2011



#### **ENGINEER'S REPORT**

Multi-Family Residential Development 3230 & 3238 Millersport Highway Amherst, New York

November 14, 2025

Prepared for: Emily's Garden Estates, Inc. 2217 Sweet Home Road Amherst, NY 14228

Project M-2011

Prepared by:

Metzger Civil Engineering, PLLC 8245 Sheridan Drive Williamsville, NY 14221 Phone: 716.633.2601

Fax: 716.633.2704 meteng@roadrunner.com



Michael J. Metzger, P.E. License No. 066786

#### PROJECT DESCRIPTION:

The subject property is located on the west side of Millersport Highway in the Town of Amherst and currently consists of 2 separate parcels addressed at 3230 Millersport Hwy (SBL. No 27.20-2-41) and 3238 Millersport Hwy (SBL. No 27.20-2-40). Each parcel is currently occupied by a single-family dwelling. The parcel to the north addressed as 3260 Millersport Hwy (SBL No 27.20-2-39) is also owned and operated by the project sponsor. The proposed development will combine all 3 parcels. Once the 3 parcels are combined, the total area of the resultant parcel will be 2.51± acres.

The scope of the development includes the construction of a 9-unit, 3-story residential apartment building consisting of approximately 16,141 square feet of livable space. The project will also create 39 additional parking spaces to serve the residential dwelling units. The building will be constructed with a basement design and a paved parking lot, concrete sidewalks and a stormwater management area, which is collected in a dry detention area.

Public water and sanitary sewer services are available to the project. As such, the proposed building will be served by tapping the existing 10" municipal water main currently running parallel along the north side of Millersport Highway. In addition, a sanitary sewer lateral will be connected to the existing 8" municipal sanitary sewer line running within the south edge of the property. Additional development is also planned including private utilities (i.e. electric, gas and telecommunication lines).

The area of disturbance needed for the construction of the building and related parking will be under 1.0 acre and therefore will not require coverage under the NYSDEC General SPDES GP-0-25-001. However, an Erosion and Sediment Control Plan has been prepared to meet the Town of Amherst stormwater regulations.

#### **WATER SERVICE:**

As previously outlined, the potable water needs for the proposed building shall be met by tapping the existing 10" water main running along the north side of Millersport Hwy with a new 2" 'type k' copper water line. The 2" copper water line running to the property will be split at the Right-of-Way (ROW) and transition 10' onto the property into a 2" SDR-9 PVC domestic service line and a 2" SDR-9 PVC fire service line. Shutoff valves will be installed on both service lines to the building at the ROW. A reduced pressure zone (RPZ) backflow device and double check valve assembly (DCVA) backflow device will be installed on the domestic and fire service lines, respectively, to prevent cross contamination with the municipal main. The RPZ and DCVA will be designed, installed and tested in accordance with the Erie County Water Authority and the Department of Health standards.

The ECWA has provided hydrant flow test data in the vicinity of the property. The hydrant flow test calculated a static pressure of 95 psi with a residual pressure of 82 psi with a flow of 2,276 gpm. A pressure / water demand analysis for the project was performed and is included in Appendix A of this report.

Construction, inspection and testing of the new water service will be in conformance with all applicable Town, ECWA, AWWA, New York State Health Department, and the "Ten State" standards.

#### SANITARY SEWER SERVICE:

The site will be serviced by a 4" diameter SDR-35 PVC lateral connecting to the existing 8" municipal sanitary sewer located along the southern property line. The anticipated sanitary flows generated from the proposed development have been calculated and are included in Appendix B of this report.

Construction, inspection and testing will be in conformance with all Town, Erie County Health Department, and "Ten State" standards.

#### Storm Drainage System:

Drainage of surface water runoff from the proposed development will be accomplished via a proposed network consisting of roof gutters, downspouts and a storm drainage system utilizing catch basins and storm water piping.

In accordance with Town of Amherst stormwater requirements, stormwater generated on the site will be collected in a dry detention area, which will detain the flows from a 25-year post development storm and release the stormwater at a rate less than a 10-year pre development storm level.

