

MEMORANDUM

To: Mark Gross, Public Works Director

From: Amanda Reitbauer, Environmental Scientist

Subject: 2020 NPDES MS4 Permit Support Services – Municipal Facilities Inventory Update and Inspection

Date: April 6, 2020

MS4 – Municipal Facilities Inventory Update and Inspection

CEDARVILLE Engineering Group, LLC (CEG) conducted a municipal facilities inspection and inventory update for the properties owned and operated by the Township per the 2020 NPDES (National Pollutant Discharge Elimination System) MS4 (Municipal Separate Storm Sewer System) Permit Support Services contract. The municipal facilities inspection is intended to serve as a “mock inspection” to provide the Township with recommendations in preparation of a prospective audit or inspection by the Environmental Protection Agency (EPA) or by the Pennsylvania Department of Environmental Protection (PA DEP). The recommendations noted below are based on CEG’s previous experience and expertise and are for the Township’s internal use. Implementation of these recommendations are at the discretion of the Township.

The following Township properties were evaluated as part of this inventory update and inspection:

- Public Works Complex
- Municipal Building
- Oakbourne Mansion
- Wastewater Treatment
- 710 Spring Line Drive*
- 950 S New Street*
- 1000 S New Street*
- 1035 Dunvegan Road*
- 1010 E Niels Lane*
- 1052 E Niels Lane*
- 25 Piedmont Road*
- 22 Garden Circle*
- 1068 Westwood Drive*
- 111 Larchwood Road*
- 1189 Blenheim Road*
- 1190 Blenheim Road*
- 1147 S Concord Road*
- 1017 Dogwood Lane*
- 506 Oakbourne Road*
- 1085 S Concord Road*
- 1055 S Concord Road*
- 627 James Drive*
- 611 Gages Lane*
- Thorne Drive*
- 605 Oakbourne Road*
- Sage Road*
- Tyson Park
- 1157 Cardinal Drive*
- 1503 Overhill Circle*
- 1509 Carmac Road*
- 1500 Johnnys Way*
- 1513 Carmac Road*
- 501 Chesterville Way*
- 1652 E Street Road*
- 1654 E Street Road*
- 119 Larchwood Road*
- 121 Larchwood Road*
- Old Wilmington Pike*
- 1511 Carmac Road*
- 602 Leslie Lane*
- 1655 E Street Road*
- Various Open Space (w/ no address)

*These are Township-owned open space properties with no facilities and very limited potential for generating stormwater pollution due to Township operations. Any Township-owned and maintained stormwater Best Management Practices (BMPs)



on open space properties will be inspected as part of the 2020 Post Construction Stormwater Management (PCSM) BMP inspections.

Inventory Update

An annual review and update of the Township's inventory of operations that have the potential for generating pollution in stormwater runoff to the regulated MS4 is required by the NPDES MS4 Permit [Minimum Control Measure (MCM) #6, BMP #1]. One of the purposes of this inspection is to update the inventory of facilities (i.e. stormwater BMPs, parks, public works buildings, etc.) that the Township owns and the activities (i.e. street sweeping, lawn/grounds care, vehicle operations, fueling, washing and maintenance) that occur at those facilities.

Having a detailed inventory allows the inspector to know what specifically to inspect on a monthly basis and is an important resource to keep current to be able to assess the items at the facility that have the potential for stormwater pollution. The Township's Operations & Maintenance for Municipal Operations & Facilities Program document will be updated accordingly per the detailed facility inventory generated from this inspection. Please reference this document for details.

Inspection Background

The inspection was conducted by Amanda Reitbauer of CEG on March 5, 2020 to provide feedback to the Township on the current status of the facilities. Pam Coleman, Executive Secretary, and Mark Gross, Director of Public Works, were present from the Township. In the event that the Township were to be audited by the EPA or inspected by the PA DEP, CEG has provided recommendations for observations made based on our prior experience. The inspection also offers the opportunity for CEG to explain the importance of proper good housekeeping BMPs to Public Works Department staff from a regulatory perspective.

Key inspection components that have potential for generating pollution include but are not limited to, hazardous and waste materials management, vehicle and equipment washing area, road salt storage, herbicide and pest control. Good housekeeping practices that are essential to proper operations and maintenance in municipal facilities are: secondary containment (double-wall tanks, pallet elevation, spill berm, etc.), clearly labeled chemicals/materials, facility floor free of spills and stains, organized equipment, facility floor is generally clear of clutter, spill kits that are readily available, designated vehicle wash area, and properly covered salt storage facility. If the facility has a drainage system, it is important to understand and map the entire system including where it eventually discharges to (i.e. the MS4, sanitary sewer system, or another treatment system).

