pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southeast Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0245551**
Facility Type	**Storm Water**	APS ID	**1098592**
Major / Minor	**Minor**	Authorization ID	**1457926**

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

Applicant and Facility Information

Applicant Name	**Journal Register Offset**	Facility Name	**Journal Register Exton Facility**
Applicant Address	390 Eagleview Boulevard	Facility Address	390 Eagleview Boulevard
	Exton, PA 19341-1155		Exton, PA 19341-1155
Applicant Contact	Anthony Blimline	Facility Contact	Anthony Blimline
Applicant Phone	(610) 601-4232	Facility Phone	(610) 601-4232
Client ID	297309	Site ID	730924
SIC Code	2711	Municipality	Uwchlan Township
SIC Description	Manufacturing - Newspapers	County	Chester
Date Application Received	September 11, 2023	EPA Waived?	Yes
Date Application Accepted	November 28, 2023	If No, Reason	

Purpose of Application: New Individual permit to replace previous NOEX NNOEX 128.

Summary of Review

The Pa Department of Environmental Protection (PADEP/Department) received a new Individual Industrial Stormwater (NSIR) application from Journal Register Offset (permittee) on September 11, 2023 for permittee's Exton Facility (facility). The facility is in Uwchlan Township, Chester County. The facility previously held a No Exposure Certificate, but since the receiving watershed has a Ch.93 Special Protection designation, an Individual Permit is warranted.

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.

Approve	Deny	Signatures	Date
√		Reza H. Chowdhury, E.I.T. / Project Manager	February 8, 2024
X		Pravin Patel Pravin C. Patel, P.E. / Environmental Engineer Manager	02/08/2024

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	002	Design Flow (MGD)	N/A
Latitude	40º 3' 26.5"	Longitude	-75º 40' 28.9"
Quad Name	Downingtown	Quad Code	1840
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to Shamona Creek (HQ-TSF, MF)	Stream Code	00326
NHD Com ID	26089316	RMI	0.2100
Drainage Area	0.33 mi^2	Yield (cfs/mi^2)	0.05
Q_{7-10} Flow (cfs)	0.0158	Q_{7-10} Basis	StreamStats
Elevation (ft)	440.22	Slope (ft/ft)	
Watershed No.	3-H	Chapter 93 Class.	HQ-TSF, MF
Existing Use		Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	FLOW REGIME MODIFICATION, SILTATION		
Source(s) of Impairment	URBAN RUNOFF/STORM SEWERS, URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final	Name	Christina River Basin
Nearest Downstream Public Water Supply Intake	Downingtown Water Authority		
PWS Waters	E. Br. Brandywine Creek	Flow at Intake (cfs)	
PWS RMI	9.36	Distance from Outfall (mi)	4.71

Changes Since Last Permit Issuance: Previously issued NNOEX 128 is replaced by this individual industrial stormwater permit due to the receiving stream being a High-Quality watershed, i.e., special protection watershed, per Pa Code 25 § 92a.54(e)(9).

Facility Description

Journal Register Offset (JRO) consists of a large-scale printing operation. The facility utilizes two sheetfed printing presses, printing 38 weekly newspapers and approximately 40 special sections each month. The 86,000 square foot facility also consists of offices, mail room, a paper storage area, an ink storage area, electric room, compactors, elevators, air compressor room, and outdoor backup generator. JRO utilizes petroleum and hazardous products in their daily operations and stores these products on-site. These materials include diesel fuel, gear oil, waste gear oil, hydraulic oil, inks, fountain solutions and blanket washes. JRO maintains an SPCC plan. The facility uses a closed loop ink system, as well as a closed water system. Blue, Red, and Yellow inks are delivered in large totes and the Black ink is delivered by tanker truck. The facility has an external truck delivery hookup which delivers the ink to a large storage tank within the facility. Waste inks are stored in 55-gallon drums within the facility. Safety Kleen is the waste removal company.