The TR55 analysis and hydrograph (attached) for the site shows that a pre development 10-year storm will produce a peak flow of 2.52 cfs while a post development 25-year storm will produce a flow of 3.76 cfs. Calculations based on these flows show the difference in stormwater volume between the post development 25-year storm and a pre development 10-year storm was 450± cubic feet. Conservatively, the detention area was sized to hold a minimum of 1,000± cubic feet of storm water. Detention will be accomplished by a reduced size outlet pipe as depicted on the design plans.

A complete set of stormwater calculations via the TR-55 method along with a hydrograph of storm events has been included with this report in Appendix C.

## **APPENDIX A**

Water Demand Calculations

#### **ENGINEER'S REPORT**

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#### **METZGER CIVIL ENGINEERING**

Water Service / Pressure Analysis 3230 & 3238 Millersport Hwy Town of Amherst, NY M-2011 11/7/2025

Number of Apartment Units	9 Units
Number of Bedrooms	22 bedrooms
Water use per person per day	100 gallons
Average Daily Flow 2	200 gpd
Average Daily Flow 0.0	022 MGD
Maximum Daily peaking factor	2.00 per ECWA design manual 3.10
Maximum Daily Flow 4	400 gpd - Average Daily Flow x peaking factor
Maximum Daily Flow 0.0	044 MGD - Average Daily Flow x peaking factor
Maximum Daily Flow	3 gpm
Peak Hourly peaking factor	3.00 per ECWA design manual 3.10
Peak Hourly Flow 0.0	066 MGD - Average Daily Flow x peaking factor
Peak Hourly Flow	5 gpm - Average Daily Flow x peaking factor
Total Peak Flow (Domestic)	5 gpm
Total Peak Flow (Fire Service)	200 gpm

205 gpm

FI	ow ]	Гest	Dat	a

Total Peak Flow (Combined)

Date of Hydrant test From ECWA

Location of Hydrant 3281 Millersport Hwy

Hydrant A - static pressure before test 95 psi
Hydrant A - residual pressure during test 82 psi
Hydrant B - Flow during test (Qf) 2276 gpm

Desired residual pressure 20 psi
Static pressure - desired pressure (Hr) 75 psi
Pressure drop during test (Hf) 13 psi

Calculate flow at 20 psi

 $Qr = Qf \times Hr^0.54 / Hf^0/54$  5864 gpm

Peak flow needed at 20 psi 205 gpm

Calculate residual pressure at peak flow

Static -(Peak flow x (Hf^0.54)^1.8518519 / Qf 94.8 psi



#### **METZGER CIVIL ENGINEERING**

Water Service / Pressure Analysis 3230 & 3238 Millersport Hwy Town of Amherst, NY M-2011

#### 11/7/2025

	11///2025	
Static Pressure at Main during fire flow	94.8 psi	
Existing Flow of Main at 20 psi	5864 gpm	
Peak Flow (Domestic)	5 gpm	
Elevation difference connection to design pt	2 feet	
Length of Pipe in Feet	75	
Number of Fittings in line 45 deg or less	1	
Number of Tees in Line - In line flow	0	
Number of Tees in Line - 90 deg bend	0	
Number of Valves in Line	1	
"D" Diameter of Waterline in inches	2	
Type of Pipe	Copper	
Standard Diameter Ratio	N/A	
"C" Hazen Williams Coefficient	100	
Equivalent Length of 45 deg bend	1.7 feet	
Equivalent Length of Each In-Line Tee	1.8 feet	
Equivalent Length of Each 90 deg bend	3.1 feet	
Equivalent Length of Each Gate Valve	2.6 feet	
"L" Design Length of Pipe in feet	79.3 feet	
Friction Loss "hf" of Pipe in feet "hf" = (10.44 x "L") x ("gpm" ^ 1.85)  ("C" ^ 1.85) x ("D" ^ 4.8655)	0.1 feet	
"hf" in psi (2.3 feet = 1 psi)	0.0 psi	
Head due to elevation in psi	-0.9 psi	
Loss due to RPZ / meter	-12.0 psi	
Total difference in psi	-12.9 psi	
Pressure Available in psi ( existing - loss)	81.9 psi	
Pressure Required in psi	20 psi	
Calculations By: Checked By:	JCM ARH	



### **METZGER CIVIL ENGINEERING**

Water Service / Pressure Analysis 3230 & 3238 Millersport Hwy Town of Amherst, NY M-2011