Inspection Results

Inspection results for each municipal facility is described below. The overall appearance of the municipal facilities was organized and clean, attributed to the hard work and acknowledgement of pollution prevention by the Township staff. The Municipal Facility Operation & Maintenance Forms are attached for reference. The Municipal Building, parks and recreational sites, and open space properties were not evaluated as it was determined that there was no potential for generating pollution to stormwater runoff because they do not contain materials, equipment, or activities with potential for contributing to stormwater pollution. The Township is responsible for lawn/grounds care at many of these properties; however, no fertilizer or pest control products are used.



Public Works Complex

The public works complex is located at 10 E. Pleasant Grove Road and consists of a main garage with administrative offices, another smaller garage, a storage shed, a salt shed, a fueling station, and associated parking facilities and other infrastructure.

Overall, the public works garage displayed excellent pollution prevention and good housekeeping practices that are consistent with the objectives of the MS4 Permit. Throughout the garage, all of the chemicals, drums, and buckets containing material were clearly labeled and organized in cabinets or storage shelves. There was little to no clutter on the floor of the garages. No major spills or staining were identified during the time of the inspection. The floor drain, which was clear of debris, discharges into an oil-water separator, that then drains to the sanitary sewer system. In the event of a spill, the staff uses readily available Oil-Dri.

Major oil changes and repairs are not performed at the public works garage; vehicles are instead taken to a commercial garage.

There is a designated indoor car washing bay within the public works garage. The bay has a floor drain, which is also connected to the oil-water separator.

A fueling station is located at the public works complex. The fueling station consists of a 1,000-gallon diesel aboveground storage tank (AST) and 500-gallon gasoline AST and associated pumps on a concrete pad. The ASTs associated with the fueling station are steel, double-wall concrete encased for secondary containment with leak detection. No leaking or staining was observed surrounding the fueling station. The Township uses dry cleanup methods in the event of a spill.

Road salt was properly contained within the storage shed and did not have any noticeable holes in the roof. No salt stains were observed outside of the storage shed.

Minor recommendations were documented for this facility. Oil-Dri was used to remediate a small spill and left in place on the garage floor. The outdoor fueling station did not have a best management practice (BMP) in place to minimize pollutant runoff if a spill were to occur while filling a vehicle. Recommended actions for these observations are noted below.

Wastewater Treatment Plant

The Township-owned wastewater treatment plant is located at 950 Westtown Road. This location consisted of an outdoor wastewater treatment plant. The entire interior of the facility was clear of clutter. All chemical drums had proper containment in the form of spill containment pallets. There are no vehicles stored at this location. Overall, the wastewater treatment plant building also displayed excellent pollution prevention and good housekeeping practices that are consistent with the objectives of the MS4 Permit.

No recommendations were noted for this facility.



Oakbourne Mansion

The Oakbourne Mansion is located at 1014 S. Concord Road. This location consisted of a historic mansion used for recreational purposes along with a storage garage. The Oakbourne facility building also displayed excellent pollution prevention and good housekeeping practices that are consistent with the objectives of the MS4 Permit.

The interior of the mansion was clear of clutter and did not display any potential for stormwater pollution. The roof drains from the mansion drain underground and discharge to an unknown location. For mapping purposes, it would be ideal to determine the system of this conveyance.

In the storage garage, all chemicals and gasoline containers had proper containment within a section of the garage, which had no floor drains. There was no floor drain where the chemicals and gasoline are stored. There are also no vehicles stored at this location. There is a small floor drain in a separate room in the storage garage which discharges to an unknown location.

A minor recommendation was documented for this facility. The small floor drain located in the main storage garage area discharges to an unknown location. Recommended action for this observation is noted below.

Parks/Open Space/Municipal Building

The following list of parks, open space, and municipal building were determined to not have a potential for generating pollution to stormwater runoff, and therefore were not inspected.