The ground surface consists of paved areas, roof tops, and vegetation. Stormwater is managed through catch basins and roof drains that discharge to an on-property detention basin. The facility is served by three outfalls, Outfalls 001 through 003. The outfalls discharge to a detention basin located to the west of the facility and collect water from both permeable and non-permeable surfaces. Outfall 001 is located on the northern side of the detention basin and drains water from impermeable surfaces to include catch basins located within the northern parking lot. Outfall 002 is centrally located within the detention basin and collects stormwater from permeable and non-permeable surfaces located north of the facility building. Outfall 003 is located to the south of Outfall 002 within the detention basin and collects surface water from permeable and non-permeable surfaces to include the loading docks, compactor area, ink loading/unloading area, and roadway on the southern portion of the site. The detention basin is located within the watershed of Brandywine Creek which has a Ch. 93 designation of High-Quality Trout Stocking Fishery (HQ-TSF).

Compliance History	
Summary of DMRs:	Not available since the facility hold NOEX previously
Summary of Inspections:	12/21/2021: RTPT conducted. No violation noted. Advised the NOEX holder to apply for individual industrial stormwater permit since discharge to SP watershed disqualifies to be covered under NOEX or general permit. 3/2/17: RTPT conducted. No violation noted.

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** n/a
Latitude 40º 03' 26.5" **Longitude** -75º 40' 28.9"
Wastewater Description: Stormwater

Stormwater Technology Limits

Outfall 002 will be subject to PAG-03 General Stormwater permit conditions as a minimum requirement because the outfall discharges stormwater associated with industrial activity. The SIC code for the site is 2711—Newspaper: Publishing, or Publishing and Printing and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix R—Printing and Publishing. The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix R of the PAG-03 will also be included in Part C of the Draft Permit.

Table 1: PAG03 Appendix R monitoring requirements:

Pollutant	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
Chemical Oxygen Demand (COD) (mg/L)	1 / 6 months	Grab	120

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 (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) stream conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfall 002 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

Anti-Degradation

Antidegradation regulations under Chapter 93.4c(a)(l)(i) require dischargers to protect the existing use of receiving waters. Chapter 93.4c(b) requires dischargers to consider non-discharge alternatives, public participation and social/economic justification when proposing new, additional or increased discharges to high quality or exceptional value streams. A Non-Discharge Alternative Analysis was conducted; however, none were selected since this is an existing discharge. Non-degrading limitations were not developed or imposed since the discharge is stormwater-only. Existing use protections required under Chapter 93.4c(a)(l)(i) are ensured for discharges to high quality streams imposing the most stringent of technology-based, water quality-based and non-degrading effluent limitations. To ensure that the discharge does not degrade the stream, the No Exposure benchmark values shown in Table 2 below, will be used as the benchmark values in the Draft Permit. The goal for the permittee is to consistently achieve pollutant discharge concentrations that are below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters. These benchmark values are not effluent limitations, and an exceedance of the benchmark value is not a violation. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and Best Management Practices (BMPs). An exceedance of the benchmark provides permittees with an indication that the facility's BMPs may not be sufficiently controlling pollutants in stormwater. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan to evaluate site stormwater controls and BMPs when there are two or more consecutive exceedance of the benchmark values, which are also included in the Part C condition.

Table 2: No Exposure Benchmark values:

Parameter	Benchmark Values (mg/l)
COD	30
Total Nitrogen	2.0
TSS	30
Total Phosphorus	1.0
pH (S.U.)	6.0-9.0

Total Maximum Daily Loads:

The discharge is in Christina River Watershed for which there are EPA approved TMDLs. The Christina River Basin Total Maximum Daily Load (TMDL) for Nutrients and Dissolved Oxygen for Low-Flow Conditions, issued by the Environmental Protections Agency (EPA) on January 19, 2001 and subsequently revised on October 2002 and April 2006. Furthermore, DEP prepared, and EPA acknowledged an Alternative Reduction Scenario for the Christina River Basin for Low Flow TMDL dated June 27, 2012 to reassigned some of the allocations within the dischargers by keeping the total load to the basin the same. JRO existed on or before 2005, but first permitted in 2010 (NNOEX 128). They weren't included in Alternative Reduction Scenario in 2012. The parameters listed in both TMDLs are Flow, CBOD5, TN, TP, DO, E. Coli, Fecal Coliform, and TSS. Flow measurement from a stormwater only facility is difficult, COD will be more appropriate than cBOD5 for this type of facility, E. Coli and Fecal Coliform aren't a concern for this facility. Stormwater only facilities usually don't have a mechanism to control a minimum DO level without a mechanical treatment. The remaining parameters are listed in the Table 1 and 2 which will be part of Part A and Part C with benchmark values to collect data and determine efficiency of the BMPs in place. Since there's no aggregated WLA for this facility in the TMDLs, it'll be appropriate to monitor these parameters in the permit, to be consistent with TMDL assumptions and requirements.