#### 11/7/2025

	11/7/2023	
Static Pressure at Main during fire flow	94.8 psi	
Existing Flow of Main at 20 psi	5864 gpm	
Peak Flow (Fire Service)	200 gpm	
Elevation difference connection to design pt	2 feet	
Length of Pipe in Feet	75	
Number of Fittings in line 45 deg or less	1	
Number of Tees in Line - In line flow	0	
Number of Tees in Line - 90 deg bend	0	
Number of Valves in Line	1	
"D" Diameter of Waterline in inches	2	
Type of Pipe	Copper	
Standard Diameter Ratio	N/A	
"C" Hazen Williams Coefficient	100	
Equivalent Length of 45 deg bend	1.7 feet	
Equivalent Length of Each In-Line Tee	1.8 feet	
Equivalent Length of Each 90 deg bend	3.1 feet	
Equivalent Length of Each Gate Valve	2.6 feet	
"L" Design Length of Pipe in feet	79.3 feet	
Friction Loss "hf" of Pipe in feet		
"hf" = (10.44 x "L") x ("gpm" ^ 1.85)	102.4 feet	
("C" ^ 1.85) x ("D" ^ 4.8655)		
"hf" in psi (2.3 feet = 1 psi)	-44.5 psi	
Head due to elevation in psi	-0.9 psi	
l load duo to dievation in per	0.0 ps.	
Loss due to DCVA	-8.0 psi	
Total difference in psi	-53.4 psi	
Total difference in pol	00.1 pc.	
Pressure Available in psi ( existing - loss)	41.5 psi	
Pressure Required in psi	20 psi	
Calculations By:	JCM	
Checked By:	ARH	
Checked by.	ANNI	

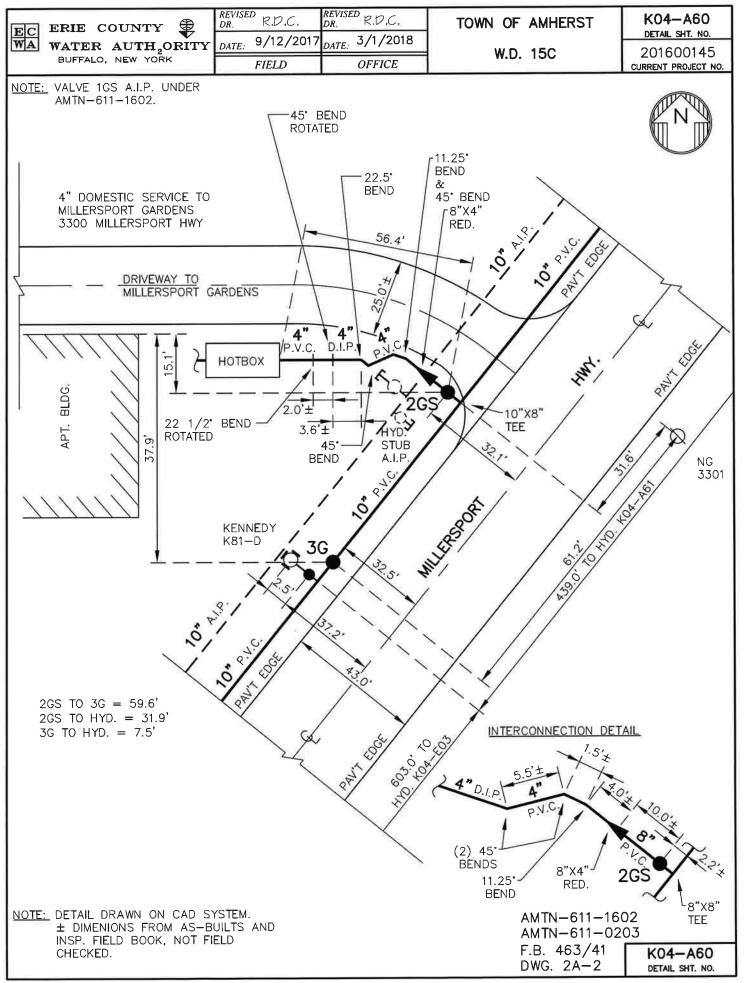


## **Town of Amherst**





Erie County Water Authority Buffalo, New York



Print Date: 10/21/2025

Water District: 315 AMHERST DISTRICT 15C

Residual Hydrant: K04A60 Test Date/Time: 7/27/2023 14:00

ize of Main/Branch: 10"/6" Fire District: 22028 GETZVILLE FD 11

ocation.....: OP 3281 MILLERSPORT HWY 2ND HYD SW/O NORTH FRENCH RD

TOWN OF AMHERST

Comments: HYDRANT FLOW TEST REQUESTED BY ZACHARY ANDERSON, ARMOR 'erformed By: MES/CDB

