TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS

PROJECT NAME:	**MALMARK SUBDIVISION**
PROJECT NO.:	**20-15**
PROJECT LOCATION:	**72 LATTINTOWN ROAD**
	SECTION 9, BLOCK 3, LOT 2
REVIEW DATE:	**10 JUNE 2022**
MEETING DATE:	**16 JUNE 2022**
PROJECT REPRESENTATIVE:	**MECURIO-NORTON-TAROLLI-MARSHALL**

1. Final sign off from the Orange County Department of Health for major subdivisions/well and septic approvals are required.

2. In response to comments received at the Public Hearing a swale has been graded along the north side of the common driveway, between the driveway and the property line directing service water in an easterly direction away from adjoining properties. Applicant's representative is requested to evaluate extending the swale slightly in an easterly direction to assure discharge to the unnamed stream on the site.

3. Common Driveway Access and Maintenance Agreements must be approved by the Planning Board Attorney.

4. A sign off from the Highway Superintendent dated 19 April 2021 has been received.

5. This office will assist the applicant in obtaining a Municipal Authorization Form.

6. A note should be added to the plans identifying that no Certificate of Occupancy will be issued with Lot #3 or 4 prior to the construction of the swale along the north side of the driveway.

Respectfully submitted,

MHE Engineering, D.P.C.

Patrick J. Hines
Principal
PJH/kbw

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33 Airport Center Drive, Suite 202, New Windsor, NY 12553
845-567-3100 | F: 845-567-3232 | mheny@mhepc.com

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Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING

45 Main Street · P.O. Box 166
Pine Bush, New York 12566
Tel: (845) 744-3620
Fax: (845) 744-3805
Email: mntm@mntm.co

Lawrence J. Marshall, P.E. | Gary Rich, L.S. | John Tarolli, L.S. | Zachary A. Peters, P.E.

Project Narrative

For

Malmark Construction Corporation Subdivision

Lattintown Road
Town of Newburgh
Orange County, New York
Town of Newburgh Project No. 2020-15

Prepared for:
Malmark Construction Corp.
36 Sloane Road
Newburgh, New York
845-248-2741

Prepared by:
Mercurio-Norton-Tarolli-Marshall
Engineering & Land Surveying, P.C.

Zachary A. Peters, P.E.

Prepared:
November 19, 2020
Last Revised:
June 7, 2022

A. Description of Project Site:

The project site is located in the Town of Newburgh, Orange County, New York on the northeasterly side of Lattintown Road. The parcel is currently identified as tax map parcel: Section 9, Block 3, Lot 2. The site contains approximately 8.30 acres of land total, with approximately 6.72 acres located in the AR zoning district and approximately 1.58 acres located in the R-3 zoning district.

B. Existing Conditions:

The project site is currently vacant, consisting primarily of farm field. The majority of the site is currently wooded. According to the United States Department of Agriculture National Cooperative soil survey, the soils located on the project site are primarily Bath-Nassau channery silt loam, classified as hydrologic soils group (HSG) "C" soils. Runoff from the project site is generally in the form of sheet flow.

C. Proposed Development:

The proposed development is a five (5) lot residential subdivision resulting in the creation of four (4) additional tax parcels. Two (2) common driveways are proposed from Lattintown road in the northwesterly portion of the site serving Lots 1 & 2 and Lots 3 & 4, respectively. Lot 5 will be served by an individual driveway from Lattintown Road in the southeasterly portion of the site. The sight distances for the proposed driveways exceed the AASHTO recommended stopping sight distances for the posted speed limit.

The minimum lot size for the AR zoning district is 40,000 square feet. The minimum lot area for the R-3 zoning district is 15,000 square-feet. As per Town Code definitions, lot area excludes the area within the private road right-of-way. The proposed lot areas are outlined in the following table:

Lot:	*Area:*
1	42,648 sq.ft.
2	41,026 sq.ft.
3	64,862 sq.ft.
4	97,026 sq.ft.
5	90,018 sq.ft.

D. Water Supply Requirements:

The entirety of the project site is located within the Town of Newburgh Consolidated Water District, with existing public water mains along the two sections of site frontage on Lattintown Road. Based upon a preliminary discussion between the applicant and Town of Newburgh Water Department, the water main along the westerly frontage is a high-pressure main serving the existing fire hydrants along Lattintown Road in this vicinity and is not suitable for a proposed water connection. The existing water main along the southerly frontage is a potable water main and would permit a potential connection from the site development.

The project currently proposes a potable water service connection for Lot 5 along the southerly frontage of Lattintown Road. Lots 1 – 4 are proposed to be served by private onsite wells with a minimum yield of five (5) gallons per minute.

All private wells are to be constructed in accordance with the requirements of the New York State Department of Health Appendix 5-B, "Standards for Water Wells", Table 2. The overburden determined for this site most closely resembles Type 5. This type of overburden requires a 6" minimum casing firmly seated in rock. To mitigate the potential for water entering the wells at less than fifty (50) feet below grade, a minimum of fifty (50) feet of casing will be installed. Drill hole diameter shall be equal to the casing size plus 2" if grout is set using pressure placement, or the casing size plus 4" if grout is set using gravity placement.

In accordance with Orange County Department of Health (OCDOH) requirements, a test well was drilled on Lot 2 and water quality and quantity testing was completed. Preliminary water quality testing results indicated an elevated odor level above the maximum contaminant level (MCL) permitted. OCDOH regulations permit a maximum of 3 TON (threshold odor number).

Copies of the test well data, including the well log, pump test results, and water quality results have been included in Attachment A.

Water quality sampling shall be completed on all lots served by private wells and, if the results exceed the specified MCL, treatment shall be provided. The proposed odor treatment shall be a Nelsen "AIO" Air Injection Oxidizing filter system, or approved equal. The system shall be equipped with a Pentair Fleck 5600AIO SXT control valve. The control valve shall be programmed to provide a backwash cycle as follows:

- Backwash: 4 minutes @ 5 gallons per minute (gpm) = 20 gallons
- Rapid Rinse: 1 minute at 5 gpm = 5 gallons
- Start/Stop Draw: assume 5 gallons each

The total backwash flow rate for the specified treatment system is 30 gallons per day. To provide a conservative estimate, the anticipate backwash rate has been specified to be 45 gallons per day.

Information pertaining to the proposed water treatment system has been included in Attachment B.

E. <u>Sewage Disposal Requirements:</u>

The design of the proposed sewage disposal systems is based on the requirements of the New York State Department of Health (NYSDOH) and the Orange County Department of Health (OCDOH). The Orange County Department of Health requires sewage disposal systems be designed for 110 gallons per day (gpd) per bedroom in accordance with NYSDOH Appendix 75-A.

Lots 1 – 4 have a design flow rate of 485 gallons per day (gpd) to accommodate a total of four (4) bedrooms at 110 gpd per bedroom, plus an addition 45 gpd of water treatment backwash.

Lot 5 has a design flow rate of 440 gallons per day (gpd) to accommodate a total of four (4) bedrooms at 110 gpd per bedroom. Lot 5 is served by a connection to the public water main and no water treatment system backwash is proposed.

The detail sheet and plans show the design and location of the proposed sewage disposal systems. The proposed sewage disposal systems have been designed as absorption trench systems. Each design includes the preliminary area and the addition of a 50% reserve area in accordance with OCDOH regulations.

The proposed systems have been designed based on results of field testing completed by MNTM. Two (2) percolation tests and two (2) deep tests will be performed at each of the proposed sewage disposal system locations. The specific dates and soils testing results will be provided in tabular form on the plans. Systems will be designed with trench bottom separations being a minimum of 2.0’ above groundwater, rock, or an impervious layer. The project is a realty subdivision involving the development of five (5) lots under five (5) acres requiring review and approval by the Orange County Department of Health (OCDOH).

Attachment A:

Test Well Data

3807-3

(1) COUNTY Orange

(2) TOWN Newburgh

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

WATER WELL COMPLETION REPORT

(3) DEC Well Number: 012550

(4) OWNER NAME: Malmark Construction Corp.

(5) OWNER ADDRESS: Lot #2 Lattintown Rd. Newburgh, NY 12550

(6) WELL ADDRESS (Also provide sketch or map, see instructions on reverse)
☐ Same as owner address

(7) LATITUDE/LONGITUDE AND METHOD USED
☑ GPS ☐ Map N 41° 33' 49.3" E -74° 0' 26.1"

(8) TAX MAP NO.

(9) DEPTH OF WELL (Feet): 305

(10) DEPTH TO GROUNDWATER (Feet): 41 ft

(11) DATE MEASURED: 12/27/21

(12) FLOWING? ☐ Yes ☑ No

CASINGS

(13) DIAMETER	6 in.	in.	in.	in.
(14) LENGTH	50 ft.	ft.	ft.	ft.

(15) GROUT TYPE / SEALING: Portland

(16) GROUT / SEALING INTERVAL (Feet) From 10 To 50

SCREENS

(17) MAKE & MATERIAL

(18) SLOT SIZE

(19) DIAMETER	in.	in.	in.	in.
(20) LENGTH	ft.	ft.	ft.	ft.

(21) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (Feet)

YIELD TEST

(22) DATE: December 27th, 2021

(23) DURATION OF TEST (Hours:Minutes): 4 hours

(24) LIFT METHOD ☐ Pump ☑ Air Lift ☐ Bailer

(25) STABILIZED DISCHARGE (GPM): 32 GPM

(26) STATIC LEVEL PRIOR TO TEST (Feet below top of casing)

(27) MAXIMUM DRAWDOWN (Stabilized) (Feet below top of casing)

(28) RECOVERY TIME (Hours:Minutes)

(29) Was the water produced during the test discharged away from immediate area? ☑ Yes ☐ No

DRILLER INFORMATION

(30) METHOD OF DRILLING ☑ Rotary ☐ Cable Tool ☐ Other

(31) USE OF WATER (See instructions for choices): Domestic

(32) DATE DRILLING WORK STARTED: December 27th, 2021

(33) DATE DRILLING WORK COMPLETED: December 27th, 2021

(34) DATE REPORT COMPLETED: 12-27-21

(35) REGISTERED COMPANY NAME: Reliable Pump and Well

(36) DEC REGISTRATION NO.: NYRD 10972

(37) REGISTERED COMPANY ADDRESS: 35 W Corbett Rd. Montgomery, NY 12549

(38) CERTIFIED DRILLER (Print name): Richard Tompkins

(39) CERTIFIED DRILLER SIGNATURE *

PUMP INSTALLATION

(40) PUMP INSTALLED? ☐ Yes ☐ No

(41) DATE

(42) TYPE

(43) MAKE

(44) MODEL

(45) MAXIMUM CAPACITY (GPM)

(46) PUMP INSTALLATION LEVEL (Feet below top of casing)

(47) DATE REPORT COMPLETED

(48) REGISTERED COMPANY NAME

(49) DEC REGISTRATION NO.: NYRD

(50) REGISTERED COMPANY ADDRESS

(51) CERTIFIED PUMP INSTALLER (Print Name)

(52) CERTIFIED PUMP INSTALLER SIGNATURE *

* By signing this document I hereby affirm that: (1) I am certified to supervise water well drilling activities as

WELL LOG

DEPTH TO BEDROCK: 17 (Feet below land surface)

GROUND ELEVATION: 391' (Feet above sea level)

TOP OF CASING: 18 (Feet above (+) or below (-) land surface)

TOP OF WELL

0-17	Brown Clay
17-50	Blue shale
Casing	set
50-305	Blue shale

BOTTOM OF HOLE

D.W.SCOTT WATER SYSTEMS

#196 Bart Bull Rd.
Middletown, N.Y. 10941
Phone: 845-692-6698
Fax: 845-692-8800
email: clnscott1475@yahoo.com

National Ground Water Association Cert# 37109

New York State Pump Inst. License# 10249

WATER WELL FLOW TEST REPORT

CLIENT NAME: MALMARK CONSTR. CORP
CLIENT ADDRESS:

WELL LOCATION: LOT-2 LATTINTOWN RD. NEWBURGH
PAGE-1
WELL CASING DIAMETER: 6"
PUMP SETTING/DEPTH: 180'

TIME	STATIC LEVEL	G.P.M.	METER READING
8:00AM	24.9'	6.5	40,823
8:05AM	32.8'	6.5	40,830
8:10AM	33.6'	6.5	40,836
8:15AM	35.3'	6.5	40,843
8:20AM	35.7'	6.5	40,849
8:25AM	35.8'	6.5	40,856
8:30AM	36.0'	6.5	40,862
8:45AM	36.5'	6.5	40,869
9:00AM	36.9	6.5	40,875
9:15AM	37.0'	6.5	40,882
9:30AM	37.1'	6.5	40,888
9:45AM	37.2'	6.5	40,895
10:00AM	37.2'	6.5	40,901
10:15AM	37.2'	6.5	40,908
10:30AM	37.2'	6.5	40,914
10:45AM	37.2'	6.5	40,921
11:00AM	37.2'	6.5	40,927
11:15AM	37.2'	6.5	40,934
11:30AM	37.2'	6.5	40,940
11:45AM	37.2'	6.5	40,947
12:00PM	37.2'	6.5	40,953
12:15PM	37.1'	6.5	40,960
12:30PM	37'0'	6.5	40,966
12:45PM	37.1'	6.5	40,973
1:00PM	37.1'	6.5	40,979
1:15PM	37.2'	6.5	40,986

D.W.SCOTT WATER SYSTEMS

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National Ground Water Association Cert# 37109

New York State Pump Inst. License# 10249

WATER WELL FLOW TEST REPORT

CLIENT NAME: MALMARK CONSTR. CORP
CLIENT ADDRESS:

WELL LOCATION: LOT-2 LATTINTOWN RD. NEWBURGH
PAGE-2
WELL CASING DIAMETER: 6"
PUMP SETTING/DEPTH: 180'

TIME	STATIC LEVEL	G.P.M.	METER READING
1:30PM	37.1'	6.5	40,986
1:45PM	37.1'	6.5	40,993
	RECOVERY		
2:00PM	33.0'		
2:15PM	28.4'		
2:30PM	26.3'		
2:45PM	25.1'		

OCL Analytical Services
35 Goshen Turnpike
Bloomingburg NY 12721

Phone: (845) 733-1557
Fax: (845) 733-1944
info@oclanalytical.com
www.oclanalytical.com

Certificate of Analysis

D.W. Scott Water Systems
196 Bart Bull Road
Middletown NY 10940

Date Received: 01/12/2022 13:10
Date Complete: 02/07/2022 14:49
Date Reported: 02/07/2022 16:55
Date Printed: 02/07/2022 16:55
Project:

Test	Method	Result	Units	Prep Date	Test Date	Initials	Quals.
378599-01	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**	Sampled 01/12/22 12:00		
Alkalinity as CaCO3	SM 21-23 2320B (-97)	110	mg/L		01/17/22 11:30	RL	
Corrosivity Index (LI)	SM 18-22 2330	-0.08			01/20/22 9:57	PM	
378599-02	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**	Sampled 01/12/22 12:00		
Chloride	SM 21-22 4500-Cl- C (-97)	39.5	mg/L		01/18/22 10:00	RL	
Color (apparent)	SM 21-23 2120B (-01)	5	CU's		01/13/22 11:15	RL	
Specific Conductance	SM 21-23 2510B (-97)	385	µmho/cm		01/14/22 14:30	RL	
pH	SM 20 4500-H+ B	7.99			01/13/22 11:10	RL	N
pH Temperature	SM 2550B	14.5	°C		01/13/22 11:10	RL	N
Turbidity	SM 21-23 2130 B (-01)	13.6	NTU's		01/13/22 11:35	RL	
378599-03	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**	Sampled 01/12/22 12:00		
Odor at 60C	SM 21-23 2150B (-97)	50	TON		01/13/22 11:15	RL	
378599-04	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**	Sampled 01/12/22 12:00		
Hardness as CaCO3, Total	SM 2340C-2011	104	mg/L		01/13/22 9:45	RL	
378599-05	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**	Sampled 01/12/22 12:00		
Nitrate as N	SM 21-23 4500-NO3 F (-00)	<0.0500	mg/L		01/25/22 11:32	MMc	

OCL - OCL Analytical Services NYSDOH ELAP# 10510
Results meet all NELAC standards unless otherwise noted.