- Municipal Building
- 1655 E. Street Road
- 1157 Cardinal Drive
- 111 Larchwood Road
- 710 Spring Line Drive
- 950 S New Street
- 1000 S New Street
- 1035 Dunvegan Road
- 1010 E Niels Lane
- 1052 E Niels Lane
- 25 Piedmont Road
- 22 Garden Circle
- 1068 Westwood Drive
- 1189 Blenheim Road
- 1190 Blenheim Road
- 1147 S Concord Road
- 1017 Dogwood Lane
- 506 Oakbourne Road
- 1085 S Concord Road
- 1055 S Concord Road
- 627 James Drive
- 611 Gages Lane
- Thorne Drive
- 605 Oakbourne Road
- Sage Road
- Tyson Park
- 1503 Overhill Circle
- 1509 Carmac Road
- 1500 Johnnys Way
- 1513 Carmac Road
- 501 Chesterville Way
- 1652 E Street Road
- 1654 E Street Road
- 119 Larchwood Road
- 121 Larchwood Road
- Old Wilmington Pike
- 1511 Carmac Road
- 602 Leslie Lane
- Various Open Space (w/ no address)



Inspection Recommendations

CEG recommends the following actions for the observations noted:

Table 1 - Public Works Complex

OBSERVATION	IMPORTANCE	RECOMMENDED ACTION
Spill clean-up using Oil-Dri was left on the floor.	Spill stains on the floor is an indication of poor spill response actions.	Perform spill response actions (dispose of Oil-Dri) as soon as the spill clean-up concludes to ensure minimal to no staining and to clear debris from the floor.
No BMPs were observed at the outdoor fueling station to minimize the potential for pollutant runoff if a spill were to occur while filling a vehicle.	Based on previous CEG experience, PA DEP has required a BMP to address potential pollutant runoff while filling a vehicle.	Consider utilizing one or more of the following BMPs to minimize the potential for pollutant runoff while filling vehicles: cover with a roof/overhang or place berms to prevent run-on to and runoff from the station.

Table 2 – Oakbourne Mansion

OBSERVATION	IMPORTANCE	RECOMMENDED ACTION
Unknown where the small floor drain in the storage garage drains.	Being able to determine the stormwater system will allow timely and proper remediation in the event of a spill, though the potential for pollution from this floor drain is currently low as there are no chemicals, fuel, etc. stored in the immediate vicinity.	Determine where the floor drain discharges by conducting a dye test or locating building plans; or plug the floor drain with a permanent or temporarily option if the use of this area changes in the future and chemicals, fuel, etc. are stored there.

These recommendations follow the guidance of the MS4 Permit to prevent and reduce pollutant runoff from operations, facilities and activities under the control of the Township. Should you have any questions or concerns, please feel free to contact me at (610) 705-4500 or areitbauer@cedarvilleeng.com.

cc: Beth Uhler, CEG Project Manager
Rob Pingar, Westtown Township Manager
Pam Coleman, Westtown Township



Municipal Facility Operation & Maintenance Form Public Works Facility

Date of Inspection: 3/5/2020

Inspector: Amanda R.

Category	Components/Items to Check	Problems Observed	Maintenance/Repairs Necessary			Comments / Actions Taken
			Yes	No	N/A	
Hazardous Spill Response and Prevention	Products/waste storage areas	<input type="checkbox"/> Uncovered/deteriorating containers <input type="checkbox"/> Materials spilled, leaks		X		
	Equipment storage areas	<input type="checkbox"/> Fluid Leaks		X		
	Secondary containment systems	<input type="checkbox"/> Structural deterioration <input type="checkbox"/> Leakage of fluids		X		
	Floor drains, storm receiver inlets and outlets	<input type="checkbox"/> Accumulation of contaminants		X		
Hazardous and Waste Materials Management	Outside storage areas	<input type="checkbox"/> Weathering		X		
	Salt piles	<input type="checkbox"/> Salt staining		X		
	Soil staging areas	<input type="checkbox"/> Silt runoff		X		
	Aboveground storage tanks	<input type="checkbox"/> Deterioration	X			cover the fueling area
	Inside storage areas	<input type="checkbox"/> Potential for discharges		X		
	Drums, other containers	<input type="checkbox"/> Deterioration <input type="checkbox"/> Uncovered		X		
Vehicle and Equipment Maintenance/Storage Area	Truck/equipment	<input type="checkbox"/> Leak/spills	X			Clean-up oil-dri soon after application
	Salt/sand spreader	<input type="checkbox"/> Improper amounts of product applied				
	Lawn care equipment	<input type="checkbox"/> Improper operation				
Vehicle and Equipment Washing Area	Designated "wash only" area	<input type="checkbox"/> No impermeable pad with wastewater collection system		X		wash bay drains to an oil-water separator
	Wastewater discharge location	<input type="checkbox"/> Does not flow to either a holding tank or to sanitary sewers		X		
	Washing/degreasing compounds	<input type="checkbox"/> Solvent based		X		
Road Salt Storage and Application	Storage shed	<input type="checkbox"/> Salt outside of shed				
	Truck loading area	<input type="checkbox"/> Salt on ground				
	Roads - (sites of application)	<input type="checkbox"/> Excessive salt on ground			X	not observed
	Salt spreader	<input type="checkbox"/> Excessive salt on ground				
Pest Control	Pesticide storage area	<input type="checkbox"/> Excessive amounts of pesticides <input type="checkbox"/> Spilled pesticides <input type="checkbox"/> Empty containers		X		
	Application equipment	<input type="checkbox"/> Improper amounts of pesticides applied		X		