CONSTRUCTION

EMAIL: ZANDERSON@ARMOR-FIRE.COM

CW #135726

Fischrge Coef: 090 Elvtn Usgs(ft): Static(psi): 95 Residual(psi): 82 Required Residual Pressure(psi): 20

Gallons Used..: 13,567 Total Flow(gpm): 2,276 Flow at Reqd Resid Pressure: 5,8

Total Flow(gpm): 2,276 Flow at Reqd Resid Pressure: 5,864

'low Hydrants:

| Nzle Size Pitot | Flow | Comments | Commen

Total Flow: 2,276 3:

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### **APPENDIX B**

Sanitary Sewer Flow Calculations

#### **ENGINEER'S REPORT**

Multi-Family Residential Development 3230 & 3238 Millersport Highway Amherst, New York

Project M-2011



8245 Sheridan Drive

Williamsville, New York 14221

Phone: 716-633-2601, Fax: 716-633-2704

Proiect: 3	3230 & 3238 Millersport Hwy	By: JCM	Date: 11/7/2025
Location:	Town of Amherst, New York	Checked: LKM	Date:

#### Sanitary Sewer Flow Calculations

Number of Bedrooms =

Hydraulic Loading =

22

100 gpcd x design population =

GPD per Bedroom (as per NYSDEC Design Std)

