pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Application Type	**Renewal**	Application No.	**PA0086487**
Facility Type	**Storm Water**	APS ID	**932653**
Major / Minor	**Minor**	Authorization ID	**1493555**

Applicant and Facility Information

Applicant Name	**Vitro Flat Glass LLC**	Facility Name	**Vitro Flat Glass Manufacturing Plant**
Applicant Address	400 Park Drive	Facility Address	400 Park Drive
	Carlisle, PA 17015-9271		Carlisle, PA 17015-9271
Applicant Contact	Amy Hacker	Facility Contact	Amy Hacker
Applicant Phone	(707) 409-4739	Facility Phone	(717) 409-4739
Client ID	165195	Site ID	248363
SIC Code	3211	Municipality	South Middleton Township
SIC Description	Manufacturing - Flat Glass	County	Cumberland
Date Application Received	July 26, 2024	EPA Waived?	Yes
Date Application Accepted	August 13, 2024	If No, Reason	

Purpose of Application: NPDES discharge of stormwater associated with industrial activity.

Summary of Review

This is a renewal application for a NPDES individual permit for discharges of stormwater associated with industrial activity located in South Middleton Township, Cumberland County. See Figures 1, 2, and 3 for a Site Location Map, Site Plan, and Stormwater Management Plan.

The facility's SIC code is 3211 (flat glass manufacturing) which requires a NPDES permit for discharges of stormwater associated with industrial activity. Since the facility discharges to an HQ-CWF surface water, the facility must be covered under a NPDES Individual Permit for Discharges of Stormwater Associated with Industrial Activities. If the facility qualified for a PAG-03, they would fall under Appendix N based on their SIC code.

Facility Description: manufacturer and distributor of flat glass.

A renewal application was received via Public Uploads Ref ID 248780 on 7/26/2024. The application was deemed complete on 8/13/2024.

The facility has one outfall that discharges to Yellow Breeches Creek (HQ-CWF, MF): Outfall 001. Outfall 001 receives stormwater runoff from the entire facility. There is typically no discharge at Outfall 001. Stormwater runoff from roofs, roads, and yard areas collect in a series of onsite retention ponds via roof drains and yard drainage. Stormwater collects and remains in the retention ponds. Only during extreme heavy storm events, when the onsite retention ponds are in danger of overflowing, are two emergency flood pumps used to pump stormwater to Outfall 001. Typically, stormwater is pumped offsite two or three times per year. The retention ponds are inspected for trash, discoloration, sheen, or any other condition prior to stormwater being pumped offsite. Historically, DEP allowed stormwater samples to be taken from the retention ponds when there is no flow at Outfall 001.

Per the application, the PPC Plan was last updated in November 2023.

Approve	Deny	Signatures	Date
X		*Jacob S. Rakowsky* Jacob S. Rakowsky, E.I.T. / Project Manager	8/13/2024
X		*Scott M. Arwood* Scott M. Arwood, P.E. / Environmental Engineer Manager	8/13/2024

Summary of Review

Part C permit conditions require semi-annual site inspections as well as implementation of BMPs and implementation of the facility PPC Plan. Given the BMPs in place, the discharge is not expected to have any measurable effect on the water quality of the receiving stream.

EPA waiver is in effect.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	N/A
Latitude	40º 7' 17.1"	Longitude	-77º 9' 15.7"
Wastewater Description:	Stormwater associated with industrial activity.		
Receiving Waters	Yellow Breeches Creek (HQ-CWF, MF)	Stream Code	10121
NHD Com ID	56407743	RMI	30.94
Drainage Area	116 sq. mi.	Yield (cfs/mi^2)	
Q_{7-10} Flow (cfs)	32.2	Q_{7-10} Basis	StreamStats
Watershed No.	7-E	Chapter 93 Class.	HQ-CWF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	SUEZ Mechanicsburg		
PWS Waters	Yellow Breeches Creek	Municipality	Upper Allen Twp, Cumberland County
PWS RMI	7.56	Distance from Outfall (mi)	~22.9

Drainage Area: 4,640,000 SF

% Impervious: 51%

Description of Materials/Activities in Drainage Area Exposed to Precipitation:
Bulk raw materials (soda ash, limestone, dolomite, sand, salt cake, etc.) are unloaded and stored under roof. Smaller amounts of raw materials delivered in super sacks may be briefly exposed to precipitation when being unloaded and moved onsite. Dust collectors and covered conveyors are employed to reduce the amount of dust/particulate that is exposed precipitation. All storage tanks outside (ammonia, fuel oil, diesel) are set in secondary containment. The vehicle refueling location is exposed to precipitation, however, spill prevention/response procedures are in place and spill response supplies are easily accessible. All runoff from the drainage area flows to onsite retention ponds. Only during extreme heavy storm events, when the onsite retention ponds are in danger of overflowing, is the stormwater pumped to Outfall 001. Stormwater is inspected prior to pumping it around or off the site.