PHOTOGRAPHIC LOG

Client Name: Westtown Township	Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382	Project No. WTT-20-003
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Photo No. 1	Date: 3/5/20
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Direction Photo Taken:
Public Works Garage

Description:
Chemical supplies on a shelving unit.



Photo No. 2	Date: 3/5/20
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Direction Photo Taken:
Public Works Garage

Description:
Public Works trucks.





PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
3

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Floor drain in the Public Works Garage.



Photo No.
4

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Wash bay for vehicles.





PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
5

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Salt shed.



Photo No.
6

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Fueling tanks (1,000-gal diesel, 500-gal gasoline).



Client Name: Westtown Township	Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382	Project No. WTT-20-003
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Photo No. 7	Date: 3/5/20
Direction Photo Taken: Public Works Garage	



Description:
Inside the supply room where the wash bay chemicals are stored.

Photo No. 8	Date: 3/5/20
Direction Photo Taken: Public Works Garage	



Description:
Shelving units with elevated chemicals in the supply room.



PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
9

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Gasoline containers contained.



Photo No.
10

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Spill cleaned up using Oil-Dri.





PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 10 E Pleasant Grove Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
11

Date:
3/5/20

Direction Photo Taken:

Public Works Garage

Description:

Waste oil tank.



Photo No.
12

Date:
3/5/20

Direction Photo Taken:

Public works garage

Description:

Oil-water separator and the stormwater basin adjacent to the Public Works building where all the floor and roof drains drain to.





Municipal Facility Operation & Maintenance Form

Wastewater Treatment Plant

Date of Inspection: 3/5/2020

Inspector: Amanda R.

Category	Components/Items to Check	Problems Observed	Maintenance/Repairs Necessary			Comments / Actions Taken
			Yes	No	N/A	
Hazardous Spill Response and Prevention	Products/waste storage areas	<input type="checkbox"/> Uncovered/deteriorating containers <input type="checkbox"/> Materials spilled, leaks		X		
	Equipment storage areas	<input type="checkbox"/> Fluid Leaks		X		
	Secondary containment systems	<input type="checkbox"/> Structural deterioration <input type="checkbox"/> Leakage of fluids		X		
	Floor drains, storm receiver inlets and outlets	<input type="checkbox"/> Accumulation of contaminants		X		
Hazardous and Waste Materials Management	Outside storage areas	<input type="checkbox"/> Weathering			X	
	Salt piles	<input type="checkbox"/> Salt staining			X	
	Soil staging areas	<input type="checkbox"/> Silt runoff			X	
	Aboveground storage tanks	<input type="checkbox"/> Deterioration			X	
	Inside storage areas	<input type="checkbox"/> Potential for discharges		X		
	Drums, other containers	<input type="checkbox"/> Deterioration <input type="checkbox"/> Uncovered		X		
Vehicle and Equipment Maintenance/Storage Area	Truck/equipment	<input type="checkbox"/> Leak/spills			X	
	Salt/sand spreader	<input type="checkbox"/> Improper amounts of product applied			X	
	Lawn care equipment	<input type="checkbox"/> Improper operation			X	
Vehicle and Equipment Washing Area	Designated "wash only" area	<input type="checkbox"/> No impermeable pad with wastewater collection system			X	
	Wastewater discharge location	<input type="checkbox"/> Does not flow to either a holding tank or to sanitary sewers			X	
	Washing/degreasing compounds	<input type="checkbox"/> Solvent based			X	
Road Salt Storage and Application	Storage shed	<input type="checkbox"/> Salt outside of shed			X	
	Truck loading area	<input type="checkbox"/> Salt on ground			X	
	Roads - (sites of application)	<input type="checkbox"/> Excessive salt on ground			X	
	Salt spreader	<input type="checkbox"/> Excessive salt on ground			X	
Pest Control	Pesticide storage area	<input type="checkbox"/> Excessive amounts of pesticides <input type="checkbox"/> Spilled pesticides <input type="checkbox"/> Empty containers			X	
	Application equipment	<input type="checkbox"/> Improper amounts of pesticides applied			X	



PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 950 Westtown Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
1

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Roof drains from the building discharge onto the pavement and into a stone infiltration bed.