110

Design Average Flow

2420 gpd =

0.0024 mgd

Peaking Factor, PF = [(18+((p/1000)^0.5)) / (4+((p/1000)^0.5))] =

Maximum Design Flow = Design Average Flow x Peaking Factor =

4.23

10241 gpd

0.0102

mgd

BMW-65 11/7/2025

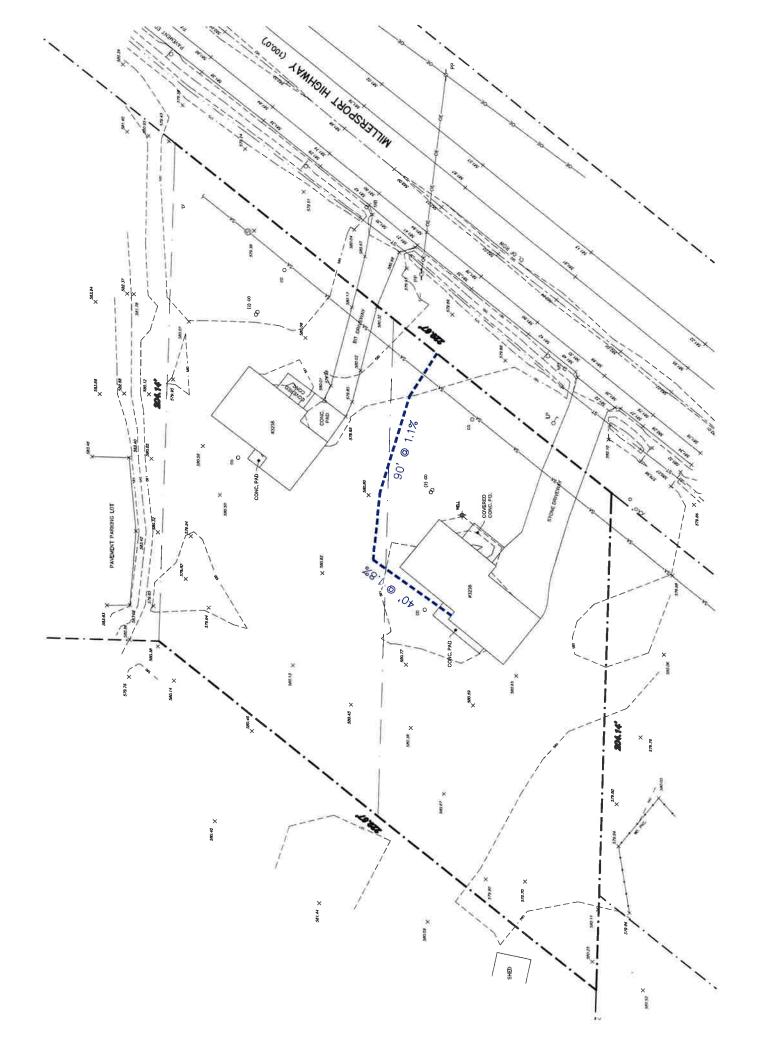
## **APPENDIX C**

**Stormwater Calculations** 

#### **ENGINEER'S REPORT**

Multi-Family Residential Development 3230 & 3238 Millersport Highway Amherst, New York

Project M-2011



#### WinTR-55 Current Data Description

#### --- Identification Data ---

Date: 11/4/2025 Units: English Areal Units: Acres

User: J. Metzger
Project: 3230-3238 Millersport Hwy
SubTitle: Pre-Development
State: New York
County: Erie Filename: <new file>

#### --- Sub-Area Data ---

Name	Description	Reach	Area(ac)	RCN	Tc
Pre-Develo	)	Outlet	0.86	87	.114

Total area: .86 (ac)

#### --- Storm Data --

#### Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.2	2.69	3.25	3.84	4.48	6.0	1.8

Storm Data Source: User-provided custom storm data Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

#### 3230-3238 Millersport Hwy Pre-Development Erie County, New York

#### Storm Data

#### Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.2	2.69	3.25	3.84	4.48	6.0	1.8
2 - 2	2.03	3.23	3.04	1.10	0.0	1.0

Storm Data Source: User-provided custom storm data Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

## 3230-3238 Millersport Hwy Pre-Development Erie County, New York

#### Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 10-Yr (cfs)
SUBAREAS Pre-Develo	2,52
REACHES	
OUTLET	2.52

#### 3230-3238 Millersport Hwy Pre-Development Erie County, New York

Hydrograph Peak/Peak Time Table

Peak Flow and Peak Time (hr) by Rainfall Return Period

Sub-Area Peak or Reach 10-Yr Identifier (cfs) (hr)

SUBAREAS

Pre-Develo 2.52

REACHES

OUTLET 2.52

# 3230-3238 Millersport Hwy Pre-Development Erie County, New York

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Pre-Develo	.86	0.114	87	Outlet	

Total Area: .86 (ac)

# 3230-3238 Millersport Hwy Pre-Development Erie County, New York

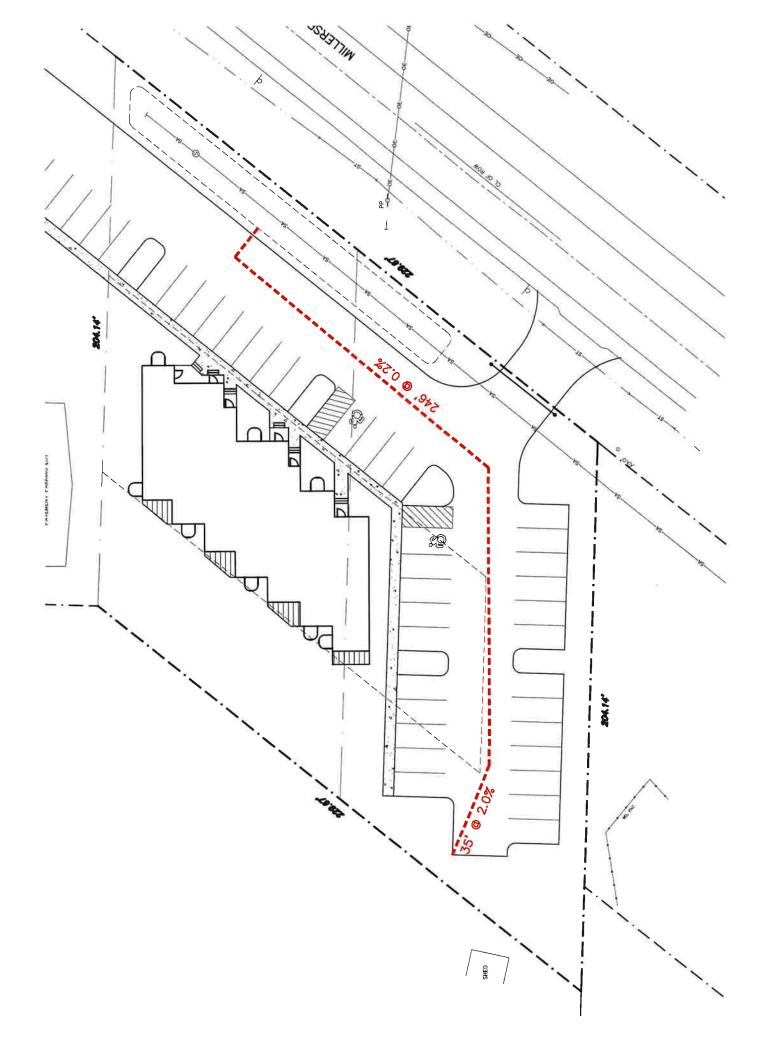
#### Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
Pre-Develo SHEET SHALLOW	40 90	0.0180 0.0110	0.150 0.05 <b>0</b>				0.099 0.015
				Ti	me of Conce	ntration	.114

