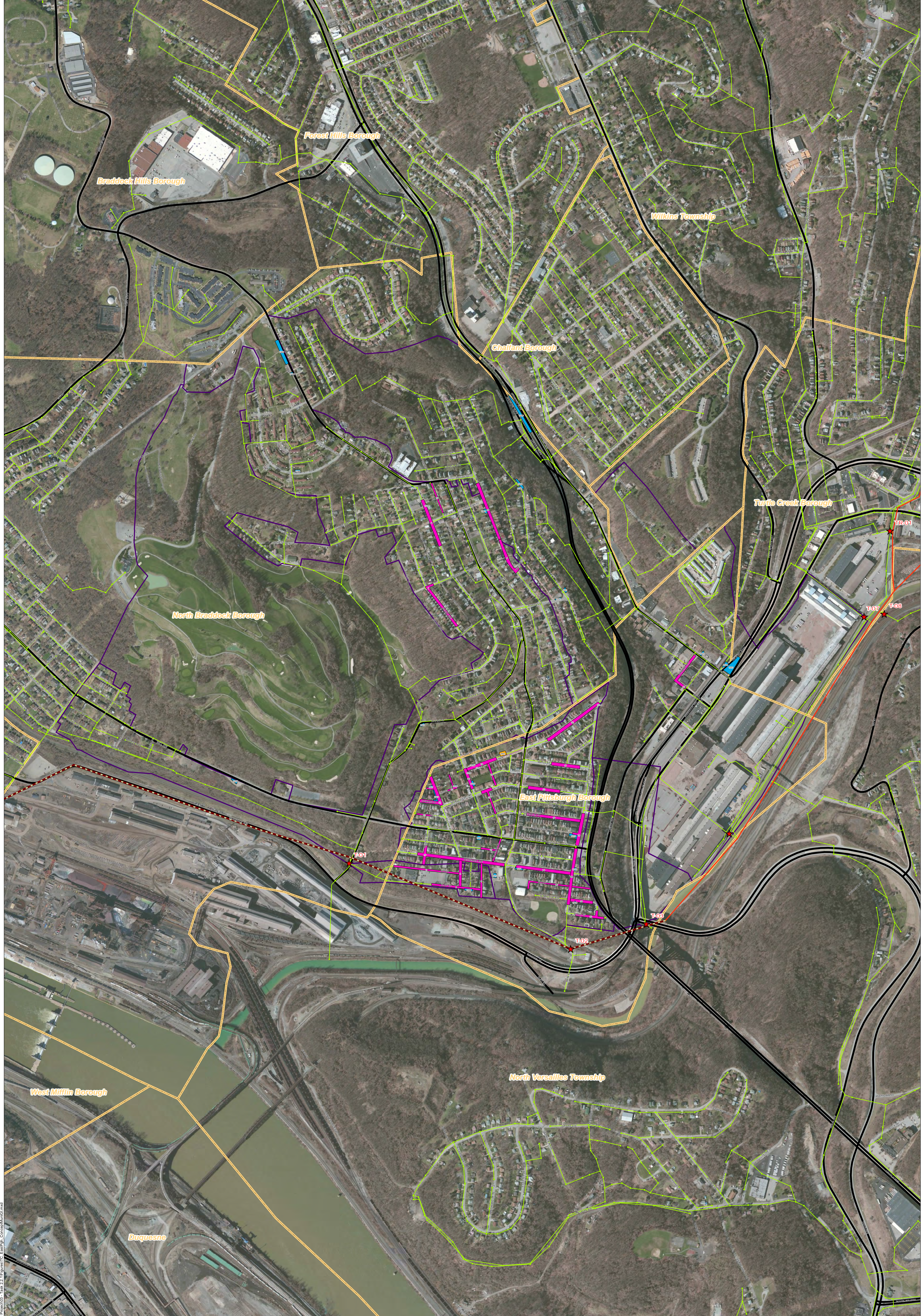
Revised October 7, 2014

*Note: The drainage area presented in this table is representative of the individual drainage area tributary to each concept municipal project without any revisions to account for overlap, without engineering judgment revisions applied, and without the drainage areas being clipped to their corresponding model subcatchments.