Description of Treatment or BMPs in Drainage Area to Control Pollutants in Stormwater:

1. Stormwater is collected in large retention ponds, which surround the plant and are separate from the wastewater system, to promote evaporation/infiltration. Stormwater is inspected prior to moving it around or off site.
2. Routine inspection and cleanup activities. Employees receive annual training on waste handling, hopper dumping and stormwater management.
3. Use of dust collectors to control airborne particulate. Dust collectors utilize covered hoppers or supersacks for material collection.
4. Raw materials (except cullet) stored under roof. Materials moved onsite by covered conveyors.
5. Use of barriers and curbing to divert runoff and prevent cullet and other materials from entering the retention ponds.
6. Vehicle/equipment washing only performed in dedicated indoor area.
7. Storage tanks in secondary containment. Drain valves are closed and locked. Monthly PM to inspect and drain containments.

Compliance History	
Summary of DMRs:	Renewal application sampling results from 4 different storm events can be found in Table 1 below. The facility was not required to submit impairment sampling since the receiving water is not impaired. The discharge is not expected to cause or contribute to an impairment.
Summary of Inspections:	The facility was last inspected on 9/8/2021. No violations were noted. The client currently has no open violations that should affect issuance of the final permit.

Table 1. Renewal Application Sampling Results

Pollutant	Avg Concentration (mg/L)	Max Concentration (mg/L)	No. Storm Events Sampled
Oil and Grease	< 4.92	< 5.0	4
BOD5	< 8.61	17.1	4
COD	< 50.58	52.3	4
TSS	< 13.24	22.0	4
TN	< 1.77	3.03	4
TP	0.168	0.49	4
pH (S.U.)	6.61	6.72	4
Total Iron	< 0.374	0.652	4
Total Aluminum	< 0.210	0.238	4

Summary of sampling results: Concentrations did not exceed PAG-03 benchmarks.

Based on the facility's **SIC code of 3211**, the applicable PAG-03 NPDES Permit for Discharges of Stormwater Associated with Industrial Activity (effective 3/24/2023) appendix is **Appendix N**, which would include the following monitoring requirements:

Table 2. PAG-03, Appendix N Requirements

Parameter	Monitoring Requirements (1),(2)		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L) (3)	1 / 6 months	Calculation	XXX
Total Phosphorus (mg/L)	1 / 6 months	Grab	XXX
pH (S.U.)	1 / 6 months	Grab	9.0
Total Suspended Solids (TSS) (mg/L)	1 / 6 months	Grab	100
Total Aluminum (mg/L)	1 / 6 months	Grab	XXX
Total Iron (mg/L)	1 / 6 months	Grab	XXX

Footnotes

(1) In accordance with Part C V.C, the permittee shall conduct additional monitoring if specified by DEP in the letter authorizing permit coverage or other correspondence.
(2) This is the minimum number of sampling events required. Permittees may optionally perform additional sampling.
(3) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO2+NO3-N), where TKN and NO2+NO3-N are measured in the same sample.

Proposed Effluent Limitations and Monitoring Requirements

The facility was previously required to sample for pH, CBOD5, COD, TSS, Oil and Grease, TKN, TP, Total Aluminum, and Total Iron. These parameters will be retained for the renewal. TN sampling be added to the permit, consistent with PAG-03 Appendix N (effective 3/24/2023).

Table 3. Proposed Monitoring Requirements for Outfall 001 or retention pond

Parameter	Effluent Limitations				Monitoring Requirements (1),(2)	
	Concentrations (mg/L)				Minimum Measurement Frequency	Required Sample Type
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Nitrogen (mg/L) (3)	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
pH (S.U.)	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids (TSS) (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Total Aluminum (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Carbonaceous Biochemical Oxygen Demand (CBOD5) (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD) (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Oil and Grease (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab
Total Kjeldahl Nitrogen (mg/L)	XXX	XXX	Report	XXX	1/6 months	Grab

Footnotes

(1) In accordance with Part C V.C, the permittee shall conduct additional monitoring if specified by DEP in the letter authorizing permit coverage or other correspondence.
(2) This is the minimum number of sampling events required. Permittees may optionally perform additional sampling.
(3) Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO2+NO3-N), where TKN and NO2+NO3-N are measured in the same sample.