## 3230-3238 Millersport Hwy Pre-Development Erie County, New York

#### Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
					Carried Control
Pre-DeveloOpen space;	grass cover < 50%	(poor	) C	.567	86
	ing lots, roofs, drivewa	ys	C	.107	98
	ass combination	(poor	) C	.187	82
Total Area	/ Weighted Curve Number			.86	87
	-			===	==



#### WinTR-55 Current Data Description

#### --- Identification Data ---

User: J. Metzger Date: 11/4/2025
Project: 3230-3238 Millersport Hwy Units: English
SubTitle: Post-Development Areal Units: Acres

SubTitle: Post-Development

State: New York County: Erie Filename: <new file> Areal Units: Acres

--- Sub-Area Data ---

Reach Area(ac) RCN Tc Name Description Outlet 0.86 92 0.1 Post-Devel

Total area: .86 (ac)

#### --- Storm Data --

#### Rainfall Depth by Rainfall Return Period

2-Yr	5-Yr	10-Yr			100-Yr	1-Yr
(in)	(in)	(in)			(in)	(in)
2.2	2.69	3.25	3.84	4.48	6.0	1.8

Storm Data Source: User-provided custom storm data Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

#### 3230-3238 Millersport Hwy Post-Development Erie County, New York

#### Storm Data

#### Rainfall Depth by Rainfall Return Period

2-Yr (in)	5-Yr (in)	10-Yr (in)	25-Yr (in)	50-Yr (in)	100-Yr (in)	1-Yr (in)
2.2	2.69	3.25	3.84	4.48	6.0	1.8

Storm Data Source: User-provided custom storm data Rainfall Distribution Type: Type II
Dimensionless Unit Hydrograph: <standard>

# 3230-3238 Millersport Hwy Post-Development Erie County, New York

#### Watershed Peak Table

Sub-Area or Reach Identifier	Peak Flow by Rainfall Return Period 25-Yr (cfs)
SUBAREAS Post-Devel	3.76
REACHES	
OUTLET	3.76

#### 3230-3238 Millersport Hwy Post-Development Erie County, New York

Hydrograph Peak/Peak Time Table

Sub-Area Peak Flow and Peak Time (hr) by Rainfall Return Period or Reach 25-Yr Identifier (cfs) (hr)

\_\_\_\_\_\_

SUBAREAS

Post-Devel 3.76

REACHES

OUTLET 3.76

#### 3230-3238 Millersport Hwy Post-Development Erie County, New York

Sub-Area Summary Table

Sub-Area Identifier	Drainage Area (ac)	Time of Concentration (hr)	Curve Number	Receiving Reach	Sub-Area Description
Post-Devel	.86	0.100	92	Outlet	

Total Area: .86 (ac)