Photo No.
2

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Stone infiltration bed for stormwater runoff.





PHOTOGRAPHIC LOG

Client Name:
Westtown Township

Site Location: 950 Westtown Rd, West Chester, PA 19382

Project No.
WTT-20-003

Photo No.
3

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Treatment facility.



Photo No.
4

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Bio-filter for odor control.



Client Name:

Westtown Township

Site Location: 950 Westtown Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
5

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Chemical storage on a pallet.



Photo No.
6

Date:
3/5/20

Direction Photo Taken:

Wastewater Treatment Plant

Description:

Floor drain.





Municipal Facility Operation & Maintenance Form

Oakbourne Mansion

Date of Inspection: 3/5/2020

Inspector: Amanda R.

Category	Components/Items to Check	Problems Observed	Maintenance/Repairs Necessary			Comments / Actions Taken
			Yes	No	N/A	
Hazardous Spill Response and Prevention	Products/waste storage areas	<input type="checkbox"/> Uncovered/deteriorating containers <input type="checkbox"/> Materials spilled, leaks		X		
	Equipment storage areas	<input type="checkbox"/> Fluid Leaks		X		
	Secondary containment systems	<input type="checkbox"/> Structural deterioration <input type="checkbox"/> Leakage of fluids		X		
	Floor drains, storm receiver inlets and outlets	<input type="checkbox"/> Accumulation of contaminants		X		floor drain in garage goes to unknown location
Hazardous and Waste Materials Management	Outside storage areas	<input type="checkbox"/> Weathering			X	
	Salt piles	<input type="checkbox"/> Salt staining			X	
	Soil staging areas	<input type="checkbox"/> Silt runoff			X	
	Aboveground storage tanks	<input type="checkbox"/> Deterioration			X	
	Inside storage areas	<input type="checkbox"/> Potential for discharges		X		
	Drums, other containers	<input type="checkbox"/> Deterioration <input type="checkbox"/> Uncovered			X	
Vehicle and Equipment Maintenance/ Storage Area	Truck/equipment	<input type="checkbox"/> Leak/spills			X	
	Salt/sand spreader	<input type="checkbox"/> Improper amounts of product applied			X	
	Lawn care equipment	<input type="checkbox"/> Improper operation		X		
Vehicle and Equipment Washing Area	Designated "wash only" area	<input type="checkbox"/> No impermeable pad with wastewater collection system			X	
	Wastewater discharge location	<input type="checkbox"/> Does not flow to either a holding tank or to sanitary sewers			X	
	Washing/degreasing compounds	<input type="checkbox"/> Solvent based			X	
Road Salt Storage and Application	Storage shed	<input type="checkbox"/> Salt outside of shed			X	
	Truck loading area	<input type="checkbox"/> Salt on ground			X	
	Roads - (sites of application)	<input type="checkbox"/> Excessive salt on ground			X	
	Salt spreader	<input type="checkbox"/> Excessive salt on ground			X	
Pest Control	Pesticide storage area	<input type="checkbox"/> Excessive amounts of pesticides <input type="checkbox"/> Spilled pesticides <input type="checkbox"/> Empty containers			X	
	Application equipment	<input type="checkbox"/> Improper amounts of pesticides applied			X	

Other comments: roof drains from the mansion discharge to unknown location underground



PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 1024 S Concord Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
1

Date:
3/5/20

Direction Photo Taken:

Oakbourne Mansion & Park

Description:

Side of the mansion where the roof drains lead into the ground.



Photo No.
2

Date:
3/5/20

Direction Photo Taken:

Oakbourne Mansion & Park

Description:

Roof drains and water tower.





PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 1024 S Concord Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
3

Date:
3/5/20

Direction Photo Taken:

Oakbourne Mansion & Park

Description:

Inside the storage garage.



Photo No.
4

Date:
3/5/20

Direction Photo Taken:

Oakbourne Mansion & Park

Description:

Storage garage.





PHOTOGRAPHIC LOG

Client Name:

Westtown Township

Site Location: 1024 S Concord Rd, West Chester, PA 19382

Project No.