All required parameters from PAG-03 Appendix N are included in this permit.
Benchmarks for TSS of 100 mg/L, pH of 9.0 S.U., Oil and Grease of 30 mg/L, and COD of 120 mg/L are included, which is typical of the monitoring requirements for PAG-03 Appendices (effective 3/24/2023).
The BMPs from Appendix N are included.
The requirement to submit an Annual Report is included.
The requirement for routine inspections on a semiannual basis is included.

Antidegradation (93.4):

The applicant is not proposing a new or increased discharge to a High Quality (HQ) or Exceptional Value (EV) water, so Module 1 (Anti Degradation Module) was not attached to the application.

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. Best Management Practices will ensure that the existing instream uses are protected. No Exceptional Value Waters are impacted by this discharge.

The designated use of the receiving waters are as follows:
Yellow Breeches Creek (HQ-CWF, MF)

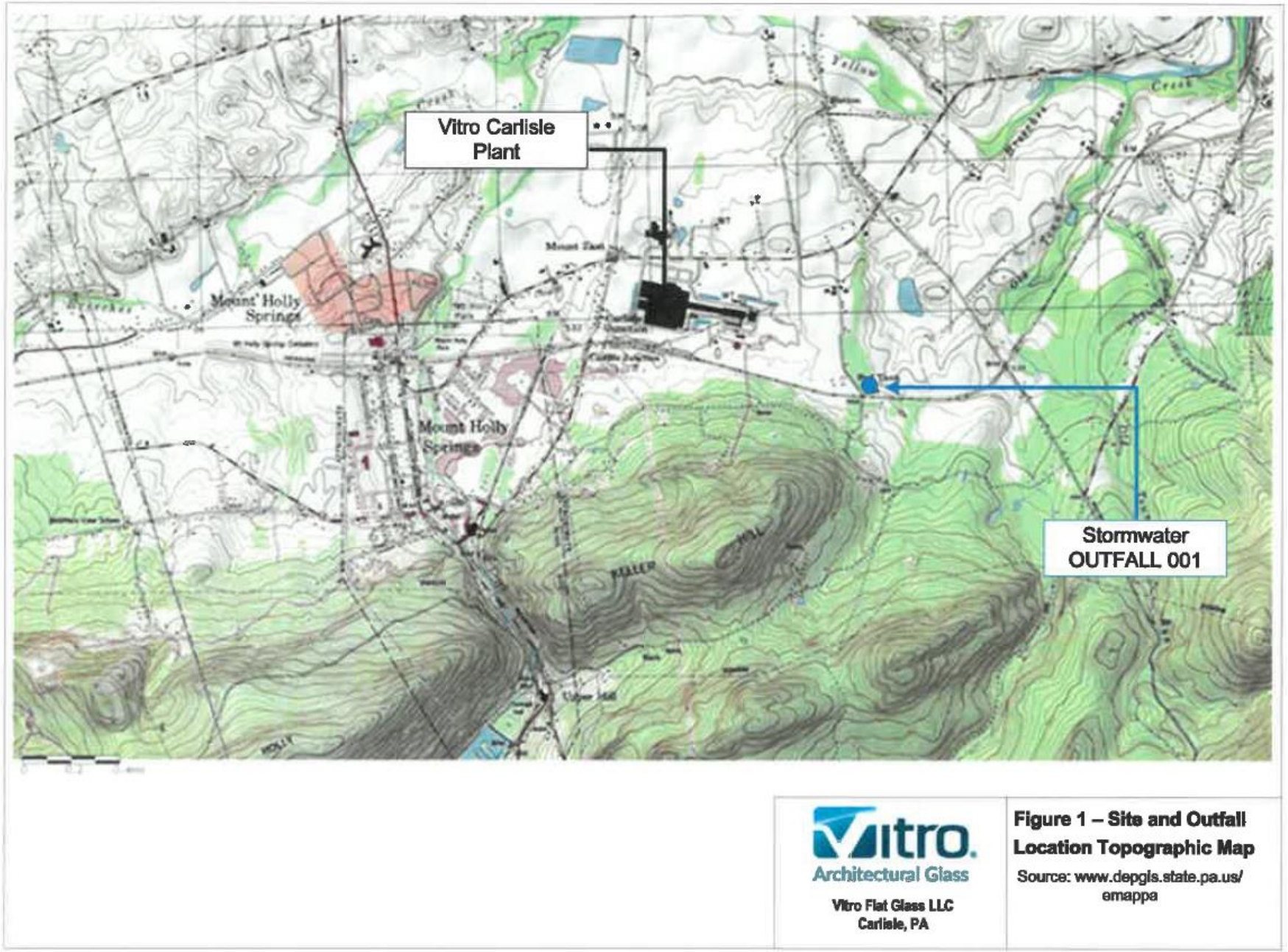

Figure 1. Site Location Map

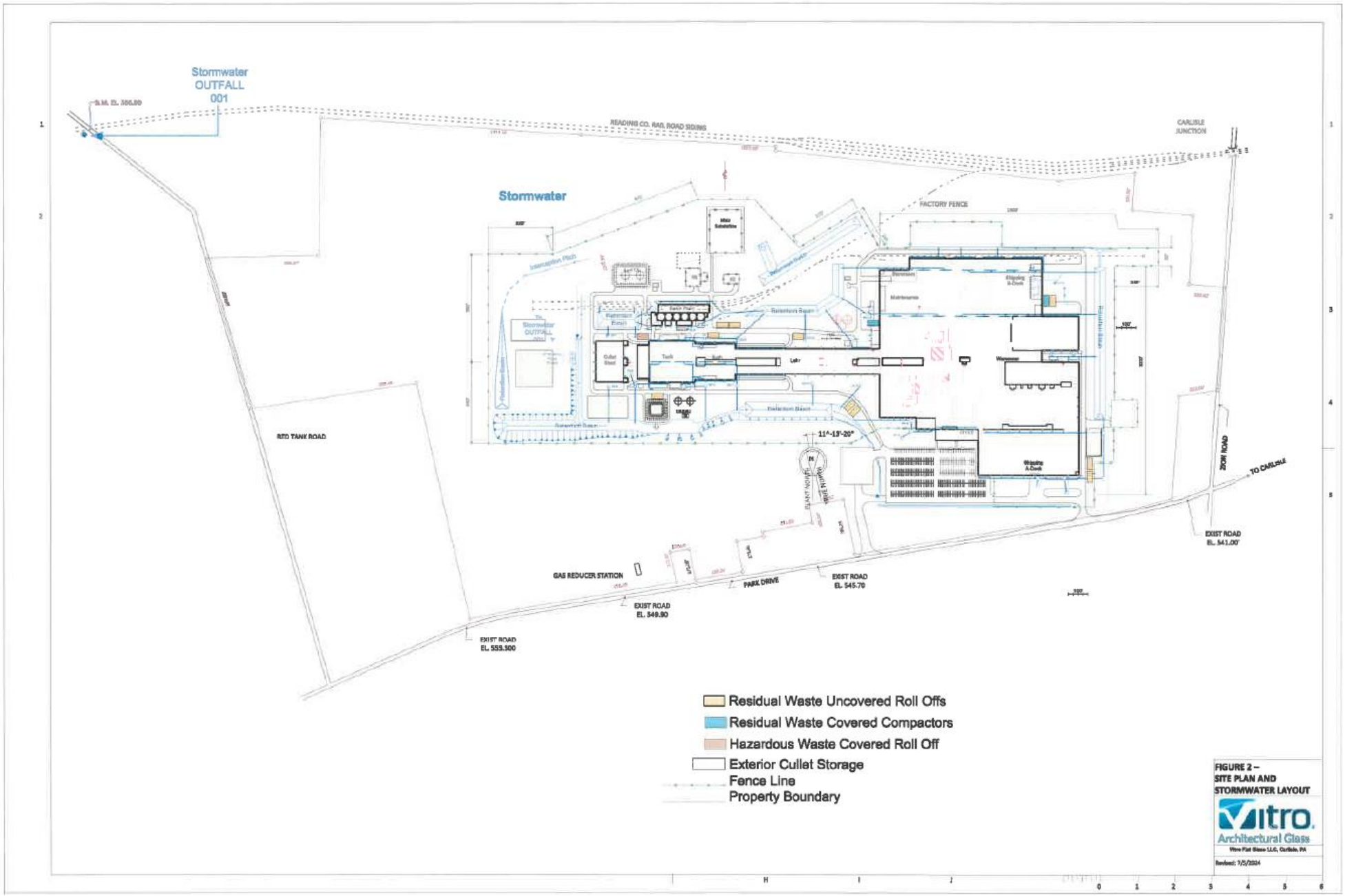

Figure 2. Site Plan

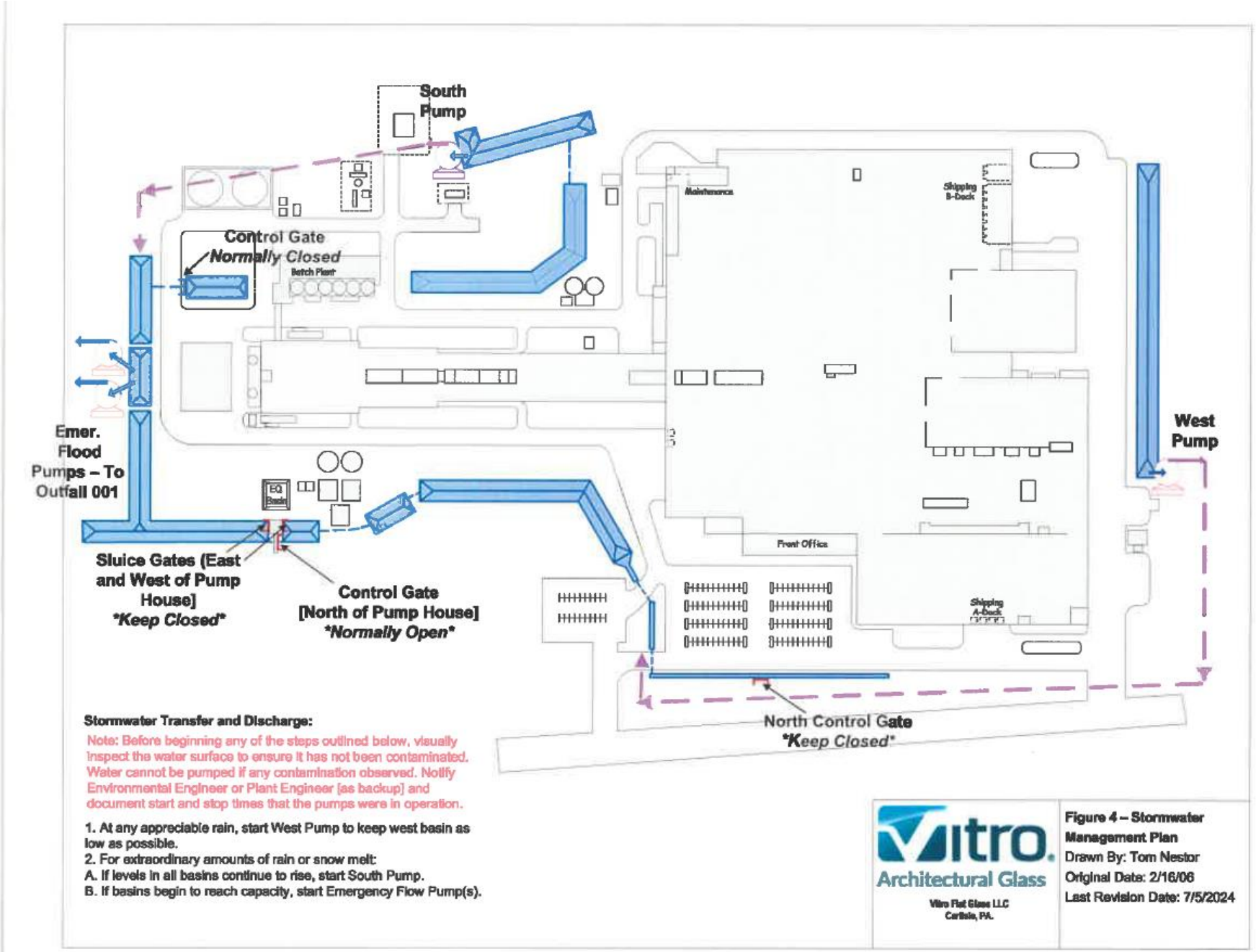

Figure 3. Stormwater Management Plan