# 3230-3238 Millersport Hwy Post-Development Erie County, New York

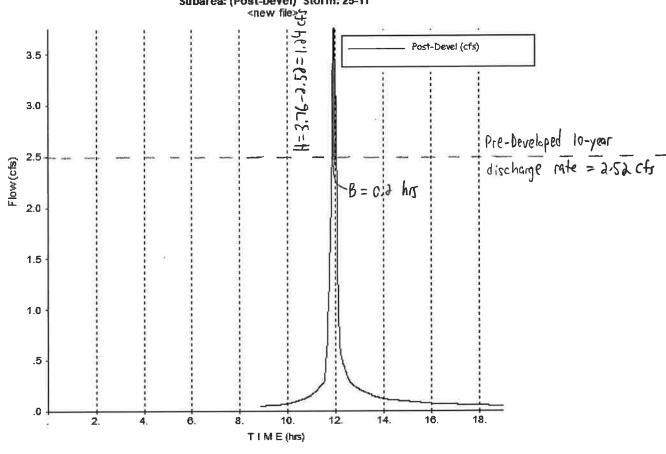
#### Sub-Area Time of Concentration Details

Sub-Area Identifier/			End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)	
Post-Devel SHEET CHANNEL	35 246	0.0200	0.011 0.012	0.79	3.14	2.204	0.011
				Ti	me of Concer	ntration =	0.1

## 3230-3238 Millersport Hwy Post-Development Erie County, New York

#### Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use		Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
					NEEDEN AND THE
Post-DevelOpen space	e: grass cover < 50%	(poor	) C	. 322	86
Paved park	ys .	С	.465	98	
	cass combination	(poor	) C	.074	82
Total Area	n / Weighted Curve Number			.86	92
				22.00.00	==



Volume Needed to Detain a 10-year Pre-Development Storm to a Post-Development 25-year Storm

$$A = \frac{1}{7} (0.9 \text{ km} \times 3600 \text{ s/hr}) (1.94 \text{ th/s})$$

$$A = \frac{1}{7} (0.9 \text{ km} \times 3600 \text{ s/hr}) (1.94 \text{ th/s})$$



8245 Sheridan Drive

Williamsville, New York 14221

Phone: 716-633-2601

Project:	Mulit-Family Residential Development	By: JCM
Location:	3230 & 3238 Millersport Hwy	11.07.25

## Outlet Control Structure Design

			Pre Development	Post Development	
			Discharge Rate	Discharge Rate	Actual
		Head (h)	(cfs)	(cfs)	Discharge from
	Elev (ft)	(ft)	(from TR-55)	(from TR-55)	Orifice (cfs)
CL of orifice	579.08				
10 year storm event	579.25		2.52		
25 year storm event	579.92	0.84		3.76	1.57
Oriface Diameter	8		inch		
Oriface Diameter	0.67		ft		
Area of Pipe (A)	0.349		sq ft		
Orifice coefficient (C	0.61				
Acceleration (g)	32.2		ft/sec2		
Torricelli Equation - 0	Orifice Calcula	ations			
			Q=CA(2gh)^.5		
			Total Flow		
			10 year pre	2.52	cfs
			25 year post	1.57	cfs

Oriface Sizing 11/7/2025

## **APPENDIX D**

**USDA** Soil Survey

**ENGINEER'S REPORT** 

Multi-Family Residential Development 3230 & 3238 Millersport Highway Amherst, New York

Project M-2011





NSDA



Page 2 of 3 11/4/2025

# MAP LEGEND

#### Special Line Features Very Stony Spot Stony Spot Spoil Area Wet Spot Other W €> ◁ Soil Map Unit Polygons Area of Interest (AOI) Soil Map Unit Points Soil Map Unit Lines Area of Interest (AOI)

Special Point Features

Blowout

Э



**Borrow Pit** Clay Spot

X



Closed Depression

0



Gravelly Spot

Gravel Pit

X







Marsh or swamp

Lava Flow

Landfill

Mine or Quarry

# Aerial Photography



















Sinkhole



# Sodic Spot

# MAP INFORMATION

The soil surveys that comprise your AOI were mapped at

Warning: Soil Map may not be valid at this scale.

contrasting soils that could have been shown at a more detailed misunderstanding of the detail of mapping and accuracy of soil Enlargement of maps beyond the scale of mapping can cause line placement. The maps do not show the small areas of