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Certificate of Analysis

D.W. Scott Water Systems
196 Bart Bull Road
Middletown NY 10940

Date Received: 01/12/2022 13:10
Date Complete: 02/07/2022 14:49
Date Reported: 02/07/2022 16:55
Date Printed: 02/07/2022 16:55
Project:

Test	Method	Result	Units	Prep Date	Test Date	Initials	Quals.
378599-06	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**		Sampled 01/12/22 12:00	
Sulfate	EPA 300.0	21	mg/L		01/17/22 7:56	EL	
378599-07	**Malmark Subdivision**	**Latintown Rd Town of Newbugh**		**Lot 2**		Sampled 01/12/22 12:00	
Iron, Fe	EPA 200.7	0.75	mg/L	01/19/22 5:29	01/21/22 7:03	EL	
Manganese, Mn	EPA 200.7	0.034	mg/L	01/19/22 5:29	01/21/22 7:03	EL	
Sodium, Na	EPA 200.7	39	mg/L	01/19/22 5:29	02/02/22 6:54	EL	
Lead, Pb	EPA 200.8	0.0013	mg/L	01/19/22 5:29	01/21/22 6:19	EL	

EL = Analysis by Envirotest Laboratories #10142

Approved By

Lisa McClinton
Lab Manager

Lab No: 378599
The reported results relate only to the samples for the Lab No. identified above

Qualifiers
N = Parameter is not NELAP certified

OCL Analytical Services LLC

35 Goshen Turnpike, Bloomingburg NY, 12721
Phone (845)-733-1557 Fax (845)-733-1944

CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

NELAP# NYDOH-10510

Client/Reporting Information

Company Name	D.W. SCOTT WATER SYSTEMS
Address	196 BART HILL RD.
City, State, Zip	MIDDLETOWN N.Y. 10941
Phone	845-346-6419
Email	CHASCOTT1475@YAHOO.COM

*Samples should be brought to lab on ice with a receiving temperature of 2 to 6°C.

LAB USE ONLY
Receiving Information
Sample Temp °C 5.0
IR Gun ID # 32

	Y	N
Received on Ice?	X	
Within Hold Times?	X	
Correct Containers?	X	
Correct Preservation?	X	
Set up in 6 Hours?	X	

Initials SAS

LAB USE ONLY OCL Number	Sample Description/Location (As it will appear on Lab Report) Fed ID / PWS #	Collection Date	Collection Time	Composite	Grab	Matrix Code	Field Chlorine Residual	Analysis Requested	Number of Containers	Container Size	Container Type	Preservative: Unpreserved	Thiosulfate	Sulfuric Acid	Nitric Acid	Hydrochloric Acid	Ascorbic Acid	Sodium Hydroxide	Zinc Acetate	Ammonium Chloride
378599-01	MALMARK SUBDIVISION	11/2/22	12		X	DW		Alkalinity, Corrosivity	1	500ml	P	X								
378599-02	LOT #2 LATTINTOWN RD.				X	DW		Turbidity, Color, Chloride, pH, Cond	1	500ml	P	X								
378599-03	TOWN OF NEWBURGH				X	DW		Odor	1	300ml	G	X								
378599-04					X	DW		Total Hardness	1	500ml	P			X						
378599-05					X	DW		Nitrate	1	500ml	P			X						
378599-06					X	DW		Sulfate	1	500ml	P	X								
378599-07					X	DW		Iron, Manganese, Lead, Sodium	1	250ml	P				X					
								(Fe +Mn)	↓	↓	↓				↓					

Comments/Special Instructions

Rush Requested? ____ Client Code: ____ Prepaid? N

Sampled By:	Print D.W. SCOTT	Date: 11/2/22
	Sign D.W. Scott	Time: 12:PM
Relinquished By:	Print D.W. SCOTT	Date: 11/2/22
	Sign	Time: 1:10 PM
Relinquished By:	Print	Date:
	Sign	Time:
Received By:	Print J. Emerson	Date: 11/2/22
	Sign	Time: 1310
Received By:	Print	Date:
	Sign	Time:
Received By:	Print	Date:
	Sign	Time:

By signing this document, you are acknowledging that the information provided is accurate. OCL Analytical does use subcontract laboratories for certain analyses. OCL Analytical also has the right to release a copy of the report to the NYS Department of Health should such information be requested.

OCL Analytical Services
35 Goshen Turnpike
Bloomingburg NY 12721

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info@oclanalytical.com
www.oclanalytical.com

Certificate of Analysis

D.W. Scott Water Systems
196 Bart Bull Road
Middletown NY 10940

Date Received: 01/12/2022 13:10
Date Complete: 01/28/2022 0:00
Date Reported: 01/28/2022 14:15
Date Printed: 01/28/2022 14:15
Project:

Test	Method	Result	Units	Prep Date	Test Date	Initials	Quals.
378598-01	**Malmark Subdivision**	**Latintown Rd, Town Of Newburgh, NY**	**LOT #2**			Sampled 01/12/22 12:00	
505	EPA 505	Attached				Pace	
378598-02	**Malmark Subdivision**	**Latintown Rd, Town Of Newburgh, NY**	**LOT #2**			Sampled 01/12/22 12:00	
525.2	EPA 525.2	Attached				Pace	
378598-03	**Malmark Subdivision**	**Latintown Rd, Town Of Newburgh, NY**	**LOT #2**			Sampled 01/12/22 12:00	
531.1	EPA 531.1	Attached				Pace	

Approved By

Lisa McClinton
Lab Manager

Lab No: 378598
The reported results relate only to the samples for the Lab No. identified above

OCL Analytical Services LLC

35 Goshen Turnpike, Bloomingburg NY, 12721
Phone (845)-733-1557 Fax (845)-733-1944

CHAIN-OF-CUSTODY

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NELAP# NYDOH-10510

Client/Reporting Information

Name	D.W. SCOTT WATER SYSTEMS
Address	196 BRAT HILL RD.
City, State, Zip	MIDDLETOWN N.Y. 10941
Phone	845-346-6419
Email	CLNSCOTT1495@YAHOO.COM

*Samples should be brought to lab on ice with a receiving temperature of 2 to 6°C.

SOC Testing

ACCEPTED Mon-Wed 8:30AM-2:30PM

LAB USE ONLY
Receiving Information
Sample Temp °C 8.0
IR Gun ID # 32

	Y	N
Received on Ice?	X	
Within Hold Times?	X	
Correct Containers?	X	
Correct Preservation?	X	
Set up in 6 Hours?	X	

Initials JAE

LAB USE ONLY OCL Number	Sample Description/Location (As it will appear on Lab Report) Fed ID / PWS #	Collection Date	Collection Time	Composite	Grab	Matrix Code	Field Chlorine Residual	Analysis Requested	Number of Containers	Container Size	Container Type	Preservative: Unpreserved	Thiosulfate	Sulfuric Acid	Nitric Acid	Hydrochloric Acid	Ascorbic Acid	Sodium Hydroxide	Zinc Acetate	Ammonium Chloride
	MAL MAR SUBDIVISION	1/12/22	12PM		X															
378598-01	LOT #3 LATTINTOWN RD				X	DW		EPA 505 (alachlor)	2	40ml	vial		X							
378598-02	TOWN OF NEWBURGH				X	DW		EPA 525.3 (atrazine)	2	1-liter	G						X			
378598-03					X	DW		EPA 531.1 (carbaryl)	1	60ml	vial		X							

Comments/Special Instructions: 525.2 preserved with EDTA, PotCitrate, Ascorbic
531.1 preserved with monochloracetic acid

Rush Requested? ____ Client Code: ____ Prepaid? N

Sampled By:	Print DWIGHT W. SCOTT	Date: 1/12/22	
	Sign D.W. Scott	Time: 12:PM	
Relinquished By:	Print D. SCOTT II	Date: 1/12/22	
	Sign	Time: 1:10 PM	
Relinquished By:	Print	Date:	
	Sign	Time:	
Received By:	Print J. Emerson	Date: 1/12/22	
	Sign	Time: 1310	
Received By:	Print	Date:	
	Sign	Time:	
Received By:	Print	Date:	
	Sign	Time:	

By signing this document, you are acknowledging that the information provided is accurate. OCL Analytical does use subcontract laboratories for certain analyses. OCL Analytical also has the right to release a copy of the report to the NYS Department of Health should such information be requested.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

January 27, 2022

Lisa McClinton
OCL Analytical Services
35 Goshen Turnpike
Bloomingburg, NY 12721

RE: Project: 378598
Pace Project No.: 70200657

Dear Lisa McClinton:

Enclosed are the analytical results for sample(s) received by the laboratory on January 13, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Sophia Sparkes

Sophia Sparkes
sophia.sparkes@pacelabs.com
(631)694-3040
Project Manager

Enclosures

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

CERTIFICATIONS

Project: 378598
Pace Project No.: 70200657

Pace Analytical Services Long Island
575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987
New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

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SAMPLE SUMMARY

Project: 378598
Pace Project No.: 70200657

Lab ID	Sample ID	Matrix	Date Collected	Date Received
70200657001	**378598-01**	Drinking Water	01/12/22 12:00	01/13/22 09:45
70200657002	**378598-02**	Drinking Water	01/12/22 12:00	01/13/22 09:45
70200657003	**378598-03**	Drinking Water	01/12/22 12:00	01/13/22 09:45

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SAMPLE ANALYTE COUNT

Project: 378598
Pace Project No.: 70200657

Lab ID	Sample ID	Method	Analysts	Analytes Reported
70200657001	**378598-01**	EPA 505	MJM	15
70200657002	**378598-02**	EPA 525.3	RP1	12

PACE-MV = Pace Analytical Services - Melville

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ANALYTICAL RESULTS

Project: 378598
Pace Project No.: 70200657

Sample: 378598-01 **Lab ID: 70200657001** Collected: 01/12/22 12:00 Received: 01/13/22 09:45 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
505 GCS Pesticides/PCBs	Analytical Method: EPA 505 Preparation Method: EPA 505 Pace Analytical Services - Melville								
Alachlor	**<0.20**	ug/L	0.20		1	01/18/22 16:35	01/19/22 02:08	15972-60-8	
Aldrin	**0.081**	ug/L	0.025		1	01/18/22 16:35	01/19/22 02:08	309-00-2	M1
gamma-BHC (Lindane)	**<0.020**	ug/L	0.020		1	01/18/22 16:35	01/19/22 02:08	58-89-9	
Chlordane (Technical)	**<0.20**	ug/L	0.20		1	01/18/22 16:35	01/19/22 02:08	57-74-9	
Dieldrin	**<0.050**	ug/L	0.050		1	01/18/22 16:35	01/19/22 02:08	60-57-1	
Endrin	**<0.010**	ug/L	0.010		1	01/18/22 16:35	01/19/22 02:08	72-20-8	
Heptachlor	**<0.025**	ug/L	0.025		1	01/18/22 16:35	01/19/22 02:08	76-44-8	
Heptachlor epoxide	**<0.020**	ug/L	0.020		1	01/18/22 16:35	01/19/22 02:08	1024-57-3	
Hexachlorobenzene	**<0.10**	ug/L	0.10		1	01/18/22 16:35	01/19/22 02:08	118-74-1	
Hexachlorocyclopentadiene	**<0.10**	ug/L	0.10		1	01/18/22 16:35	01/19/22 02:08	77-47-4	
Methoxychlor	**<0.10**	ug/L	0.10		1	01/18/22 16:35	01/19/22 02:08	72-43-5	
PCB Screen	**<0.40**	ug/L	0.40		1	01/18/22 16:35	01/19/22 02:08		
Toxaphene	**<1.0**	ug/L	1.0		1	01/18/22 16:35	01/19/22 02:08	8001-35-2	
Surrogates									
Tetrachloro-m-xylene (S)	80	%	44-129		1	01/18/22 16:35	01/19/22 02:08	877-09-8	
Decachlorobiphenyl (S)	83	%	26-197		1	01/18/22 16:35	01/19/22 02:08	2051-24-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 378598
Pace Project No.: 70200657

Sample: 378598-02 **Lab ID: 70200657002** Collected: 01/12/22 12:00 Received: 01/13/22 09:45 Matrix: Drinking Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
525.3 Base Neutral Extractable	Analytical Method: EPA 525.3 Preparation Method: EPA 525.3 Pace Analytical Services - Melville								
Atrazine	**<0.10**	ug/L	0.10		1	01/17/22 11:07	01/19/22 17:49	1912-24-9	
Benzo(a)pyrene	**<0.020**	ug/L	0.020		1	01/17/22 11:07	01/19/22 17:49	50-32-8	
Butachlor	**<0.20**	ug/L	0.20		1	01/17/22 11:07	01/19/22 17:49	23184-66-9	
bis(2-Ethylhexyl)adipate	**<0.60**	ug/L	0.60		1	01/17/22 11:07	01/19/22 17:49	103-23-1	
bis(2-Ethylhexyl)phthalate	**<0.60**	ug/L	0.60		1	01/17/22 11:07	01/19/22 17:49	117-81-7	M1
Metolachlor	**<0.10**	ug/L	0.10		1	01/17/22 11:07	01/19/22 17:49	51218-45-2	
Metribuzin	**<0.50**	ug/L	0.50		1	01/17/22 11:07	01/19/22 17:49	21087-64-9	
Propachlor	**<0.10**	ug/L	0.10		1	01/17/22 11:07	01/19/22 17:49	1918-16-7	
Simazine	**<0.070**	ug/L	0.070		1	01/17/22 11:07	01/19/22 17:49	122-34-9	
Surrogates									
1,3-Dimethyl-2-nitrobenzene(S)	81	%	70-130		1	01/17/22 11:07	01/19/22 17:49	81209	
Benzo(a)pyrene-d12 (S)	75	%	70-130		1	01/17/22 11:07	01/19/22 17:49		
Triphenylphosphate (S)	91	%	70-130		1	01/17/22 11:07	01/19/22 17:49	115-86-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 378598
Pace Project No.: 70200657

QC Batch: 240999
QC Batch Method: EPA 505
Analysis Method: EPA 505
Analysis Description: 505 GCS Pesticides
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70200657001