ALCOSAN POC	Model Subcatchment	Concept Municipal Project UID	BMP Type	Concept Municipal Project Area (acres)	Public ROW or Parcel		Concept Municipal Project Individual Drainage Area (acres)*	Concept Municipal Project Individual Drainage Area (acres)*
					Area of Municipal Project in Public ROW (acres)	Area of Municipal Project outside of Public ROW (acres)		
T-01-00	T-01B	EPGH_2	PP	0.267	0.253	0.014	3.585	1.851
T-01-00	T-01B	EPGH_3	PP	0.169	0.169	0.000	1.670	1.074
T-01-00	T-01B	EPGH_5	PP	0.159	0.153	0.006	0.594	0.315
T-01-00	T-01B	EPGH_6	PP	0.248	0.248	0.000	5.599	3.367
T-01-00	T-01A	EPGH_7	PP	0.338	0.338	0.000	0.621	0.359
T-01-00	T-01A	EPGH_8	PP	0.281	0.280	0.001	0.657	0.348
T-01-00	T-01A	EPGH_9	PP	0.375	0.368	0.007	1.582	0.685
T-01-00	T-01A	EPGH_10	PP	0.114	0.080	0.034	0.397	0.144
T-02-00	T-02	EPGH_14	PP	0.386	0.386	0.000	1.791	1.006
T-02-00	T-02	EPGH_15	PP	0.749	0.749	0.000	7.813	4.175
T-02-00	T-02	EPGH_16	PP	0.361	0.361	0.000	2.775	1.439
T-02-00	T-02	EPGH_17	PP	0.221	0.221	0.000	4.152	1.916
T-02-00	T-02	EPGH_18	PP	0.237	0.237	0.000	0.896	0.491
T-02-00	T-02	EPGH_19	PP	0.104	0.077	0.027	1.223	0.620
T-02-00	T-02	EPGH_21	PP	0.400	0.400	0.000	1.308	0.639
T-02-00	T-02	EPGH_22	PP	0.056	0.056	0.000	0.362	0.206
T-02-00	T-02	EPGH_23	PP	0.083	0.073	0.010	0.158	0.099
T-02-00	T-02	EPGH_24	PP	0.286	0.285	0.001	5.112	2.419
T-02-00	T-02	EPGH_25	PP	0.195	0.195	0.000	0.721	0.385
T-02-00	T-02	EPGH_26	PP	0.249	0.236	0.013	1.504	0.919
T-02-00	T-02	EPGH_27	PP	0.157	0.151	0.006	2.417	1.223
T-02-00	T-02	EPGH_29	PP	0.159	0.159	0.000	0.344	0.171
T-02-00	T-02	EPGH_30	PP	0.157	0.157	0.000	0.403	0.229
T-02-00	T-02	EPGH_31	PP	0.174	0.172	0.002	2.231	1.254
T-02-00	T-02	EPGH_32	PP	0.469	0.469	0.000	3.395	1.244
T-02-00	T-02	EPGH_33	PP	0.246	0.246	0.000	1.591	0.918