Please rely on the bar scale on each map sheet for map measurements. Source of Map: Natural Resources Conservation Service Coordinate System: Web Mercator (EPSG:3857) Web Soil Survey URL:

distance and area. A projection that preserves area, such as the Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required. This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Erie County, New York Survey Area Data: Version 25, Sep 4, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger. Date(s) aerial images were photographed: May 13, 2023—May

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

### **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cv	Cosad loamy fine sand	0.2	21.7%
NfA	Niagara silt loam, 0 to 3 percent slopes	0.7	78.3%
Totals for Area of Interest	, N	0.9	100.0%

## **APPENDIX E**

Pipe Sizing Calculations

#### **ENGINEER'S REPORT**

Multi-Family Residential Development 3230 & 3238 Millersport Highway Amherst, New York

Project M-2011

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SHEET OF

Frequency 10 Year n=0.012

DATE: ###### BY: JCM Ck: LKM

PROJECT NO.: M-2011
PROJECT: Multi-Family Residential Development
COUNTY / TOWN: Town of Amherst, New York

	i i	_	_	_		7		7	7		7	7	2.00	7	7		2	2	1	0
TNIC		CAPACITY	(CFS)			1.		1.	1.		4-1	1.		1.	1		T.	2.2		2
SIGN PO		>	(FPS)			2.2		2.2	2.2		2.2	2.2		2.18	2.2		2.2	2.8		2.8
OUTLET PIPE FROM DESIGN POINT		SLOPE	%			0.20		0.20	0.19		0.19	0.20		0.20	0.20		0.20	0.32		0.32
PIPE FR			(N.)				12			12			12	11100 0-451 0-454 0-454 0-454 0-454		12	127		12	
UTLET		>	,	FALL	(FT.)	0.12	0.12	0.12	0.14	0.14	0.14	0.12	0.12	0.12	0.12	0.12	0.12	0.08	0.08	80.0
٥		CROWN ELEV.	INVERT ELEV.		END		580.38	579.38		580.24	579.24		580.12	579.12		580.00	579.00		579.92	578.92
		CRC	N	UPPER LOWER	END		580.50	579.50		580.38	579.38		580.24	579.24		580.12	579.12		580.00	92.00
DESIGN	OINT	(RIM)			(F)		581.60			581.60			581.42			581.42			581.60	
-		RUNOFF (					0.35			69.0			1,21			1.62			1.90	
	TOTAL	CA					0.08			0.17	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0:30			0.41			0.49	
		(IN/HR)					4.10			4.06			4.01			3.95			3.90	
TIME	Р	FLOW	Z	SECTION	(MIN)		0.47			0.55		1000	0.47			0.47			0.15	
	TIME	P	CONC.	(NIM)			10.00			10.47			11.02			11.49			11.95	
	SUBTOTAL		۲ ک			0.08	0.00	0.01	0.16	0.00	0.01	0.28	0.00	0.02	0.38	0.00	0.03	0.46	0.00	0.03
	-	0.98	0.98	0.30	SUBTOTAL	0.08	0.00	0.02	0.16	0.00	0.04	0.29	0.00	90.0	0.39	0.00	60.0	0.47	00.0	60.0
DRAINAGE AREA	(ACRES)	PAVMT C=	GUTTER C=	LAWN C=	INCRMNT	0.08	00:00	0.02	0.08	0.00	0.02	0.13	00:00	0.02	0.10	0.00	0.03	0.08	00:00	00:00
OUTLET	PIPE	FROM	DESIGN	POINT	(FT)		61	100 mm of the control		72	10000 10010		61	2100 2100 2100 2100 2100 2100 2100 2100		61			25	
		LINE	TYPE				HDPE			HDPE	10 10 10 10 10 10 10 10 10 10 10 10 10 1		HDPE	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		HDPE			HDPE	
		STRUCT.	TYPE				Cat. Basin	1 m   1 m		Cat. Basin	1010 1010 1010 1010 1010 1011 1011 101		Cat. Basin			Cat. Basin	2000 2000 2000 2000 2000 2000 2000 200		Cat. Basin	
	WATER	FLOWING	đ	DESIGN	POINT		CB1	71 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0		CB2	2010 2010 2010 2010 2010 2010 2010 2010		CB3			CB4	1000 1000 1000 1000 1000 1000 1000 100		CB5	10000 10000