METHOD BLANK: 1217630 Matrix: Water
Associated Lab Samples: 70200657001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alachlor	ug/L	<0.20	0.20	01/19/22 00:05	
Aldrin	ug/L	<0.025	0.025	01/19/22 00:05	
Chlordane (Technical)	ug/L	<0.20	0.20	01/19/22 00:05	
Dieldrin	ug/L	<0.050	0.050	01/19/22 00:05	
Endrin	ug/L	<0.010	0.010	01/19/22 00:05	
gamma-BHC (Lindane)	ug/L	<0.020	0.020	01/19/22 00:05	
Heptachlor	ug/L	<0.025	0.025	01/19/22 00:05	
Heptachlor epoxide	ug/L	<0.020	0.020	01/19/22 00:05	
Hexachlorobenzene	ug/L	<0.10	0.10	01/19/22 00:05	
Hexachlorocyclopentadiene	ug/L	<0.10	0.10	01/19/22 00:05	
Methoxychlor	ug/L	<0.10	0.10	01/19/22 00:05	
PCB Screen	ug/L	<0.40	0.40	01/19/22 00:05	
Toxaphene	ug/L	<1.0	1.0	01/19/22 00:05	
Decachlorobiphenyl (S)	%	109	26-197	01/19/22 00:05	
Tetrachloro-m-xylene (S)	%	105	44-129	01/19/22 00:05	

LABORATORY CONTROL SAMPLE: 1217631

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alachlor	ug/L	0.29	0.27	95	70-130	
Aldrin	ug/L	0.029	0.032	111	70-130	
Chlordane (Technical)	ug/L		<0.20			
Dieldrin	ug/L	0.029	<0.050	98	70-130	
Endrin	ug/L	0.029	0.028	98	70-130	
gamma-BHC (Lindane)	ug/L	0.029	0.022	76	70-130	
Heptachlor	ug/L	0.029	0.029	100	70-130	
Heptachlor epoxide	ug/L	0.029	0.031	108	70-130	
Hexachlorobenzene	ug/L	0.029	<0.10	101	70-130	
Hexachlorocyclopentadiene	ug/L	0.029	<0.10	70	70-130	
Methoxychlor	ug/L	0.14	0.13	92	70-130	
PCB Screen	ug/L		<0.40			
Toxaphene	ug/L		<1.0			
Decachlorobiphenyl (S)	%			95	26-197	
Tetrachloro-m-xylene (S)	%			95	44-129	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 378598
Pace Project No.: 70200657

LABORATORY CONTROL SAMPLE: 1217633

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
gamma-BHC (Lindane)	ug/L	0.029	0.021	73	70-130	
Decachlorobiphenyl (S)	%			94	26-197	
Tetrachloro-m-xylene (S)	%			83	44-129	

LABORATORY CONTROL SAMPLE: 1217634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chlordane (Technical)	ug/L	0.71	0.75	105	70-130	
Decachlorobiphenyl (S)	%			107	26-197	
Tetrachloro-m-xylene (S)	%			108	44-129	

MATRIX SPIKE SAMPLE: 1217637

Parameter	Units	70200657001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alachlor	ug/L	<0.20	0.57	0.37	65	65-135	
Aldrin	ug/L	0.081	0.057	0.042	-67	65-135	M1
Chlordane (Technical)	ug/L	<0.20		<0.20			
Dieldrin	ug/L	<0.050	0.057	<0.050	80	65-135	
Endrin	ug/L	<0.010	0.057	0.048	83	65-135	
gamma-BHC (Lindane)	ug/L	<0.020	0.057	0.040	69	65-135	
Heptachlor	ug/L	<0.025	0.057	0.048	84	65-135	
Heptachlor epoxide	ug/L	<0.020	0.057	0.050	88	65-135	
Hexachlorobenzene	ug/L	<0.10	0.057	<0.10	70	65-135	
Hexachlorocyclopentadiene	ug/L	<0.10	0.057	<0.10	81	65-135	
Methoxychlor	ug/L	<0.10	0.29	0.20	71	65-135	
PCB Screen	ug/L	<0.40		<0.40			
Toxaphene	ug/L	<1.0		<1.0			
Decachlorobiphenyl (S)	%				75	26-197	
Tetrachloro-m-xylene (S)	%				76	44-129	

SAMPLE DUPLICATE: 1217937

Parameter	Units	70200718001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alachlor	ug/L	<0.20	<0.20		20	
Aldrin	ug/L	<0.025	<0.025		20	
Chlordane (Technical)	ug/L	<0.50	<0.20		20	
Dieldrin	ug/L	<0.050	<0.050		20	
Endrin	ug/L	<0.010	<0.010		20	
gamma-BHC (Lindane)	ug/L	<0.020	0.050		20	
Heptachlor	ug/L	<0.040	<0.025		20	
Heptachlor epoxide	ug/L	<0.020	<0.020		20	
Hexachlorobenzene	ug/L	<0.10	<0.10		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 378598
Pace Project No.: 70200657

SAMPLE DUPLICATE: 1217937

Parameter	Units	70200718001 Result	Dup Result	RPD	Max RPD	Qualifiers
Hexachlorocyclopentadiene	ug/L	<0.10	<0.10		20	
Methoxychlor	ug/L	<0.10	<0.10		20	
PCB Screen	ug/L	<0.40	<0.40		20	
Toxaphene	ug/L	<2.5	<1.0		20	
Decachlorobiphenyl (S)	%	90	87		20	
Tetrachloro-m-xylene (S)	%	59	87		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 378598
Pace Project No.: 70200657

QC Batch: 240791
QC Batch Method: EPA 525.3
Analysis Method: EPA 525.3
Analysis Description: 525.3 Base Neutral Extractables
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70200657002

METHOD BLANK: 1216895 Matrix: Water
Associated Lab Samples: 70200657002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Atrazine	ug/L	ND	0.10	01/19/22 13:27	
Benzo(a)pyrene	ug/L	ND	0.020	01/19/22 13:27	
bis(2-Ethylhexyl)adipate	ug/L	ND	0.60	01/19/22 13:27	
bis(2-Ethylhexyl)phthalate	ug/L	ND	0.60	01/19/22 13:27	
Butachlor	ug/L	ND	0.20	01/19/22 13:27	
Metolachlor	ug/L	ND	0.10	01/19/22 13:27	
Metribuzin	ug/L	ND	0.50	01/19/22 13:27	
Propachlor	ug/L	ND	0.10	01/19/22 13:27	
Simazine	ug/L	ND	0.070	01/19/22 13:27	
1,3-Dimethyl-2-nitrobenzene(S)	%	79	70-130	01/19/22 13:27	
Benzo(a)pyrene-d12 (S)	%	70	70-130	01/19/22 13:27	
Triphenylphosphate (S)	%	85	70-130	01/19/22 13:27	

LABORATORY CONTROL SAMPLE: 1216896

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Atrazine	ug/L	0.1	<0.10	93	70-130	
Benzo(a)pyrene	ug/L	0.1	0.080	80	70-130	
Butachlor	ug/L	0.1	<0.20	88	70-130	
Metolachlor	ug/L	0.1	<0.10	97	70-130	
Metribuzin	ug/L	0.1	<0.50	71	70-130	
Propachlor	ug/L	0.1	0.10	102	70-130	
Simazine	ug/L	0.1	0.10	102	70-130	
1,3-Dimethyl-2-nitrobenzene(S)	%			85	70-130	
Benzo(a)pyrene-d12 (S)	%			72	70-130	
Triphenylphosphate (S)	%			92	70-130	

LABORATORY CONTROL SAMPLE: 1216899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzo(a)pyrene	ug/L	0.02	<0.020	84	70-130	
Simazine	ug/L	0.02	<0.070	109	70-130	
1,3-Dimethyl-2-nitrobenzene(S)	%			83	70-130	
Benzo(a)pyrene-d12 (S)	%			70	70-130	
Triphenylphosphate (S)	%			90	70-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 378598
Pace Project No.: 70200657

LABORATORY CONTROL SAMPLE: 1216900

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Atrazine	ug/L	0.5	0.45	90	70-130	
Benzo(a)pyrene	ug/L	0.5	0.37	73	70-130	
bis(2-Ethylhexyl)adipate	ug/L	0.5	<0.60	94	70-130	
bis(2-Ethylhexyl)phthalate	ug/L	0.5	0.64	127	70-130	
Butachlor	ug/L	0.5	0.45	90	70-130	
Metolachlor	ug/L	0.5	0.46	92	70-130	
Metribuzin	ug/L	0.5	<0.50	81	70-130	
Propachlor	ug/L	0.5	0.48	95	70-130	
Simazine	ug/L	0.5	0.41	83	70-130	
1,3-Dimethyl-2-nitrobenzene(S)	%			88	70-130	
Benzo(a)pyrene-d12 (S)	%			79	70-130	
Triphenylphosphate (S)	%			92	70-130	

MATRIX SPIKE SAMPLE: 1216905

Parameter	Units	70200657002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Atrazine	ug/L	<0.10	0.1	<0.10	90	70-130	
Benzo(a)pyrene	ug/L	<0.020	0.1	0.081	81	70-130	
bis(2-Ethylhexyl)adipate	ug/L	<0.60	0.1	<0.60	115	70-130	
bis(2-Ethylhexyl)phthalate	ug/L	<0.60	0.1	<0.60	167	70-130	M1
Butachlor	ug/L	<0.20	0.1	<0.20	104	70-130	
Metolachlor	ug/L	<0.10	0.1	<0.10	95	70-130	
Metribuzin	ug/L	<0.50	0.1	<0.50	81	70-130	
Propachlor	ug/L	<0.10	0.1	0.10	104	70-130	
Simazine	ug/L	<0.070	0.1	0.093	93	70-130	
1,3-Dimethyl-2-nitrobenzene(S)	%				86	70-130	
Benzo(a)pyrene-d12 (S)	%				78	70-130	
Triphenylphosphate (S)	%				86	70-130	

SAMPLE DUPLICATE: 1216906

Parameter	Units	70200693001 Result	Dup Result	RPD	Max RPD	Qualifiers
Atrazine	ug/L	<0.10	<0.10		30	
Benzo(a)pyrene	ug/L	<0.020	<0.020		30	
bis(2-Ethylhexyl)adipate	ug/L	<0.60	<0.60		30	
bis(2-Ethylhexyl)phthalate	ug/L	<0.60	<0.60		30	
Butachlor	ug/L	<0.20	<0.20		30	
Metolachlor	ug/L	<0.10	<0.10		30	
Metribuzin	ug/L	<0.50	<0.50		30	
Propachlor	ug/L	<0.10	<0.10		30	
Simazine	ug/L	<0.070	<0.070		30	
1,3-Dimethyl-2-nitrobenzene(S)	%	95	83			
Benzo(a)pyrene-d12 (S)	%	79	75			
Triphenylphosphate (S)	%	92	91			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 378598
Pace Project No.: 70200657

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

Pace Analytical Services, LLC
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Melville, NY 11747
(631)694-3040

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 378598
Pace Project No.: 70200657

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70200657001	**378598-01**	EPA 505	240999	EPA 505	241051
70200657002	**378598-02**	EPA 525.3	240791	EPA 525.3	241012

OCL Analytical Services LLC

35 Goshen Turnpike, Bloomingburg NY, 12721
Phone (845)-733-1557 Fax (845)-733-1944

CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

NELAP# NYDOH-10510

WO# : 70200657

70200657

SOC Testing

ACCEPTED Mon-Wed 8:30AM-2:30PM

LAB USE ONLY
Receiving Information
Sample Temp °C 8.0
IR Gun ID # 32

	Y	N
Received on Ice?	X	
Within Hold Times?	X	
Correct Containers?	X	
Correct Preservation?	X	
Set up in 6 Hours?	X	

Initials JAE

Client/Reporting Information

Name D.W. SCOTT WATER SYSTEMS
Address 196 BART HILL RD.
City, State, Zip MIDDLETOWN N.Y. 10941
Phone 845-346-6419
Email CLNSCOTT1475@YAHOO.COM

LAB USE ONLY OCL Number	Sample Description/Location (As it will appear on Lab Report) Fed ID / PWS #	Collection Date	Collection Time	Composite	Grab	Matrix Code	Field Chlorine Residual	Analysis Requested	Number of Containers	Container Size	Container Type	Preservative: Unpreserved	Thiosulfate	Sulfuric Acid	Nitric Acid	Hydrochloric Acid	Ascorbic Acid	Sodium Hydroxide	Zinc Acetate	Ammonium Chloride
	MAL MARK SUBDIVISION	1/12/22	12PM		X															
378598-01	LOT #2 LATTINTOWN RD				X	DW		EPA 505 (alachlor)	2	40ml	vial		X							
378598-02	TOWN OF NEWBURGH				X	DW		EPA 525.3 (atrazine)	2	1-liter	G						X			
378598-03					X	DW		EPA 531.1 (carbaryl)	1	60ml	vial		X							

Comments/Special Instructions: 525.2 preserved with EDTA, PotCitrate, Ascorbic
531.1 preserved with monochloracetic acid

Rush Requested? ____ Client Code: ____ Prepaid? N

Sampled By:	Print DWIGHT W. SCOTT	Date: 1/12/22	
	Sign D.W. Scott	Time: 12: PM	
Relinquished By:	Print D. Scott II	Date: 1/12/22	Received By: Print J. Emerson Date: 1/12/22
	Sign	Time: 1:10 PM	Sign Time: 1310
Relinquished By:	Print	Date: 1/12/22	Received By: Print Date: 1/13/22
	Sign (LAM)	Time: 1515	Sign Time: 9.45
			Received By: Print Date:
			Sign Time:

Pace Analytical®

Sample Condition Upon Receipt

WO#: 70200657

PM: STS **Due Date: 01/27/22**

CLIENT: OCL

Client Name: Proje

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking #: 1Z 27Y 718 03 9986 3172

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No Seals intact: ☐ Yes ☐ No ☐ N/A

Temperature Blank Present: ☐ Yes ☑ No

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ Ziploc ☐ None ☐ Other

Type of Ice: (Wet) Blue None

Thermometer Used: TH091 Correction Factor: 0.00

☐ Samples on ice, cooling process has begun

Cooler Temperature(°C): 3.1 Cooler Temperature Corrected(°C): 3.1

Date/Time 5035A kits placed in freezer _____

Temp should be above freezing to 6.0°C

USDA Regulated Soil (☐ N/A, water sample) Date and Initials of person examining contents: KO 1/13/22

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? ☐ Yes ☐ No

Did samples orignate from a foreign source including Hawaii and Puerto Rico)? ☐ Yes ☑ No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	☑ Yes	☐ No		1.
Chain of Custody Filled Out:	☑ Yes	☐ No		2.
Chain of Custody Relinquished:	☑ Yes	☐ No		3.
Sampler Name & Signature on COC:	☑ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time:	☑ Yes	☐ No		5.
Short Hold Time Analysis (<72hr):	☐ Yes	☑ No		6.
Rush Turn Around Time Requested:	☐ Yes	☑ No		7.
Sufficient Volume: (Triple volume provided for I	☑ Yes	☐ No		8.
Correct Containers Used:	☑ Yes	☐ No		9.
-Pace Containers Used:	☑ Yes	☐ No		
Containers Intact:	☑ Yes	☐ No		10.
Filtered volume received for Dissolved tests	☐ Yes	☐ No	☑ N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	☑ Yes	☐ No		12.
-Includes date/time/ID/Matrix: SL WT OIL				
All containers needing preservation have been checked?	☐ Yes	☐ No	☑ N/A	13. ☐ HNO_3 ☐ H_2SO_4 ☐ NaOH ☐ HCl
pH paper Lot #				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO_3, H_2SO_4, HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	☐ Yes	☐ No	☑ N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: / Lot # of added preservative: / Date/Time preservative added:
Samples checked for dechlorination:	☐ Yes	☐ No	☑ N/A	14.
KI starch test strips Lot #				Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	☐ Yes	☐ No	☑ N/A	15.
Lead Acetate Strips Lot #				Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	☐ Yes	☑ No	☐ N/A	16.
Trip Blank Present:	☐ Yes	☐ No	☑ N/A	17.
Trip Blank Custody Seals Present	☐ Yes	☐ No	☑ N/A	
Pace Trip Blank Lot # (if applicable): _____				

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

* PM (Project Manager) review is documented electronically in LIMS.