ALCOSAN POC	Model Subcatchment	Concept Municipal Project UID	BMP Type	Concept Municipal Project Area (acres)	Public ROW or Parcel		Concept Municipal Project Individual Drainage Area (acres)*	Concept Municipal Project Individual Project Impervious Drainage Area (acres)*
					Area of Municipal Project in Public ROW (acres)	Area of Municipal Project outside of Public ROW (acres)		
T-04-00	T-04	EPGH_36	PP	0.415	0.415	0.000	0.819	0.396
T-04-00	T-04	EPGH_37	PP	0.276	0.276	0.000	4.185	1.956
T-02-00	T-02	EPGH_38	PP	0.400	0.400	0.000	7.367	4.024
T-01-00	T-01A	EPGH_1001	BR	0.026	0.015	0.011	0.139	0.081
T-01-00	T-01A	EPGH_1004	BR	0.019	0.014	0.005	0.057	0.005
T-01-00	T-01B	EPGH_1006	BR	0.041	0.020	0.021	0.238	0.099
T-01-00	T-01A	EPGH_1007	BR	0.014	0.013	0.001	0.023	0.005
T-01-00	T-01A	EPGH_1008	BR	0.202	0.194	0.008	0.425	0.132
T-02-00	T-02	EPGH_1009	BR	0.008	0.005	0.003	0.321	0.172
T-02-00	T-02	EPGH_1010	BR	0.032	0.005	0.027	0.074	0.018
T-02-00	T-02	EPGH_1011	BR	0.043	0.033	0.010	0.121	0.080
T-02-00	T-02	EPGH_1012	BR	0.021	0.010	0.011	4.044	2.157
T-02-00	T-02	EPGH_1013	BR	0.063	0.028	0.035	0.615	0.296
T-02-00	T-02	EPGH_1014	BR	0.007	0.007	0.000	0.012	0.007
T-02-00	T-02	EPGH_1015	BR	0.037	0.014	0.023	0.070	0.032
T-02-00	T-02	EPGH_1016	BR	0.018	0.004	0.014	0.075	0.037
T-02-00	T-02	EPGH_1017	BR	0.013	0.007	0.006	0.041	0.007
T-02-00	T-02	EPGH_1018	BR	0.006	0.003	0.003	0.037	0.025
T-02-00	T-02	EPGH_1019	BR	0.009	0.001	0.008	0.073	0.040
T-02-00	T-02	EPGH_1020	BR	0.037	0.013	0.024	1.598	0.743
T-02-00	T-02	EPGH_1021	BR	0.031	0.018	0.013	0.042	0.007
T-02-00	T-02	EPGH_1022	BR	0.062	0.060	0.002	0.457	0.216
T-04-00	T-04	EPGH_1023	BR	0.251	0.040	0.211	0.261	0.067
T-04-00	T-04	EPGH_1024	BR	0.037	0.024	0.013	1.718	0.376
T-04-00	T-04	EPGH_1025	BR	0.022	0.009	0.013	1.715	0.340
T-04-00	T-04	EPGH_1026	BR	0.245	0.043	0.202	0.386	0.172
T-04-00	T-04	EPGH_1028	BR	0.055	0.033	0.022	0.223	0.059
T-04-00	T-04	EPGH_1030	BR	0.014	0.013	0.001	0.372	0.029
T-04-00	T-04	EPGH_1031	BR	0.025	0.010	0.015	0.046	0.015
T-04-00	T-04	EPGH_1032	BR	0.020	0.013	0.007	0.064	0.008
T-01-00	T-01A	EPGH_1033	BR	0.025	0.006	0.019	29.349	8.168
T-01-00	T-01A	EPGH_1034	BR	0.007	0.002	0.005	0.013	0.002
T-01-00	T-01A	EPGH_1035	BR	0.015	0.009	0.006	0.073	0.035
T-01-00	T-01A	EPGH_1036	BR	0.032	0.000	0.032	0.167	0.048

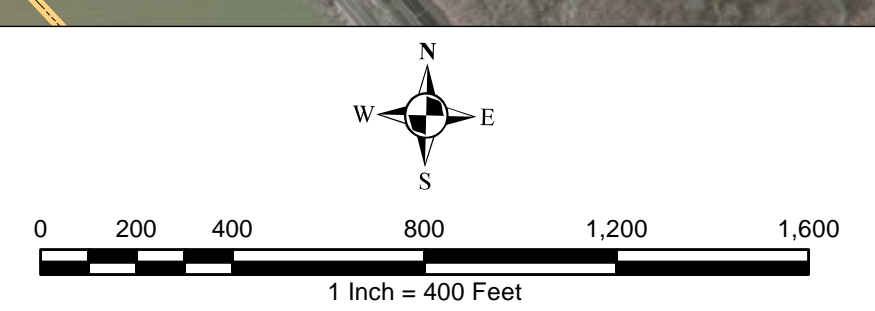
ALCOSAN POC	Model Subcatchment	Concept Municipal Project UID	BMP Type	Concept Municipal Project Area (acres)	Public ROW or Parcel		Concept Municipal Project Individual Drainage Area (acres)*	Concept Municipal Project Individual Project Impervious Drainage Area (acres)*
					Area of Municipal Project in Public ROW (acres)	Area of Municipal Project outside of Public ROW (acres)		
T-01-00	T-01A	EPGH_1037	BR	0.034	0.034	0.000	3.573	0.364
T-02-00	T-02	EPGH_2001	IB	0.065	0.007	0.058	1.558	0.712