Anti-backsliding:

Proposed individual permit will be more protective in terms of limits or terms and conditions compared to existing NOEX, therefore, anti-backsliding prohibition isn't applicable.

Other non-industrial Stormwater Outfalls:

The facility has two other non-industrial stormwater outfalls which aren't subject to limits or monitoring requirements. They are entered into eFACTS for records keeping purposes. Below is a summary of the outfalls:

Outfall	Latitude	Longitude	Drainage area (sft)	% impervious	Description	BMPs
001	40º 03' 28.7"	-75º 40' 28.7"	192,000	47	Asphalt parking lot, vegetated areas, catch basins and roof drains discharge to the outfall	Inspected and cleared of debris
003	40º 03' 25.3"	-75º 40' 27.7"	116,000	58	The ink uploading area, recycling/trash compactors, loading dock, vegetated areas, catch basins, and roof drains discharge to the outfall	Inspected and cleared of debris

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 002, Effective Period: Permit Effective Date through Permit Expiration Date.

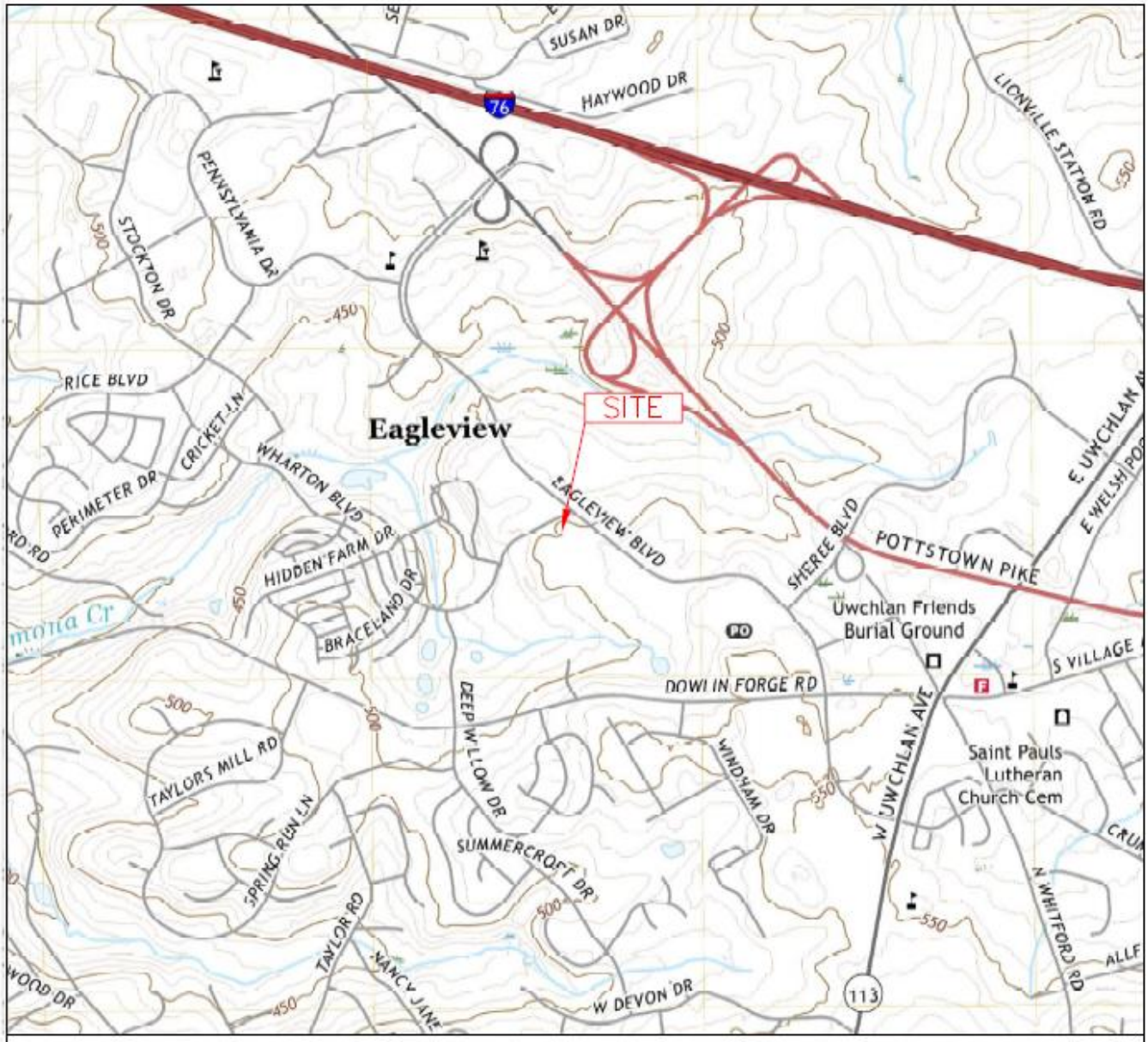
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	Repot	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Calculation
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Compliance Sampling Location: At Outfall 002