ENV-FRM-MELV-0024 01

301 Fulling Mill Road | Middletown, PA 17057 | Phone: 717-944-5541 | Fax: 717-944-1430 | www.alsglobal.com

NELAP Certifications: NJ PA010 , NY 11759 , PA 22-293 DoD ELAP: PJLA 74618
State Certifications: FL E871113 , WA C999 , MD 128 , VA 460157 , WV DW 9961-C , WV 343

Analytical Results Report For **Pace Analytical Services, Inc.-NY**

Project 70200657
Workorder 3222609
Report ID 145179 on 1/25/2022

Certificate of Analysis

Enclosed are the analytical results for samples received by the laboratory on Jan 15, 2022.

The ALS Environmental laboratory in Middletown, Pennsylvania is a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory and as such, certifies that all applicable test results meet the requirements of NELAP.

If you have any questions regarding this certificate of analysis, please contact Sarah Leung (Project Coordinator) at (717) 944-5541.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program and any applicable state requirements. The test results meet requirements of the current NELAP standards or state requirements, where applicable. For a specific list of accredited analytes, refer to the certifications section of the ALS website at www.alsglobal.com/en/Our-Services/Life-Sciences/Environmental/Downloads.

ALS Middletown: 301 Fulling Mill Road, Middletown, PA 17057 : 717-944-5541.

Recipient(s):
Tara Bernier - Pace Analytical Services, Inc.-NY
Reporting - Pace Analytical Services, Inc.-NY

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.

Sarah Leung

Sarah Leung *(ALS Digital Signature)*
Project Coordinator

Sample Summary

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Collector	Collection Company
3222609001	378598-03	NY Potable Water	01/12/2022 12:00 PM	01/15/2022 9:09 AM	CBC	Collected By Client

Reference

Notes

- Samples collected by ALS personnel are done so in accordance with the procedures set forth in the ALS Field Sampling Plan (20 - Field Services Sampling Plan).
- Except as qualified, Clean Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 136.
- Except as qualified, Safe Drinking Water Act sample analyses are consistent with methodology requirements in 40 CFR Part 141.
- The Chain of Custody document is included as part of this report.
- All Library Search analytes should be regarded as tentative identifications based on the presumptive evidence of the mass spectra. Concentrations reported are estimated values.
- Parameters identified as "analyze immediately" require analysis within 15 minutes of collection. Any "analyze immediately" parameters not listed under the header "Field Parameters" are preformed in the laboratory and are therefore analyzed out of hold time.
- Method references listed on this report beginning with the prefix “S” followed by a method number (such as S2310B-97) refer to methods from “Standard Methods for the Examination of Water and Wastewater”.
- For microbiological analyses, the "Prepared" value is the date/time into the incubator and the "Analyzed" value is the date/time out the incubator.
- An Analysis-Prep Method Cross Reference Table is included after Analytical Results & Qualifiers section in this report.

Standard Acronyms/Flags

C	Please reference the Project Summary section of this Certificate of Analysis for case narrative comments.
J	Indicates an estimated value between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL) for the analyte
U	Indicates that the analyte was Not Detected (ND)
N	Indicates presumptive evidence of the presence of a compound
MDL	Method Detection Limit
PQL	Practical Quantitation Limit
RDL	Reporting Detection Limit
ND	Not Detected - indicates that the analyte was Not Detected at the RDL
Cntr	Analysis was performed using this container
RegLmt	Regulatory Limit
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
%Rec	Percent Recovery
RPD	Relative Percent Difference
LOD	DoD Limit of Detection
LOQ	DoD Limit of Quantitation
DL	DoD Detection Limit
I	Indicates reported value is greater than or equal to the Method Detection Limit (MDL) but less than the Report Detection Limit (RDL)
(S)	Surrogate Compound
NC	Not Calculated
*	Result outside of QC limits

Project Notations

Sample Notations

Lab ID	Sample ID

Result Notations

Notation #
0

Client Sample ID	**378598-03**	Collected	**01/12/2022 12:00 PM**
Lab Sample ID	**3222609001**	Lab Receipt	**01/15/2022 9:09 AM**

HPLC
EPA 531.1

Prep

Method	N/A	Container	3222609001-A(MAB)
Batch	N/A	Aliquot	50 mL
Date	N/A	Tech.	N/A

Analysis

Method	EPA 531.1	Fraction	
Batch	813769	Dilution	1
Date	01/21/2022 7:19 AM	Analyst	CGS

RESULTS

Compound	CAS No	Result	Units	RDL	MDL	Qualifiers
3-Hydroxycarbofuran	16655-82-6	ND	ug/L	1.0	0.36	C,ND
Aldicarb	116-06-3	ND	ug/L	1.0	0.27	C,ND
Aldicarb Sulfone	1646-88-4	ND	ug/L	1.0	0.24	C,ND
Aldicarb Sulfoxide	1646-87-3	ND	ug/L	1.0	0.38	C,ND
Carbaryl	63-25-2	ND	ug/L	1.0	0.49	C,ND
Carbofuran	1563-66-2	ND	ug/L	1.0	0.40	C,ND
Methomyl	16752-77-5	ND	ug/L	1.0	0.32	C,ND
Oxamyl	23135-22-0	ND	ug/L	1.0	0.27	C,ND

Sample - Method Cross Reference Table

Lab ID	Sample ID	Analysis Method	Preparation Method	Leachate Method
3222609001	378598-03	EPA 531.1	N/A	

QUALITY CONTROL SAMPLES

HPLC
EPA 531.1

QC Batch

QC Batch	813769	Prep Method	N/A
Date	N/A	Analysis Method	EPA 531.1
Tech.	N/A		

Matrix Spike 3448777 (MS) Aliquot from 3220973003 For QC Batch 813769

****NOTE - The Original Result shown below is a raw result and is only used for the purpose of calculating Matrix Spike percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
3-Hydroxycarbofuran	16655-82-6	MS	10.90	10	109	65 - 135	
Aldicarb	116-06-3	MS	10.10	10	101	65 - 135	
Aldicarb Sulfone	1646-88-4	MS	10.70	10	107	65 - 135	
Aldicarb Sulfoxide	1646-87-3	MS	10.80	10	108	65 - 135	
Carbaryl	63-25-2	MS	10	10	100	65 - 135	
Carbofuran	1563-66-2	MS	11.90	10	119	65 - 135	
Methomyl	16752-77-5	MS	11.20	10	112	65 - 135	
Oxamyl	23135-22-0	MS	10.80	10	108	65 - 135	

Duplicate 3448778 (DUP) Aliquot from 3222295004 For QC Batch 813769

****NOTE - The Original Result and Duplicate Result shown below are raw results and are only used for the purpose of calculating Sample Duplicate percent recoveries. This result is not a final value and cannot be used as such.

RESULTS

Compound	CAS No		Result (ug/L)	Orig. Result (ug/L)				Qualifiers
3-Hydroxycarbofuran	16655-82-6	DUP	0	0	RPD	0	(Max-20)	ND
Aldicarb	116-06-3	DUP	0	0	RPD	0	(Max-20)	ND
Aldicarb Sulfone	1646-88-4	DUP	0	0	RPD	0	(Max-20)	ND
Aldicarb Sulfoxide	1646-87-3	DUP	0	0	RPD	0	(Max-20)	ND
Carbaryl	63-25-2	DUP	0	0	RPD	0	(Max-20)	ND
Carbofuran	1563-66-2	DUP	0	0	RPD	0	(Max-20)	ND
Methomyl	16752-77-5	DUP	0	0	RPD	0	(Max-20)	ND
Oxamyl	23135-22-0	DUP	0	0	RPD	0	(Max-20)	ND

Method Blank 3448775 (MB) Created on 01/19/2022 9:14 AM For QC Batch 813769

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
3-Hydroxycarbofuran	16655-82-6	BLK	ND	ug/L	1.0	ND

RESULTS

Compound	CAS No		Result	Units	RDL	Qualifiers
Aldicarb	116-06-3	BLK	ND	ug/L	1.0	ND
Aldicarb Sulfone	1646-88-4	BLK	ND	ug/L	1.0	ND
Aldicarb Sulfoxide	1646-87-3	BLK	ND	ug/L	1.0	ND
Carbaryl	63-25-2	BLK	ND	ug/L	1.0	ND
Carbofuran	1563-66-2	BLK	ND	ug/L	1.0	ND
Methomyl	16752-77-5	BLK	ND	ug/L	1.0	ND
Oxamyl	23135-22-0	BLK	ND	ug/L	1.0	ND

Lab Control Standard 3448776 (LCS) Created on 01/19/2022 9:14 AM For QC Batch 813769

RESULTS

Compound	CAS No		Result (ug/L)	Expected (ug/L)	Rec. (%)	Limits (%)	Qualifiers
3-Hydroxycarbofuran	16655-82-6	LCS	10.60	10	106	80 - 120	
Aldicarb	116-06-3	LCS	10.20	10	102	80 - 120	
Aldicarb Sulfone	1646-88-4	LCS	10.80	10	108	80 - 120	
Aldicarb Sulfoxide	1646-87-3	LCS	11.20	10	112	80 - 120	
Carbaryl	63-25-2	LCS	10.10	10	101	80 - 120	
Carbofuran	1563-66-2	LCS	12	10	120	80 - 120	
Methomyl	16752-77-5	LCS	11.40	10	114	80 - 120	
Oxamyl	23135-22-0	LCS	11.20	10	112	80 - 120	

Chain of Custody

PASI New York Laboratory

3222609

Workorder: 70200657 **Workorder Name:** 378598 **Results Requested By:** 1/27/2022

Report / Invoice To	Subcontract To
Sophia Sparkes Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: sophia.sparkes@pacelabs.com	ALS Middletown 301 Fulling Mill Road Middletown, PA 17057 P.O. 70200657STS

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: MeOH	Requested Analysis: 531.1	LAB USE ONLY
1	378598-03	1/12/2022 12:00	70200657003	Drinking		X	
2							
3							
4							
5							

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature] PaceLi	1/14/22 18:00	Fed-EX	
2	Fed EX		SHIPALS	1/15/22 0929
3				

Comments: 1°575

Cooler Temperature on Receipt °C | Custody Seal Y or N | Received on Ice Y or N | Samples Intact Y or N

Temp Taken By: SJC
WO Temp (°C): 5.5
Therm ID: SMC
Receipt Info Completed By:
Cooler Custody Seal Intact: Y N NA
Sample Custody Seal Intact: Y N NA
Received on Ice: Y N
Cooler & Samples Intact: Y N
Correct Containers Provided: Y N
Sample Label/COC Agree: Y N
Adequate Sample Volumes: Y N
VOA Headspace Present: Y N NA
Voa Trip Blank: Y N NA
NJ≤ 4 Days? Y N
Rad Screen (uCi): 5615 2914
Courier/Tracking #: 2247
SDWA Compliance: Y N
PWSID

OCL Analytical Services
35 Goshen Turnpike
Bloomingburg NY 12721

Phone: (845) 733-1557
Fax: (845) 733-1944
info@oclanalytical.com
www.oclanalytical.com

Certificate of Analysis

D.W. Scott Water Systems
196 Bart Bull Road
Middletown NY 10940

Date Received: 02/14/2022 11:14
Date Complete: 03/03/2022 12:23
Date Reported: 03/03/2022 13:19
Date Printed: 03/03/2022 13:19
Project:

Test	Method	Result	Units	Prep Date	Test Date	Initials	Quals.
379252-01	**Malmark Construction Corp.**	**Lattintown Rd. Newburgh, NY**			Sampled 02/14/22 10:00		
Iron, Fe	EPA 200.7	<0.060	mg/L	02/19/22 1:00	02/22/22 3:55	EL	U
379252-02	**Malmark Construction Corp.**	**Lattintown Rd. Newburgh, NY**			Sampled 02/14/22 10:00		
Odor at 60C	SM 21-23 2150B (-97)	20	TON		02/14/22 15:30	RL	
379252-03	**Malmark Construction Corp.**	**Lattintown Rd. Newburgh, NY**			Sampled 02/14/22 10:00		
Turbidity	SM 21-23 2130 B (-01)	1.01	NTU's		02/14/22 15:00	RL	

EL = Analysis by Envirotest Laboratories #10142

Approved By Lisa McClinton
Lab Manager

Lab No: 379252
The reported results relate only to the samples for the Lab No. identified above

Qualifiers
U = The analyte was analyzed for but not detected at or above the stated limit.

OCL Analytical Services LLC

35 Goshen Turnpike, Bloomingburg NY, 12721
Phone (845)-733-1557 Fax (845)-733-1944

CHAIN-OF-CUSTODY

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

NELAP# NYDOH-10510

Client/Reporting Information

Name	J. W. SCOTT WATER SYSTEMS
Address	176 BART BULL RD.
City, State, Zip	MIDDLETOWN, N.Y. 10941
Phone	845-346-6419
Email	CLNSCOTT1475@YAHOO.COM

*Samples should be brought to lab on ice with a receiving temperature of 2 to 6°C.

LAB USE ONLY
Receiving Information
Sample Temp °C 5
IR Gun ID # 32

	Y	N
Received on Ice?	☑	☐
Within Hold Times?	☑	☐
Correct Containers?	☑	☐
Correct Preservation?	☑	☐
Set up in 6 Hours?	☑	☐

Initials CL

LAB USE ONLY OCL Number	Sample Description/Location (As it will appear on Lab Report) Fed ID / PWS #	Collection Date	Collection Time	Composite	Grab	Matrix Code	Field Chlorine Residual	Analysis Requested	Number of Containers	Container Size	Container Type	Preservative: Unpreserved	Thiosulfate	Sulfuric Acid	Nitric Acid	Hydrochloric Acid	Ascorbic Acid	Sodium Hydroxide	Zinc Acetate	Ammonium Chloride
39252-01	HALMARK CONST. CORP	2/14	10AM		✓	TW		FE	1	250	P				✓					
39252-02	LAITIN TOWN RD.				✓	DW		ODOR	1	300	G	✓								
39252-03	NEWBURGH, N.Y.				✓	DW		TURBINITY	1	500	P	✓								

Comments/Special Instructions

Rush Requested? ____ Client Code: ____ Prepaid? CC ✓

Sampled By:	Print DWIGHT W. SCOTT	Date: 2/14/22	
	Sign D. W. Scott	Time: 10 AM	
Relinquished By:	Print DWIGHT W. SCOTT	Date: 2/14/22	
	Sign D. W. Scott	Time: 11:08	
Relinquished By:	Print ____	Date:	
	Sign ____	Time:	
Received By:	Print ____	Date: 2-14-22	
	Sign ____	Time: 11:14	
Received By:	Print ____	Date:	
	Sign ____	Time:	
Received By:	Print ____	Date:	
	Sign ____	Time:	

By signing this document, you are acknowledging that the information provided is accurate. OCL Analytical does use subcontract laboratories for certain analyses. OCL Analytical also has the right to release a copy of the report to the NYS Department of Health should such information be requested.