- ★ ALCOSAN Structures
- ALCOSAN Shallow-Cut Interceptor
- ALCOSAN Deep Tunnel Interceptor
- One Overall Manholes
- One Overall Sewerlines

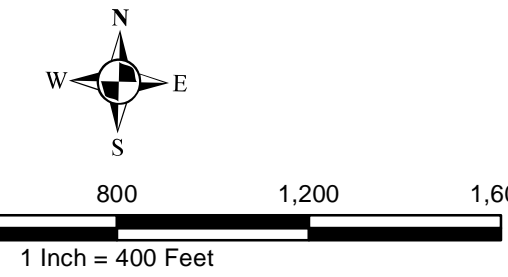
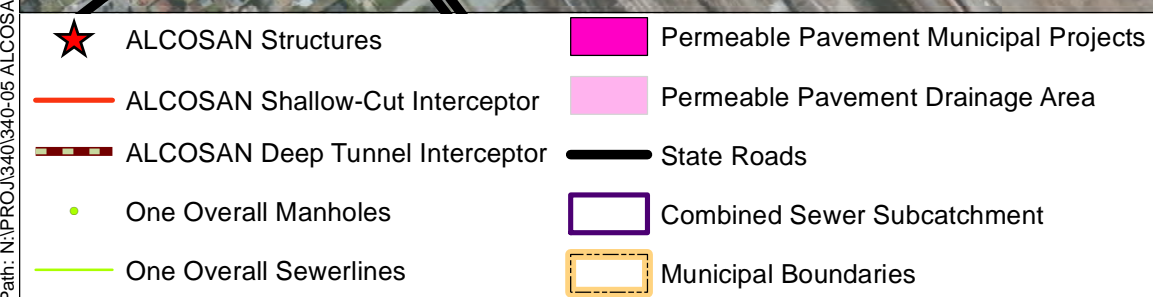
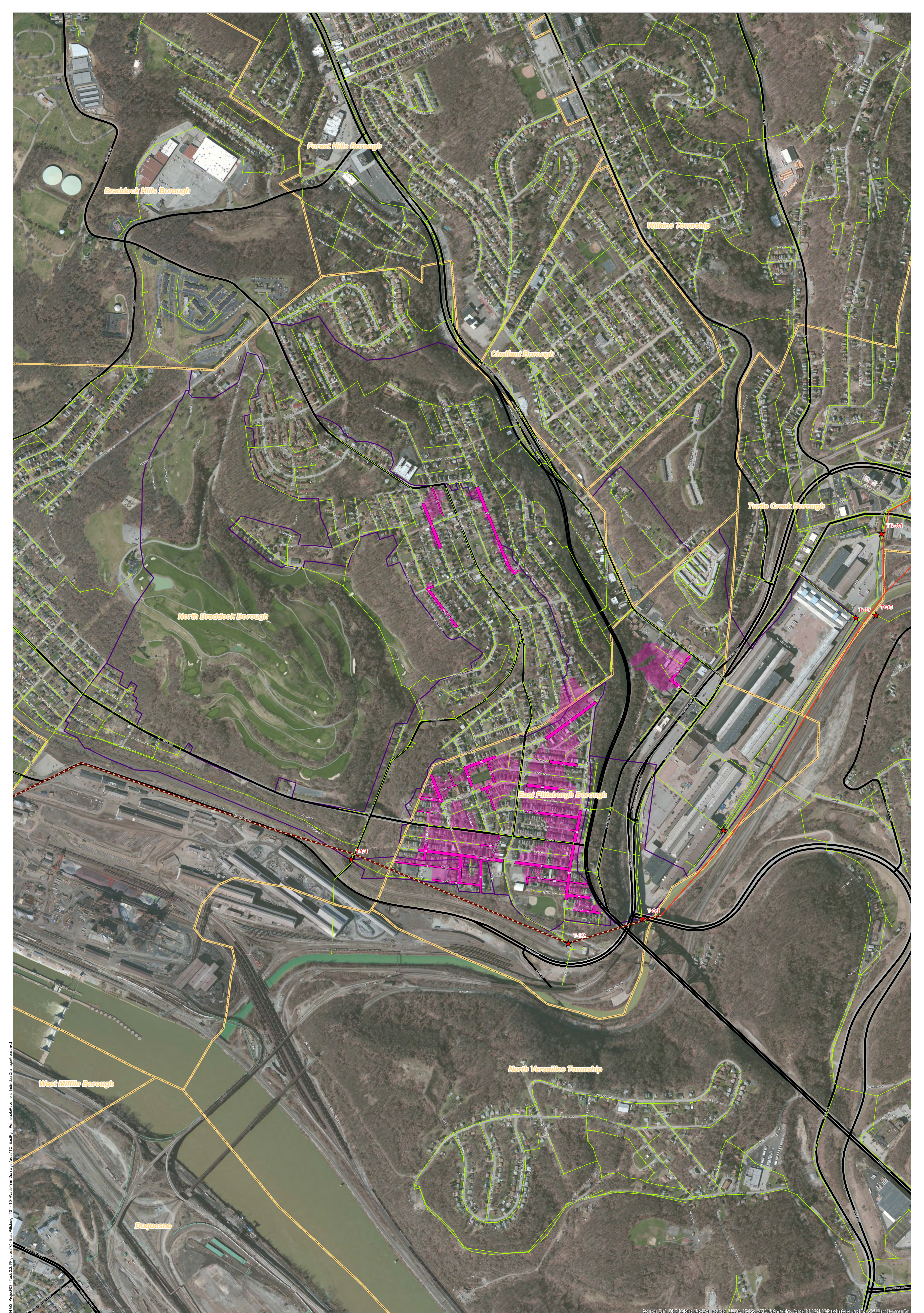
- Municipal Projects**
- Infiltration Basin
 - Bioretention
 - Permeable Pavement
 - Combined Sewer Subcatchment
 - Municipal Boundaries