Other Comments: None

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☐	Toxics Management Spreadsheet (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☐	SOP:
☐	Other:

Facility location



SCALE 1: 24000

0 1 MILE

0 1000 2000 3000 4000 5000 6000 7000

FEET

USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE:
DOWINGTOWN, Pa.

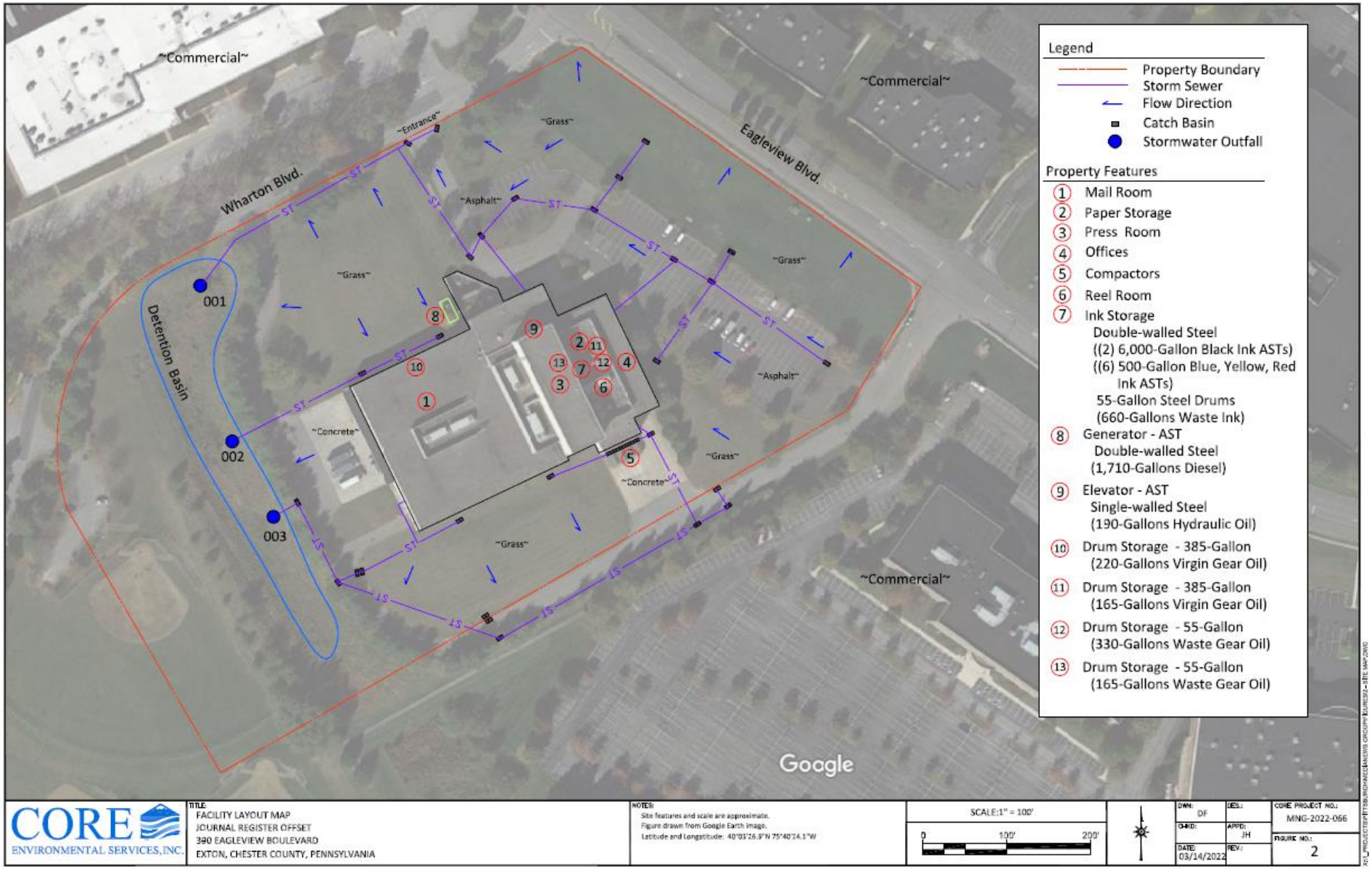
N

Latitude/ Longatitude: 40°03'26.9"N 75°40'24.1"W