Appendix B:

Water Treatment System Data

ELIMINATE RUST STAINING, AS WELL AS SULFUR “ROTTEN EGG” ODORS WITH THE NELSEN AIO™ AIR INJECTION OXIDIZING SYSTEMS.

Iron and Sulfur are two of the most common elements found in nature. While both are extremely important for every day life, both are a nuisance in water and can cost you money and frustration.

Iron staining is a common problem in homes today. It causes orange staining on fixtures, as well as dingy clothes and sometimes can have negative effects on both hair and skin. Sulfur is easily detected by the presence of a “rotten egg” odor, and is sometimes associated with yellow staining.

All of these problems can be eliminated with the Nelsen AIO™ Air Injection Oxidizing Filtration System.

Nelsen AIO™

AIR INJECTION OXIDIZING FILTER SYSTEM

FOR IRON AND SULFUR REMOVAL

AIR INJECTION OXIDIZING SYSTEM

Benefits of a **Nelsen Water Treatment** System

REDUCED IRON STAINING:

Iron staining is a common problem in homes today. It causes orange staining on fixtures, as well as dingy clothes and sometimes can have negative effects on both hair and skin.

REDUCED SULFUR SMELL:

Sulfur is easily detected by the presence of a “rotten egg” odor and is sometimes associated with yellow staining.

PROTECT YOUR APPLIANCES:

By reducing the iron and sulfur buildup in your water your appliances will last longer. Rust and slime buildup make your appliances work harder and less efficiently, requiring more maintenance or replacement.

EFFICIENT AND CHEMICAL FREE:

The need for additional equipment such as air tanks, feed pumps or harsh chemicals (like those used in Manganese Greensand Systems) is virtually eliminated!

2510/5600 SXT SERIES

Nelsen AIO™
AIR INJECTION OXIDIZING FILTER SYSTEM

USING NATURE'S OWN PROCESS

These naturally occurring elements can be removed using nature's own process of oxidation. The Nelsen AIO™ maintains an "air pocket" in the top of the tank while the system is in service. As water passes through the air pocket, iron and sulfur are oxidized. The Nelsen AIO™ filter media bed then removes the oxidized iron and sulfur from the water. Additionally, dissolved oxygen is added to the water.

PROVEN TECHNOLOGY

The Nelsen AIO™ system includes the Pentair Fleck 2510AIO SXT or 5600AIO SXT electronic control valve that automatically backwashes the system to clean the media and flush everything down the drain. The Nelsen AIO™ puts the whole oxidation process inside one tank, keeping maintenance costs and down time to a minimum.

Made by Pentair Fleck, a leading manufacturer of control valves in the US, the digital control valve allows for ease of setup and automatic operation.

The Nelsen AIO™ can remove up to 8 ppm Hydrogen Sulfide and up to 7 ppm Iron. A daily backwash will remove accumulated iron and replenish the filter media bed. The regeneration process also adds a fresh air pocket to the system. Calcium and hardness can also be removed when a water softener is placed after the Nelsen AIO™.

Nelsen Corporation is the largest family-owned manufacturer/distributor of water treatment products in the United States. Headquartered in Akron, Ohio with additional distribution centers in Arizona, Texas and Florida, our company has seen substantial growth over the years. Since 1954 Nelsen Corporation has remained committed to the professional water treatment dealer, their customers and the communities that they serve. More than 65 years of experience in water treatment have been incorporated into our systems yielding the very best equipment for your family or your business.

FLECK
Pentair Water

AIO System featuring the Pentair Fleck 5600AIO SXT Control Valve Shown with Optional Tank Jacket

AIO System featuring the Pentair Fleck 2510AIO SXT Control Valve Shown with Optional Tank Jacket

AIO™

AIR INJECTION OXIDIZING FILTER SYSTEM

	5600AIO SXT	2510AIO SXT
Inlet/Outlet Fittings	3/4", 1"	3/4", 1"
Cycles	3	4
Valve Material	Fiber-reinforced polymer	Fiber-reinforced polymer
Service Flow Rates	2.5 - 6.3 GPM	2.5 - 10.0 GPM
Operating Pressures	20-75 PSI	20-75 PSI
Operating Temperatures	34-110 Degrees	34-110 Degrees
Electrical Specification	24V - 50/60 Hz	24V - 50/60 Hz

Professional Series AIO Control Valve

- Water use is monitored for peak efficiency
- Built in backup of settings during power outages
- Simple diagnostics and design provide for easy maintenance

Oxidation Air Pocket

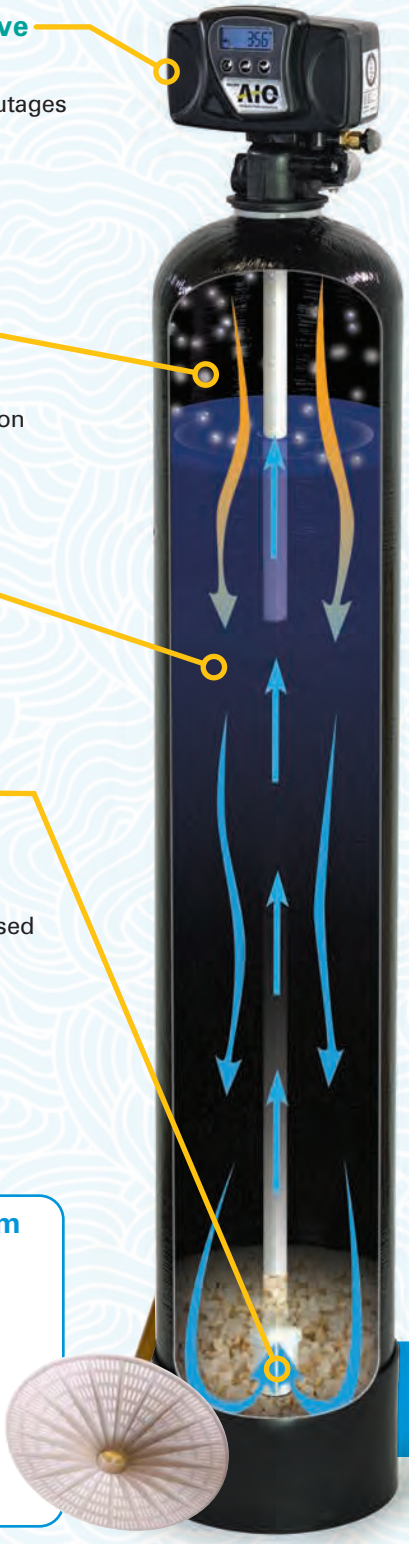
- An air pocket is introduced into the top of the filter tank
- As water passes through this pocket the iron and sulfur in the water are oxidized

Exclusive Filter Media Bed

- Custom blends of media for efficient reduction of iron, sulfur and manganese

Basket Style Distribution System

- Delivers evenly distributed and high quality flows
- Optional Enpress® Vortech™ Plate Tank style distribution system, providing increased backwash efficiency using less water and saving money



Arrows indicate water flow through the system as it oxidizes and filters.

SYSTEM FEATURES & OPTIONS

5600AIO SXT Key Features

- Large LCD display with 48 hours of internal power backup capacitor
- LCD display alternates between time of day, volume remaining or days to regeneration
- Down-flow regeneration
- Backwash capacity handles tanks up to 13" for filter applications

2510AIO SXT Key Features

- Top mount control with adjustable cycles delivers controlled up-flow backwash, air draw, rapid rinse, and down-flow service
- Time-tested hydraulically balanced piston, seal and spacer concept to control service flow and regeneration
- Non-corrosive, high-tech material construction
- Excellent flow rates - 2.5 GPM continuous, 10.0 GPM peak
- Backwash capacity handles tanks up to 14" diameter

System Options

- Corrosion free fiber-reinforced polymer or stainless steel bypass valve
- Auxiliary switches
- Optional stylish tank jackets help reduce tank condensation

Ready to get rid of iron and sulfur from your water? Contact:

NYS Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit

*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Malmark Construction Corp.
2. Contact Person:	Malcolm Meyerson
3. Street Address:	36 Sloane Road
4. City/State/Zip:	Newburgh, NY 12550
II. Project Site Information	
5. Project/Site Name:	Malmark Construction Corp. Subdivision
6. Street Address:	Lattintown Road
7. City/State/Zip:	Newburgh, NY 12550
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	
14. Street Address:	
15. City/State/Zip:	
16. Telephone Number:	

MS4 SWPPP Acceptance Form - continued

V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

VI. Additional Information

Town of Newburgh Planning Board Project No. 2020-15

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.35

(Submission #: HPJ-9CJB-64Y95, version 1)

Details

Originally Started By	Zachary Peters
Alternate Identifier	Malmark Construction Corp. Subdivision
Submission ID	HPJ-9CJB-64Y95
Submission Reason	New
Status	Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Malmark Construction Corp.

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Meyerson

Owner/Operator Contact Person First Name
Malcolm

Owner/Operator Mailing Address
36 Sloane Road

City
Newburgh

State
NY

Zip
12550

Phone
(845) 248-2741

Email
NONE PROVIDED

Federal Tax ID
NONE PROVIDED

Project Location

Project/Site Name
Malmark Construction Corp. Subdivision

Street Address (Not P.O. Box)
Lattintown Road

Side of Street
North

City/Town/Village (THAT ISSUES BUILDING PERMIT)
Town of Newburgh

State
NY

Zip
12550

DEC Region
3

County
ORANGE

Name of Nearest Cross Street
Holmes Road

Distance to Nearest Cross Street (Feet)
500

Project In Relation to Cross Street
North

Tax Map Numbers Section-Block-Parcel
9-3-2

Tax Map Numbers
NONE PROVIDED

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
41.56362457293468,-74.00634801935328

Project Details

2. What is the nature of this project?
New Construction

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Cultivated Land

Post-Development Future Land Use
Single Family Subdivision (Please answer 3a)

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
5

---

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
8.3

Total Area to be Disturbed (acres)
1.7

Existing Impervious Area to be Disturbed (acres)
0.0

Future Impervious Area Within Disturbed Area (acres)
0.7

5. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
0

B (%)
0

C (%)
100

D (%)
0

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
7/1/2022

End Date
7/1/2024

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Unnamed class C stream

9a. Type of waterbody identified in question 9?
Stream/Creek On Site

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
NONE PROVIDED

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
No

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey?
No

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
Yes

16. What is the name of the municipality/entity that owns the separate storm sewer system?
Town of Newburgh

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?
No

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?
NONE PROVIDED

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
MNTM Engineering & Land Surveying, PC

Contact Name (Last, Space, First)
Peters, Zachary

Mailing Address
PO Box 166

City
Pine Bush

State
NY

Zip
12566

Phone
(845) 744-3620

Email
zpeters@mntm.co

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form

3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification
NONE PROVIDED
Comment
NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Silt Fence
Stabilized Construction Entrance
Check Dams
Dust Control
Temporary Swale

Biotechnical
None

Vegetative Measures
Seeding
Mulching

Permanent Structural
Diversion

Other
NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
NONE PROVIDED

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
NONE PROVIDED

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
NONE PROVIDED

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
NONE PROVIDED

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
NONE PROVIDED

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
NONE PROVIDED

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
NONE PROVIDED

CPv Provided (acre-feet)
NONE PROVIDED

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
NONE PROVIDED

Post-Development (CFS)
NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because:
NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
NONE PROVIDED

If Yes, Identify the entity responsible for the long term Operation and Maintenance
NONE PROVIDED

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
NONE PROVIDED

Name of Alternative SMP
NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
Yes

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload
> NONE PROVIDED
> **Comment**
> NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.
Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form
> NONE PROVIDED
> **Comment**
> NONE PROVIDED

TO: **John P. Ewasutyn, Planning Board Chairman**

FROM: **Mark Hall, Highway Superintendent**

DATE: **April 19, 2021**

RE: **Malmark Construction Corp Subdivision**
Sec 9-Bl. 3-Lot 2

I have met with Zachary Peters P.E. at the above-mentioned site and the revised sub-division plans and the revisions are sufficient for the Town of Newburgh Highway Department.

If you have any questions feel free to contact me at the above number.

MH:ch

Zoning Legend: AR

-	REQUIRED (1)
MINIMUM LOT AREA	40,000 S.F.
MINIMUM LOT WIDTH (2)	150'
MINIMUM LOT DEPTH	150'
MINIMUM FRONT YARD	50'
MINIMUM REAR YARD	50'
MINIMUM SIDE YARD (ONE)	30'
MINIMUM SIDE YARD (BOTH)	80'
MINIMUM HABITABLE FLOOR AREA	900 S.F.
MAXIMUM BUILDING COVERAGE	10%
MAXIMUM BUILDING HEIGHT	35'
MAXIMUM LOT COVERAGE	20%

(1) SEE SHEET 3 FOR LOT SPECIFIC BULK ZONING INFORMATION.
(2) AS PER TOWN CODE, LOT WIDTH IS MEASURED AT THE FRONT SETBACK REQUIREMENT OR AT THE BUILDING LINE.