- State Roads



ALCOSAN GSI Project
Turtle Creek - East Pittsburgh T-01 thru T-04
Concept Municipal GSI Projects

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ALCOSAN GSI Project
 Turtle Creek / East Pittsburgh (T-01 thru T-04)
 Concept Municipal Permeable Pavement GSI Projects
 Individual Project Drainage Areas

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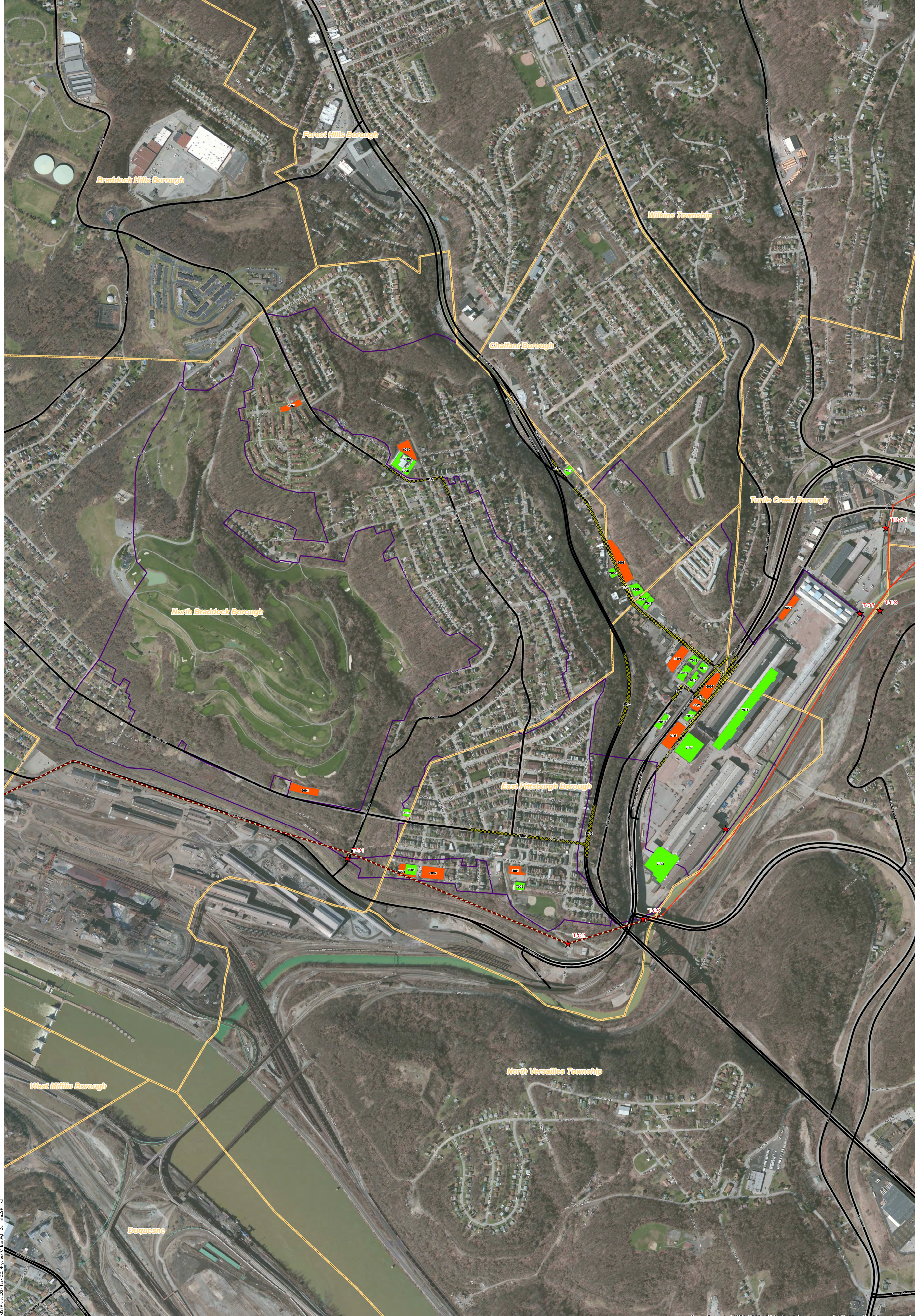
Source: Esri, DigitalGlobe, GeoEye, Earthstar (USA), USGS, AeroGRID, IGN, SITA, Airbus, GeoEye, USDA, NOAA, CNR, Esri, SNT, Swire, and the U.S. Government.

**Turtle Creek-East Pittsburgh Concept Commercial / Institutional Permeable Pavement, Green Roof, and Special Case GSI
Projects: Summary Table**