WTT-20-003

Photo No.
5

Date:
3/5/20

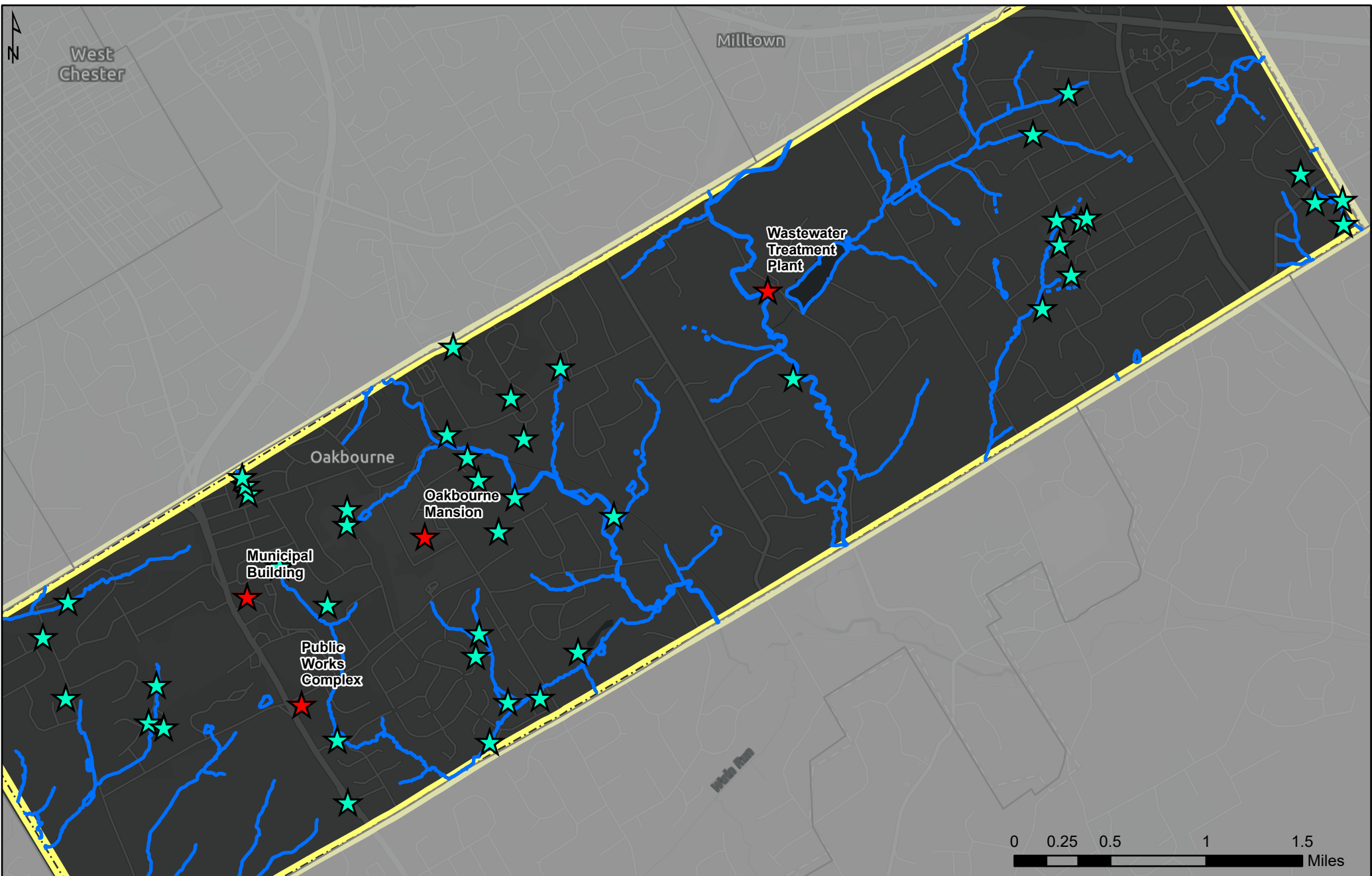
Direction Photo Taken:

Oakbourne Mansion & Park

Description:

2 dumpsters.





1 inch equals 1 mile

DRAWN BY: AR

DATE: 3/10/20



DISCLAIMER:
 This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. It may not be accurate and is not legal or definitive.

**WESTTOWN TOWNSHIP
 LOCATION MAP**

MUNICIPAL OWNED FACILITIES

CHESTER COUNTY, PENNSYLVANIA

Legend

-  Facility (Potential for Generating SW Pollution)
-  Open Space