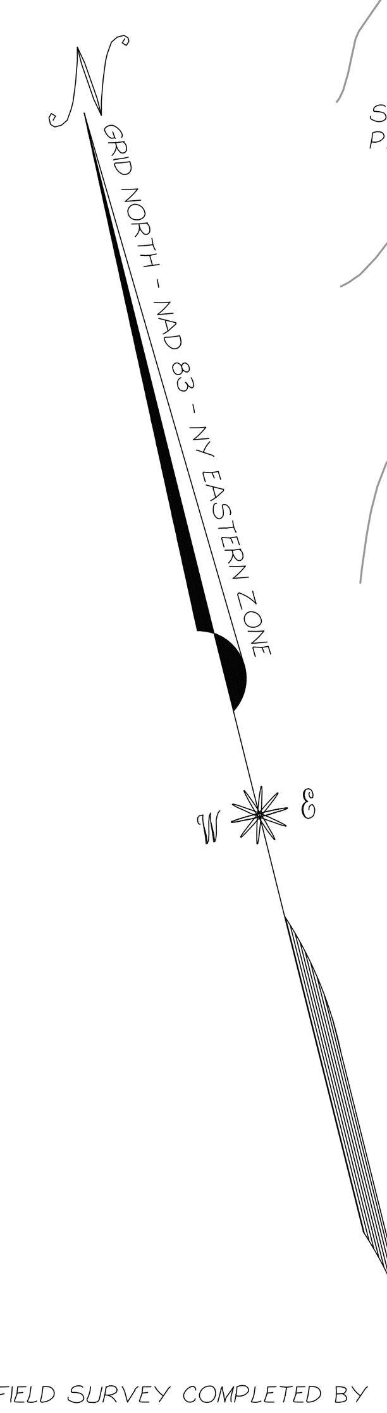
Zoning Legend: R-3

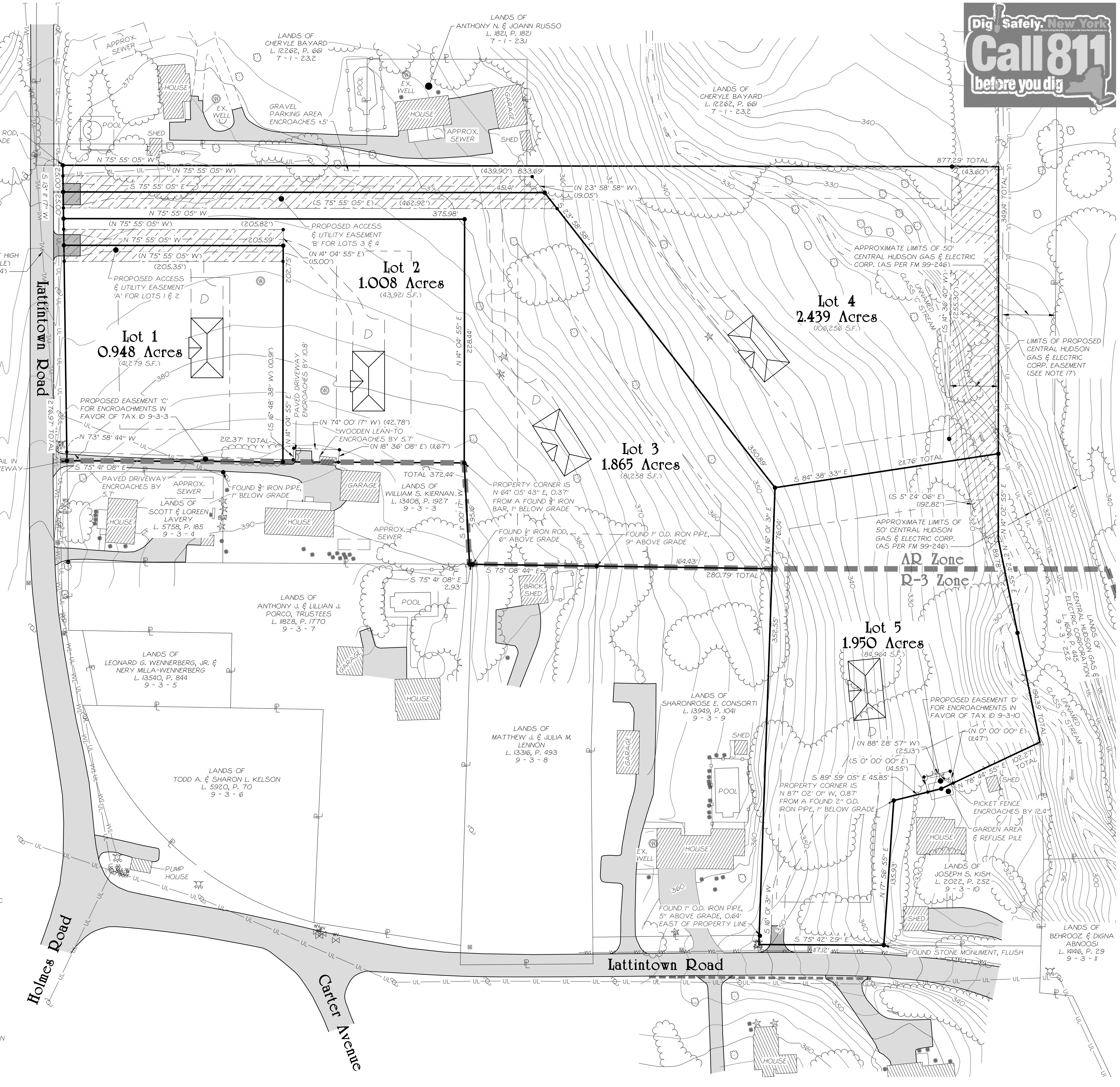
- WITH PUBLIC WATER ONLY -	REQUIRED (1)
MINIMUM LOT AREA	15,000 S.F.
MINIMUM LOT WIDTH	100'
MINIMUM LOT DEPTH	125'
MINIMUM FRONT YARD	40'
MINIMUM REAR YARD	40'
MINIMUM SIDE YARD (ONE)	15'
MINIMUM SIDE YARD (BOTH)	30'
MINIMUM HABITABLE FLOOR AREA	900 S.F.
MAXIMUM BUILDING COVERAGE	15%
MAXIMUM BUILDING HEIGHT	35'
MAXIMUM LOT COVERAGE	30%

(1) SEE SHEET 3 FOR LOT SPECIFIC BULK ZONING INFORMATION.

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD AT PROPERTY CORNER
- ADJOINER PROPERTY LINE
- L. XXXX, P. XXX — DEED LIBER, PAGE
- XX-X-XX — TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)
- UL — EXISTING UTILITY POLE & LINE
- XX" — EXISTING CULVERT & SIZE
- STONE WALL
- APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE
- WATERCOURSE
- SIGN LOCATION
- FIRE HYDRANT
- WV — WATER VALVE
- M — MAILBOX
- W — EXISTING WELL LOCATION
- EXISTNG TREE LINE
- EXISTING TREE & SHRUBS
- ZONING MINIMUM SETBACK LINE
- XXX — EXISTING CONTOUR LINE
- PROPOSED BUILDING
- EASEMENT BOUNDS





Notes:

1.) THE INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERING & LAND SURVEYING, P.C. ON DECEMBER 16, 2020.

2.) THE TOPOGRAPHY SHOWN IS BASED ON AERIAL IMAGERY PROVIDED BY GOLDEN AERIAL SURVEYS, INC. DATED APRIL 2020.

3.) SUBJECT TO ANY FACTS THAT MAY BE REVEALED BY AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT.

4.) SUBJECT TO UTILITY GRANTS OF RECORD.

5.) SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF LATTINTOWN ROAD FOR USE AS A PUBLIC HIGHWAY.

6.) VERTICAL DATUM IS NAVD88.

7.) TO AVOID ADVERSE IMPACTS TO THE INDIANA BAT (MYOTIS SODALIS), A STATE- AND FEDERALLY-LISTED ENDANGERED SPECIES, CLEARING OF TREES FOUR (4) INCHES D.B.H. OR GREATER SHALL ONLY OCCUR BETWEEN NOVEMBER 1 AND MARCH 31.

8.) LOTS 1 & 2 SUBJECT TO A PROPOSED ACCESS & UTILITY EASEMENT, EASEMENT 'A', TO BE FILED IN THE ORANGE COUNTY CLERKS OFFICE.

9.) LOTS 3 & 4 SUBJECT TO A PROPOSED ACCESS & UTILITY EASEMENT, EASEMENT 'B', TO BE FILED IN THE ORANGE COUNTY CLERKS OFFICE.

10.) SEE SHEET 3 FOR LOT SPECIFIC BULK ZONING INFORMATION.

11.) INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR UTILIZED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED WITHIN ONE (1) YEAR OF AVAILABILITY.

12.) ORANGE COUNTY DEPARTMENT OF HEALTH (OCDOH) APPROVAL IS LIMITED TO FIVE (5) YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON THE REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.

13.) ANY CONSTRUCTION WORK PERFORMED WITHIN THE WATERSHED OF A PUBLIC WATER SUPPLY SOURCE WILL BE PERFORMED IN A MANNER CONSIDERED SATISFACTORY TO THE WATER SUPPLIER AND IN COMPLIANCE WITH ANY EXISTING WATERSHED RULES A& REGULATIONS.

14.) EXISTING HIGH PRESSURE (NON-POTABLE) WATER LINE LOCATION BASED UPON WATER VALVE AND HYDRANT LOCATIONS AND IS APPROXIMATE.

15.) NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.

16.) THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST APPROVAL OF FINAL PLANS.

17.) LOTS 4 & 5 ARE SUBJECT TO A PROPOSED CENTRAL HUDSON GAS & ELECTRIC CORP. EASEMENT AS SHOWN ON A PLAN ENTITLED "PROPOSED EASEMENT FOR ANNETTE BIVIANO" PREPARED BY MASER CONSULTING DATED AUGUST 10, 2020 TO BE FILED IN THE ORANGE COUNTY CLERK'S OFFICE.

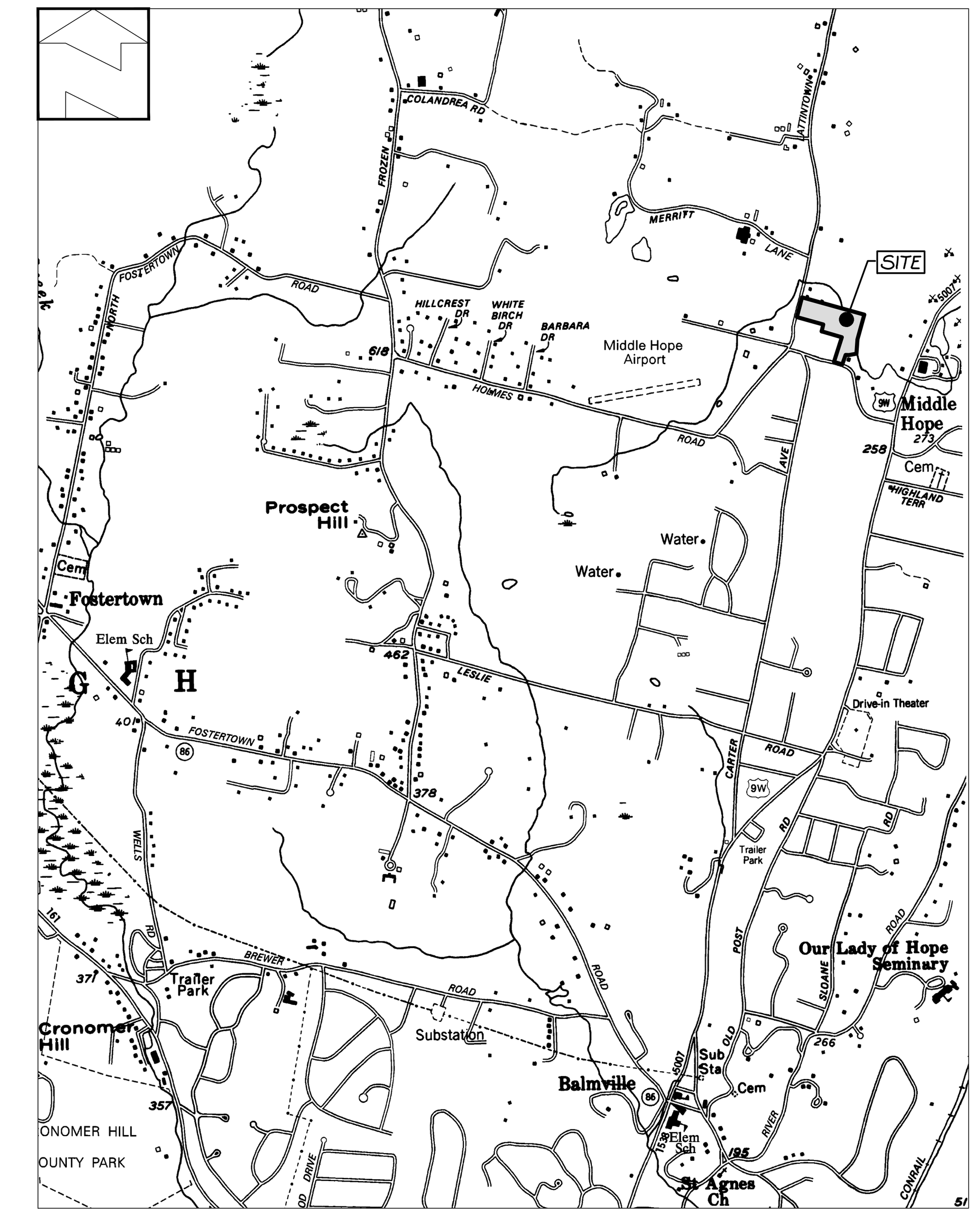
GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

MAP CK:

Dig Safely. New York — Call 811 before you dig



Location Map

SCALE: 1" = 2,000'

Parcel Information

TAX PARCEL:	9 - 3 - 2
AREA:	±8.30 ACRES
RECORD OWNER:	MALMARK CONSTRUCTION CORP. 36 SLOANE ROAD NEWBURGH, NEW YORK 12550
DEED REFERENCE:	LIBER 14778, PAGE 243
MAP REFERENCE:	-

ORANGE COUNTY DEPARTMENT OF HEALTH APPROVAL BOX

TOWN OF NEWBURGH PROJECT NO. 2020-15

PLANNING BOARD APPROVAL

NO.	DATE	REVISION	BY
10	6-8-22	CONSULTANT COMMENTS	ZAP
9	6-7-22	OCDOH COMMENTS	ZAP
8	3-28-22	OCDOH COMMENTS	ZAP
7	12-9-21	OCDOH COMMENTS	ZAP
6	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS
5	6-22-21	PUBLIC HEARING COMMENTS	RTS
4	5-7-21	ENGINEER COMMENTS	ZAP
3	4-20-21	ENGINEER COMMENTS	ZAP
2	3-15-21	HIGHWAY COMMENTS	ZAP
1	1-15-21	DETAILED SUBDIVISION PLAN	ZAP

I HEREBY CERTIFY TO MALMARK CONSTRUCTION CORPORATION THAT THIS MAP IS THE RESULT OF AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO - NORTON - TAROLLI - MARSHALL ENGINEERING & LAND SURVEYING, P.C. COMPLETED ON DECEMBER 16, 2020.

JOHN TAROLLI LS #049201

I HEREBY CERTIFY THAT EACH PROPOSED SEWER SYSTEM & WATER FACILITY SHOWN ON THIS PLAN IS DESIGNED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE NEW YORK STATE DEPARTMENTS OF HEALTH AND ENVIRONMENTAL CONSERVATION FOR RESIDENTIAL LOTS AND FURTHER THAT SUCH DESIGN IS BASED UPON ACTUAL SOIL AND SITE CONDITIONS FOUND UPON EACH LOT AT THE LOCATION SHOWN. THE INSTALLATION OF EACH PROPOSED SEWER SYSTEM & WATER FACILITY SHALL BE IN ACCORDANCE WITH THE DESIGN SHOWN & AT THE LOCATION SHOWN.

LAWRENCE MARSHALL PE #087107

Survey Map & Subdivision Plan for Malmark Construction Corp.