December 24, 2013
Revised October 10, 2014

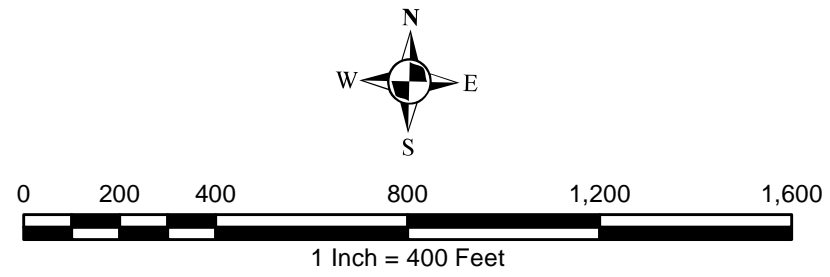
ALCOSAN POC	Model Subcatchment	Concept Comm / Inst Project UID	BMP Type	Concept Municipal Project Area (acres)	Taxable (acres)	Exempt (acres)	Provisionally Exempt (acres)	Public ROW (acres)
T-01	T-01B	EPGH_6001	CPP	0.256	0.219	0.000	0.000	0.037
T-01	T-01B	EPGH_6002	CPP	0.632	0.590	0.000	0.000	0.042
T-01	T-01A	EPGH_6003	CPP	0.279	0.279	0.000	0.000	0.000
T-01	T-01G	EPGH_6004	CPP	0.512	0.512	0.000	0.000	0.000
T-02	T-02	EPGH_6005	CPP	0.287	0.287	0.000	0.000	0.000
T-04	T-04	EPGH_6006	CPP	0.906	0.000	0.906	0.000	0.000
T-04	T-04	EPGH_6007	CPP	0.588	0.575	0.000	0.000	0.013
T-04	T-04	EPGH_6008	CPP	0.402	0.402	0.000	0.000	0.000
T-04	T-04	EPGH_6009	CPP	0.591	0.124	0.409	0.000	0.058
T-04	T-04	EPGH_6010	CPP	0.455	0.000	0.418	0.000	0.037
T-04	T-04	EPGH_6011	CPP	0.710	0.679	0.000	0.000	0.031
T-04	T-04	EPGH_6012	CPP	0.258	0.258	0.000	0.000	0.000
T-01	T-01B	EPGH_7001	GR	0.270	0.000	0.270	0.000	0.000
T-02	T-02	EPGH_7002	GR	0.168	0.166	0.000	0.000	0.002
T-02	T-01A	EPGH_7003	GR	0.125	0.123	0.000	0.000	0.002
T-03	T-03	EPGH_7004	GR	1.632	1.631	0.000	0.000	0.001
T-04	T-04	EPGH_7005	GR	0.432	0.397	0.000	0.000	0.035
T-04	T-04	EPGH_7006	GR	0.060	0.000	0.040	0.000	0.020
T-04	T-04	EPGH_7007	GR	0.141	0.141	0.000	0.000	0.000
T-04	T-04	EPGH_7008	GR	0.125	0.123	0.000	0.000	0.002
T-04	T-04	EPGH_7009	GR	0.286	0.000	0.286	0.000	0.000
T-04	T-04	EPGH_7010	GR	0.225	0.225	0.000	0.000	0.000
T-04	T-04	EPGH_7011	GR	0.176	0.153	0.000	0.000	0.023
T-04	T-04	EPGH_7012	GR	0.167	0.152	0.000	0.000	0.015
T-04	T-04	EPGH_7013	GR	0.291	0.140	0.141	0.000	0.010
T-04	T-04	EPGH_7014	GR	0.180	0.148	0.000	0.000	0.032
T-04	T-04	EPGH_7015	GR	0.221	0.188	0.000	0.000	0.033
T-04	T-04	EPGH_7016	GR	0.168	0.168	0.000	0.000	0.000

ALCOSAN POC	Model Subcatchment	Concept Comm / Inst Project UID	BMP Type	Concept Municipal Project Area (acres)	Taxable (acres)	Exempt (acres)	Provisionally Exempt (acres)	Public ROW (acres)
T-04	T-04	EPGH_7017	GR	1.118	1.117	0.000	0.000	0.001
T-04	T-04	EPGH_7018	GR	2.289	2.289	0.000	0.000	0.000
T-04	T-04	EPGH_7019	GR	0.209	0.196	0.000	0.000	0.013
T-04	T-04	EPGH_8001	SRPP	1.973	0.000	0.042	0.000	1.931
T-02	T-02	EPGH_8002	SRPP	0.790	0.000	0.000	0.000	0.790
T-04	T-04	EPGH_8003	SRPP	1.843	0.009	0.180	0.000	1.654
T-04	T-04	EPGH_8010	SRPP	0.621	0.000	0.000	0.000	0.621
T-01	T-01A	EPGH_8011	SRPP	0.467	0.000	0.000	0.000	0.467
T-03	T-03	EPGH_8012	SRPP	0.516	0.000	0.000	0.000	0.516
T-04	T-04	EPGH_8016	SRPP	0.237	0.000	0.000	0.000	0.237
T-04	T-04	EPGH_8017	SRPP	0.161	0.000	0.000	0.000	0.161



Source: USGS National Wetland Inventory, USGS, ArcGIS, Geoprocessing, August 14, 2024, GP, and the City of East Pittsburgh

- ★ ALCOSAN Structures
- ALCOSAN Shallow-Cut Interceptor
- ALCOSAN Deep Tunnel Interceptor
- Special Case
- Concept Commercial / Institutional Permeable Pavement Projects
- Concept Green Roof Projects
- State Roads
- Combined Sewer Subcatchment
- Municipal Boundaries



ALCOSAN GSI Project

Turtle Creek - East Pittsburgh T-01 thru T-04

Concept Commercial / Institutional and Green Roofs GSI Projects