CORE ENVIRONMENTAL SERVICES, INC.

FIGURE NO.	CLIENT/LOCATION: JOURNAL REGISTER OFFSET 390 EAGLEVIEW BOULAVARD EXTON, CHESTER COUNTY, PENNSYLVANIA	
1		
DRAWN BY: D. FREDERICK	DESCRIPTION: TOPOGRAPHIC MAP	
REVIEWED BY:	DATE: 3/28/2022	CORE PROJECT NO. MNG-2022-066

Facility Layout Map



StreamStats at Outfall 002

PA0245551 at Outfall 002

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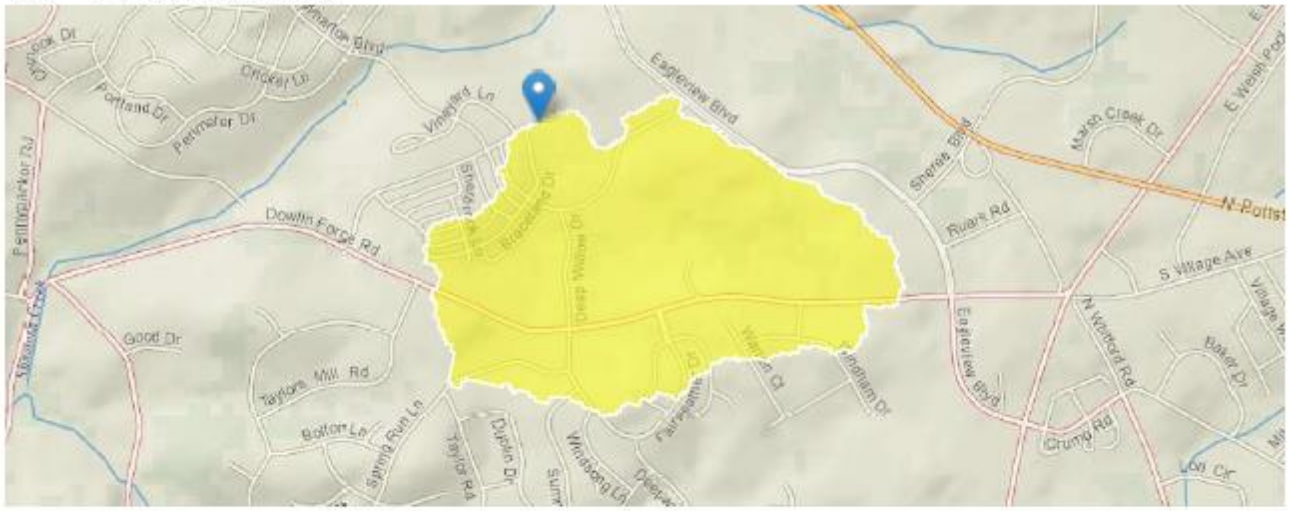