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.	
TAX MAP PARCEL: 9 - 3 - 2	
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DRAFTED BY: ZAP	
DATE: OCTOBER 22, 2020	
PROJECT: 3807-3	
SHEET:	1 / 6

Legend

PROPERTY LINE & CORNER		SIGN LOCATION		TEST PIT LOCATION	
SET 5/8" IRON ROD AT PROPERTY CORNER		FIRE HYDRANT		PERCOLATION TEST LOCATION	
ADJOINER PROPERTY LINE		WATER VALVE		PROPOSED BUILDING	
L. XXXX, P. XXX	DEED LIBER, PAGE	MAILBOX		PROPOSED SEPTIC TANK (SEE DETAIL)	
XX-X-XX	TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)	WELL LOCATION		PROPOSED PUMP STATION (SEE DETAIL)	
EXISTING UTILITY POLE & LINE		EXISTNG TREE LINE		PROPOSED DOSING CHAMBER (RESERVE ONLY) (SEE DETAIL)	
EXISTING CULVERT & SIZE		EXISTING TREE & SHRUBS		PROPOSED CLEANOUT	
STONE WALL		ZONING MINIMUM SETBACK LINE		PROPOSED DISTRIBUTION BOX	
APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE		EXISTING CONTOUR LINE		PROPOSED 4" PERFORATED SEWER LATERAL	
WATERCOURSE		PROPOSED CONTOUR LINE		PROPOSED 4" PERFORATED SEWER RESERVE LATERAL	
				PROPOSED SITE FENCE (SEE DETAIL)	
				LIMITS OF DISTURBANCE	

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S EMBOSSED SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."
"ONLY COPIES FROM THE ORIGINAL TRACING OF THIS SURVEY MAP MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED VALID, TRUE COPIES."
"CERTIFICATIONS INDICATED HEREON SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE FOR LAND SURVEYORS ADOPTED BY THE NEW YORK STATE ASSOCIATION OF PROFESSIONAL LAND SURVEYORS. SAID CERTIFICATIONS SHALL RUN ONLY TO THOSE NAMED INDIVIDUALS AND/OR INSTITUTIONS FOR WHOM THE SURVEY WAS PREPARED. CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INDIVIDUALS, INSTITUTIONS, THEIR SUCCESSORS AND/OR ASSIGNS, OR SUBSEQUENT OWNERS."

NO.	DATE	REVISION	BY
7	6-8-22	CONSULTANT COMMENTS	ZAP
6	6-7-22	OCDOH COMMENTS	ZAP
5	3-28-22	OCDOH COMMENTS	ZAP
4	12-9-21	OCDOH COMMENTS	ZAP
3	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS
2	6-22-21	PUBLIC HEARING COMMENTS	RTS
1	3-15-21	HIGHWAY COMMENTS	ZAP

LAWRENCE MARSHALL PE #087107

Subdivision Detail - A
for
Malmark Construction Corp.

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 9 - 3 - 2
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: OCTOBER 22, 2020
PROJECT: 3807-3
SHEET: 2 / 6

Zoning Legend: AR

-	REQUIRED	LOT 1	LOT 2	LOT 3	LOT 4
MINIMUM LOT AREA	40,000 S.F.	±41,280 S.F.	±43,921 S.F.	±81,261 S.F.	±106,255 S.F.
MINIMUM LOT WIDTH (1)	150'	-	-	-	-
MINIMUM LOT DEPTH	150'	-	-	-	-
MINIMUM FRONT YARD	50'	-	-	-	-
MINIMUM REAR YARD	50'	-	-	-	-
MINIMUM SIDE YARD (ONE)	30'	-	-	-	-
MINIMUM SIDE YARD (BOTH)	80'	-	-	-	-
MINIMUM HABITABLE FLOOR AREA	900 S.F.	>900 S.F.	>900 S.F.	>900 S.F.	>900 S.F.
MAXIMUM BUILDING COVERAGE	10%	10%	10%	10%	10%
MAXIMUM BUILDING HEIGHT	35'	35'	35'	35'	35'
MAXIMUM LOT COVERAGE	20%	20%	20%	20%	20%

(2) AS PER TOWN CODE, LOT WIDTH IS MEASURED AT THE FRONT SETBACK REQUIREMENT OR AT THE BUILDING LINE.

Zoning Legend: R-3

- WITH PUBLIC WATER ONLY -	REQUIRED	LOT 5
MINIMUM LOT AREA	15,000 S.F.	±84,961 S.F.
MINIMUM LOT WIDTH	100'	-
MINIMUM LOT DEPTH	125'	-
MINIMUM FRONT YARD	40'	-
MINIMUM REAR YARD	40'	-
MINIMUM SIDE YARD (ONE)	15'	-
MINIMUM SIDE YARD (BOTH)	30'	-
MINIMUM HABITABLE FLOOR AREA	900 S.F.	>900 S.F.
MAXIMUM BUILDING COVERAGE	15%	<15%
MAXIMUM BUILDING HEIGHT	35'	<35'
MAXIMUM LOT COVERAGE	30%	<30%

Notes:

1.) THE INFORMATION SHOWN HEREON IS BASED UPON AN ACTUAL FIELD SURVEY COMPLETED BY MERCURIO-NORTON-TAROLLI-MARSHALL ENGINEERING & LAND SURVEYING, P.C. ON DECEMBER 16, 2020.

2.) THE TOPOGRAPHY SHOWN IS BASED ON AERIAL IMAGERY PROVIDED BY GOLDEN AERIAL SURVEYS, INC. DATED APRIL 2020.

3.) SUBJECT TO ANY FACTS THAT MAY BE REVEALED BY AN ACCURATE, UP TO DATE, TITLE ABSTRACT REPORT.

4.) SUBJECT TO UTILITY GRANTS OF RECORD.

5.) SUBJECT TO THAT PORTION OF LAND WITHIN THE BOUNDS OF LATTINTOWN ROAD FOR USE AS A PUBLIC HIGHWAY.

6.) VERTICAL DATUM IS NAVD88.

7.) TO AVOID ADVERSE IMPACTS TO THE INDIANA BAT (MYOTIS SODALIS), A STATE- AND FEDERALLY-LISTED ENDANGERED SPECIES, CLEARING OF TREES FOUR (4) INCHES D.B.H. OR GREATER SHALL ONLY OCCUR BETWEEN NOVEMBER 1 AND MARCH 31.

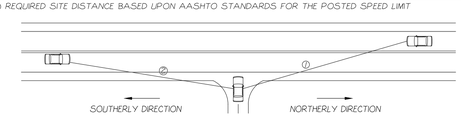
8.) LOTS 1 & 2 SUBJECT TO A PROPOSED ACCESS & UTILITY EASEMENT, EASEMENT 'A', TO BE FILED IN THE ORANGE COUNTY CLERKS OFFICE.

9.) LOTS 3 & 4 SUBJECT TO A PROPOSED ACCESS & UTILITY EASEMENT, EASEMENT 'B', TO BE FILED IN THE ORANGE COUNTY CLERKS OFFICE.

Sight Distance Tables

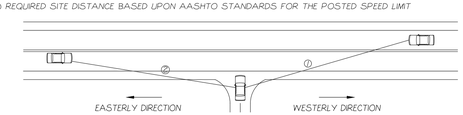
LATTINTOWN ROAD SPEED LIMIT ALONG SITE FRONTAGE: 40 MPH				
MEASURED BY R. SMITHEM ON OCTOBER 23, 2020				
LOCATION	SIGHT LINE	DISTANCE	REQUIRED (1)	NOTES
PROPOSED LOT 1 & 2 DRIVEWAY	1	> 1,000'	445'	LIMITED BY HORIZONTAL CURVATURE
	2	±390'	385'	LIMITED BY VERTICAL CURVATURE
PROPOSED LOT 3 & 4 DRIVEWAY	1	> 1,000'	445'	LIMITED BY HORIZONTAL CURVATURE
	2	±440'	385'	LIMITED BY VERTICAL CURVATURE

(1) REQUIRED SITE DISTANCE BASED UPON AASHTO STANDARDS FOR THE POSTED SPEED LIMIT



LATTINTOWN ROAD SPEED LIMIT ALONG SITE FRONTAGE: 30 MPH				
MEASURED BY R. SMITHEM ON OCTOBER 23, 2020				
LOCATION	SIGHT LINE	DISTANCE	REQUIRED (1)	NOTES
LOT 5 PROPOSED DRIVE	1	±455'	335'	LIMITED BY VERTICAL CURVATURE
	2	±305'	290'	LIMITED BY VERTICAL CURVATURE

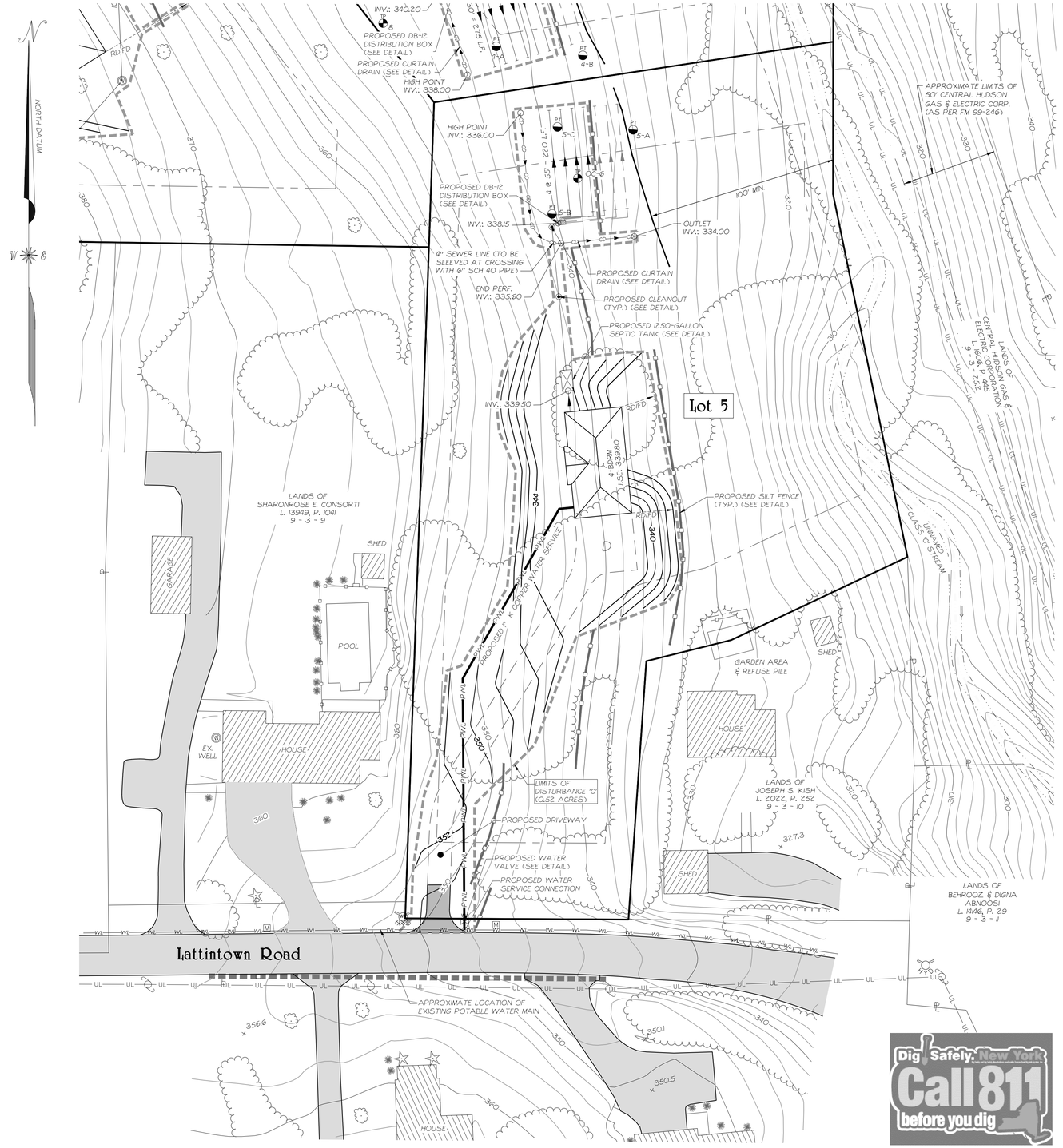
(1) REQUIRED SITE DISTANCE BASED UPON AASHTO STANDARDS FOR THE POSTED SPEED LIMIT



NOT FOR ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW OR APPROVAL

Legend

- PROPERTY LINE & CORNER
- SET 5/8" IRON ROD AT PROPERTY CORNER
- ADJOINER PROPERTY LINE
- L. XXXX, P. XXX — DEED LIBER, PAGE
- XX-X-XX — TAX PARCEL DESIGNATION (SECTION - BLOCK - LOT)
- UL — UL — EXISTING UTILITY POLE & LINE
- XX" — EXISTING CULVERT & SIZE
- STONE WALL
- APPROXIMATE LOCATION OF EXISTING BUILDING / STRUCTURE
- WATERCOURSE
- SIGN LOCATION
- FIRE HYDRANT
- WATER VALVE
- MAILBOX
- W — WELL LOCATION
- EXISTNG TREE LINE
- EXISTING TREE & SHRUBS
- ZONING MINIMUM SETBACK LINE
- XXX — EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE
- TP — TEST PIT LOCATION
- PT — PERCOLATION TEST LOCATION
- PROPOSED BUILDING
- PROPOSED SEPTIC TANK (SEE DETAIL)
- PROPOSED PUMP STATION (SEE DETAIL)
- PROPOSED CLEANOUT
- PROPOSED DISTRIBUTION BOX
- PROPOSED 4" PERFORATED SEWER LATERAL
- PROPOSED 4" PERFORATED SEWER RESERVE LATERAL
- PROPOSED SITE FENCE (SEE DETAIL)
- LIMITS OF DISTURBANCE



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

NO.	DATE	REVISION	BY
5	3-28-22	OCDOH COMMENTS	ZAP
4	12-9-21	OCDOH COMMENTS	ZAP
3	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS
2	4-20-21	ENGINEER COMMENTS	ZAP
1	3-15-21	HIGHWAY COMMENTS	ZAP

LAWRENCE MARSHALL PE #087107

Site Detail - B
for
Malmark Construction Corp.

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 9 - 3 - 2

TOWN OF NEWBURGH

COUNTY OF ORANGE

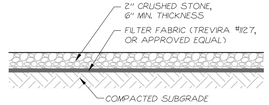
STATE OF NEW YORK

DRAFTED BY: ZAP

DATE: OCTOBER 22, 2020

PROJECT: 3807-3

SHEET: 3 / 6



NOTES:

1. STONE SIZE - USE 1-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.

2. LENGTH - NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH WOULD APPLY).

3. THICKNESS - NOT LESS THAN SIX (6) INCHES.

4. WIDTH - TWELVE (12') FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT THE POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.

5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.

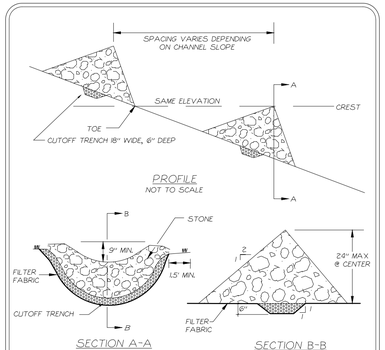
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

Stabilized Construction Entrance Detail

NOT TO SCALE



1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.

2. SET SPACING OF CHECK DAMS TO ASSUME THAT ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.

3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.

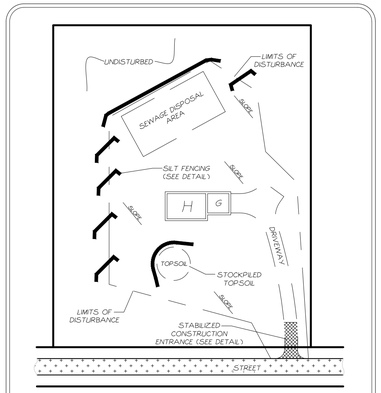
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.

5. ENSURE THAT A CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES

Temporary Check Dam Detail

NOT TO SCALE



NOTES:

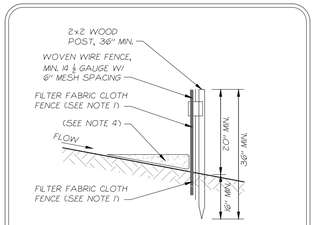
1.) SILT FENCE SHALL BE INSTALLED PARALLEL TO CONTOURS IN ACCORDANCE WITH THE CORRESPONDING DETAIL.