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	2.9493	degrees
DRNAREA	Area that drains to a point on a stream	0.33	square miles
ROCKDEP	Depth to rock	5	feet
URBAN	Percentage of basin with urban development	0.1058	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.33	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	2.9493	degrees	1.7	6.4
ROCKDEP	Depth to Rock	5	feet	4.13	5.21
URBAN	Percent Urban	0.1058	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0447	ft^3/s

Statistic	Value	Unit
30 Day 2 Year Low Flow	0.0638	ft^3/s
7 Day 10 Year Low Flow	0.0158	ft^3/s
30 Day 10 Year Low Flow	0.024	ft^3/s
90 Day 10 Year Low Flow	0.0476	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.19.3
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

StreamStats at node 2

PA0245551 at node 2

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Workspace ID: PA20240207124542556000
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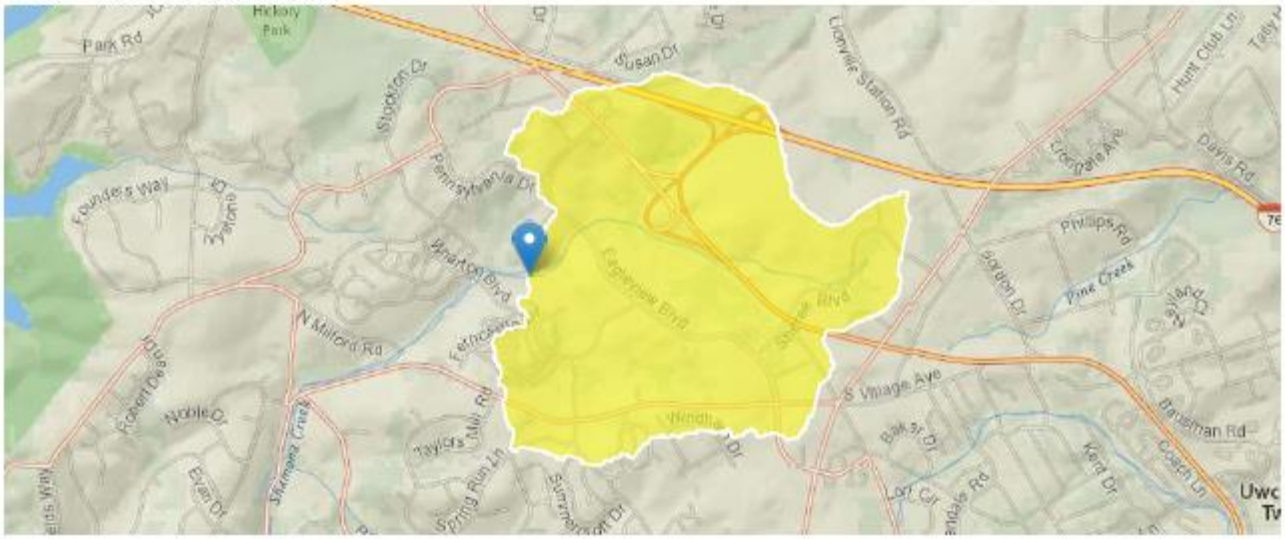

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	2.6646	degrees
DRNAREA	Area that drains to a point on a stream	1.31	square miles
ROCKDEP	Depth to rock	5	feet
URBAN	Percentage of basin with urban development	5.2787	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 1]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	1.31	square miles	4.78	1150
BSLOPD	Mean Basin Slope degrees	2.6646	degrees	1.7	6.4
ROCKDEP	Depth to Rock	5	feet	4.13	5.21
URBAN	Percent Urban	5.2787	percent	0	89

Low-Flow Statistics Disclaimers [Low Flow Region 1]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 1]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.174	ft^3/s
30 Day 2 Year Low Flow	0.252	ft^3/s
7 Day 10 Year Low Flow	0.065	ft^3/s
30 Day 10 Year Low Flow	0.0983	ft^3/s
90 Day 10 Year Low Flow	0.199	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.19.3
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1