2.) ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED WITHIN FOURTEEN (14) DAYS OF DISTURBANCE. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS PRACTICAL FOLLOWING FINAL DISTURBANCE.

3.) THE DISTURBANCE FOR THE SITE SHALL BE KEPT TO A MINIMUM.

Typical Lot Erosion & Sediment Control Detail

NOT TO SCALE



NOTES:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER 'T' OR 'U' TYPE OR HARDWOOD.

2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.

3. WHEN TWO SECTION OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.

4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AN MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

Silt Fence Detail

NOT TO SCALE

Erosion & Sediment Control Notes:

1.) DUST CONTROL SHALL BE PROVIDED IN TIMES OF DRY WEATHER. AREAS SHALL BE SPRAYED WITH WATER TO PREVENT DUST FROM TRANSFERRING TO ADJACENT PROPERTIES.

2.) THE PROPOSED AREA OF DISTURBANCE IS APPROXIMATELY 2.2 ACRES.

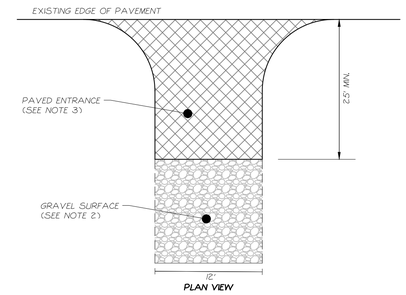
3.) IDLE DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION REQUIREMENTS IN THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, JULY 2016 EDITION. TEMPORARY STABILIZATION SPECIFICATIONS INCLUDE:

- ANNUAL OR PERENNIAL RYEGRASS SEEDING WITH STRAW MULCHING AT A RATE OF 30 LBS PER ACRE.
- COARSE WOOD CHIPS AT A RATE OF 500 LBS PER ACRE.
- WOOD FIBER HYDROMULCH, AS PER MANUFACTURERS SPECIFICATIONS.

4.) ALL DISTURBED AREAS NOT ENCUMBERED BY LANDSCAPING MULCH, PAVEMENT, CONCRETE, OR OTHER IMPERVIOUS COVER BE STABILIZED WITH BLUE GRASS BLEND, WITH THE FOLLOWING SPECIFICATIONS:

- 25% FESTUCA RUBRA COMMUTATA (CHEWINGS FESCUE)
- 15% LOLIUM PERENNE (PERENNIAL RYEGRASS)
- 60% POA PRATENSIS (KENTUCKY BLUEGRASS)

5.) SEEDING SHALL BE PERFORMED AT A RATE OF FIVE (5) LBS. PER ACRE.



NOTES:

1.) THE PROPOSED DRIVEWAY SHALL BE GRADED AT -2.0% MINIMUM FROM THE EDGE OF PAVEMENT ALONG LATTINTOWN ROAD.

2.) GRAVEL DRIVEWAYS SHALL BE A MINIMUM OF 12'-FEET WIDE AND CONSIST OF 8" RUN-OF-BANK GRAVEL BASE WITH 4" ITEM 4 TOP COURSE.

3.) PAVED DRIVEWAYS SHALL BE CONSTRUCTED WITH A MINIMUM OF 6" RUN-OF-BANK GRAVEL FOUNDATION, 3" BINDER COURSE, AND 2" BITUMINOUS ASPHALT TOP COURSE FOR THE FIRST 25-FEET FROM THE EDGE OF PAVEMENT.

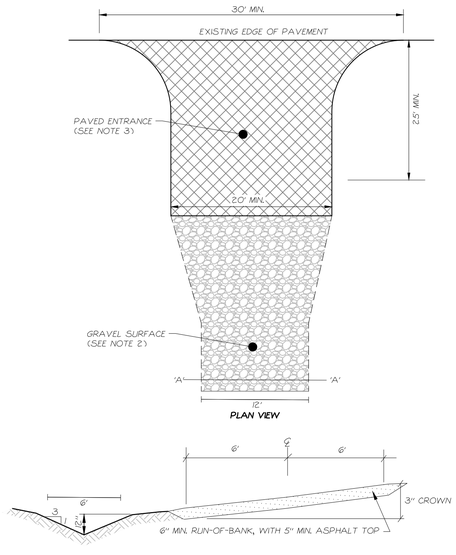
4.) THE MAXIMUM DRIVEWAY SLOPE SHALL NOT EXCEED 10%.

5.) A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH PROPOSED DRIVEWAY ENTRANCE DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH THE ASSOCIATED DETAIL.

6.) THIS DETAIL IS APPLICABLE FOR THE PROPOSED DRIVEWAY ON LOT 5.

Private Driveway Detail

NOT TO SCALE



NOTES:

1.) THE PROPOSED DRIVEWAY SHALL BE GRADED AT -2.0% MINIMUM FROM THE EDGE OF PAVEMENT ALONG LATTINTOWN ROAD.

2.) GRAVEL DRIVEWAYS SHALL BE A MINIMUM OF 20-FEET WIDE AND CONSIST OF 8" RUN-OF-BANK GRAVEL BASE WITH 4" ITEM 4 TOP COURSE. THE DRIVEWAY SHALL FLARE TO A MINIMUM WIDTH OF 30-FEET AT THE EDGE OF EXISTING PAVEMENT ALONG LATTINTOWN ROAD.

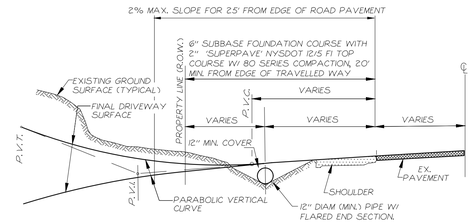
3.) PAVED DRIVEWAYS SHALL BE CONSTRUCTED WITH A MINIMUM OF 6" RUN-OF-BANK GRAVEL FOUNDATION, 3" BINDER COURSE, AND 2" BITUMINOUS ASPHALT TOP COURSE FOR THE FIRST 25-FEET FROM THE EDGE OF PAVEMENT.

4.) THE MAXIMUM DRIVEWAY SLOPE SHALL NOT EXCEED 10%.

5.) A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT EACH PROPOSED COMMON DRIVEWAY ENTRANCE DURING THE COURSE OF CONSTRUCTION IN ACCORDANCE WITH THE ASSOCIATED DETAIL.

Common Driveway Detail

NOT TO SCALE



NOTES:

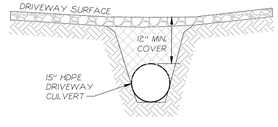
1.) DRIVEWAY SHALL BE GRADED TO DIVERT WATER INTO ROAD DRAINAGE, NOT ONTO MAIN ROAD.

2.) THE INSTALLATION OF ALL PROPOSED DRIVEWAY CULVERTS WILL BE PROPERLY COORDINATED TO ASSURE POSITIVE DRAINAGE IS ACHIEVED.

3.) BACKFILL MATERIAL WITHIN 8' OF THE EDGE OF PAVEMENT SHALL CONSIST OF ITEM NO. 4 (ITEM 304.12 SUBBASE COURSE TYPE 2).

4.) EXCAVATED MATERIAL MAY BE USED AS BACKFILL MATERIAL BEYOND 8' FROM THE EDGE OF PAVEMENT. NO BOULDERS/ROCKS OVER 12" ARE ALLOWED TO BE USED AS BACKFILL.

Driveway Entrance Profile Detail



Typical Culvert Detail

NOT TO SCALE

NO.	DATE	REVISION	BY
4	12-9-21	OCDOH COMMENTS	ZAP
3	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS
2	6-22-21	PUBLIC HEARING COMMENTS	RTS
1	3-15-21	HIGHWAY COMMENTS	ZAP

LAWRENCE MARSHALL PE #087107

THIS SHEET IS NOT FOR ORANGE COUNTY HEALTH DEPARTMENT REVIEW OR APPROVAL

Construction Detail Sheet for Malmark Construction Corp.

MNTM
Mercurio-Norton-Tarolli-Marshall
ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.	
TAX MAP PARCEL:	9 - 3 - 2
TOWN OF NEWBURGH	
COUNTY OF ORANGE	
STATE OF NEW YORK	
DRAFTED BY:	ZAP
DATE:	OCTOBER 22, 2020
PROJECT:	3807-3
SHEET:	4 / 6

Deep Soils Testing Results

TEST HOLE #	1	2	3	4	5	6	7	8	9
TESTING DATE:	2-18-20	2-18-20	2-18-20	2-18-20	2-18-20	2-18-20	2-18-20	2-18-20	2-18-20
TESTER:	RTS	RTS	RTS	RTS	RTS	RTS	RTS	RTS	RTS
DEEP TEST SOIL LOG *NO WATER OR ROCK UNLESS SO NOTED	0'-1': SILTY TOPSOIL (FIELD) — 15" 1'-3': HEAVY SILT LOAM & STONES — 36" 3'-4': SILT LOAM & RIPPABLE SHALE — 66"	0'-1': SILTY TOPSOIL (FIELD) — 15" 1'-3': HEAVY SILT LOAM & STONES — 42" 3'-4': SILT LOAM & RIPPABLE SHALE — 72"	0'-1': SILTY TOPSOIL (FIELD) — 12" 1'-3': HEAVY SILT LOAM — 36" 3'-4': SILT LOAM & RIPPABLE SHALE — 72"	0'-1': SILTY TOPSOIL (FIELD) — 12" 1'-3': HEAVY SILT LOAM — 36" 3'-4': SILT LOAM & RIPPABLE SHALE — 63"	0'-1': SILTY TOPSOIL (FIELD) — 6" 1'-3': CLAY LOAM — 18" 2'-3': CLAY LOAM & STONES — 36" 3'-6': SILT LOAM W. SHALE FRAGMENTS — 76"	0'-1': TOPSOIL — 12" 1'-3': CLAYEY SILT LOAM W. SHALE FRAGMENTS — 66"	0'-1': TOPSOIL — 6" 1'-3': SILT LOAM — 18" 3'-4': CLAYEY SILT LOAM W. SHALE FRAGMENTS — 66"	0'-1': TOPSOIL — 12" 1'-3': CLAY LOAM — 30" 3'-6': GRAVELLY CLAY LOAM W. SHALE FRAGMENTS — 72"	0'-1': TOPSOIL — 6" 1'-3': CLAY LOAM — 18" 3'-4': SILT LOAM & RIPPABLE SHALE — 69"
NOTES:	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED

-

Joint Deep Soils Testing Results

TEST HOLE #	OC-1	OC-2	OC-3	OC-4	OC-5	OC-6
TESTING DATE:	8-3-21	8-3-21	8-3-21	8-3-21	8-3-21	8-3-21
TESTER:	RTS/PB	RTS/PB	RTS/PB	RTS/PB	RTS/PB	RTS/PB
DEEP TEST SOIL LOG *NO WATER OR ROCK UNLESS SO NOTED	0'-1': TOPSOIL — 6" 1'-6': SILTY CLAY LOAM W/ SOME GRAVEL — 72"	0'-1': TOPSOIL — 12" 1'-7': SILTY CLAY LOAM W/ SOME GRAVEL — 84"	0'-1': TOPSOIL — 12" 1'-7': SILTY LOAM — 84"	0'-1': TOPSOIL — 8" 1'-6': SILTY LOAM W/ SHALE FRAGMENTS — 72"	0'-1': TOPSOIL — 6" 1'-6': SILTY LOAM W/ AN ABUNDANCE OF SHALE FRAGMENTS — 72"	0'-2': TOPSOIL — 6" 2'-4': SILTY LOAM W/ SHALE FRAGMENTS — 58" 4': REFUSAL
NOTES:	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED	* NO MOTTLING OBSERVED

* JOINT DEEP SOILS TESTING WAS COMPLETED BY RYAN SMITHEM OF MNTM AND PAUL BELLOTTO OF THE ORANGE COUNTY DEPARTMENT OF HEALTH ON AUGUST 3, 2021

Percolation Testing Results

TEST HOLE #		1-A	1-B	2-A	2-B	3-A	3-B	4-A	4-B	5-A	5-B
TESTING DATE:		11-10-20	11-10-20	11-10-20	11-10-20	11-10-20	11-10-20	11-10-20	11-10-20	11-10-20	11-10-20
DEPTH / TESTER:		24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ	24" - WJ
PERCOLATION TEST RESULTS * TESTING COMPLETED WITH A STOPWATCH AND CLEAN WATER	RUN 1 ELAPSED TIME:	12:49	25:05	15:51	6:39	0:39	16:14	0:56	7:16	4:41	2:31
	RUN 2 ELAPSED TIME:	14:31	28:40	18:08	8:36	0:59	18:10	1:20	8:46	5:05	3:30
	RUN 3 ELAPSED TIME:	16:45	29:34	19:43	8:46	0:59	21:09	2:24	9:56	5:10	3:33
	RUN 4 ELAPSED TIME:	17:05		20:24		1:08	21:58	3:24	10:15		
	RUN 5 ELAPSED TIME:					1:10		3:30			
	RUN 6 ELAPSED TIME:										
	RUN 7 ELAPSED TIME:										
	STABILIZED RATE:	17:05	29:34	20:24	9:00	1:10	21:58	3:30	10:15	5:10	3:33

-

Joint Percolation Testing Results

TEST HOLE #		2-C	3-C	5-C	2-D
TESTING DATE:		8-3-21	8-3-21	8-3-21	8-3-21
DEPTH / TESTER:		24" - WJ/PB	24" - WJ/PB	24" - WJ/PB	24" - WJ/PB
PERCOLATION TEST RESULTS * TESTING COMPLETED WITH A STOPWATCH AND CLEAN WATER	RUN 1 ELAPSED TIME:	6:45	4:36	4:44	8:42
	RUN 2 ELAPSED TIME:	9:41	5:18	5:58	11:28
	RUN 3 ELAPSED TIME:	11:44	5:20	6:30	12:58
	RUN 4 ELAPSED TIME:	13:15			14:15
	RUN 5 ELAPSED TIME:	15:00			15:36
	RUN 6 ELAPSED TIME:	16:12			16:02
	RUN 7 ELAPSED TIME:	17:11			
	STABILIZED RATE:	17:11	5:20	6:30	16:02

JOINT PERCOLATION TESTING WAS PERFORMED BY WILLIAM JOY OF MNTM & PAUL BELLOTTO OF THE ORANGE COUNTY DEPARTMENT OF HEALTH ON AUGUST 3, 2021

Water Treatment System Notes:

1.) PRELIMINARY WATER QUALITY TESTING ON THE LOT 2 TEST WELL INDICATED AN ELEVATED ODOR LEVEL ABOVE THE MAXIMUM CONTAMINANT LEVEL (MCL) PERMITTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH (OCDOH) OF 3 TON (THRESHOLD ODOR NUMBER).

2.) WATER QUALITY SAMPLING SHALL BE COMPLETED ON ALL LOTS SERVED BY PRIVATE WELLS AND, IF THE RESULTS EXCEED THE SPECIFIED MCL, TREATMENT SHALL BE PROVIDED.

3.) THE PROPOSED ODOR TREATMENT SHALL BE A NELSEN "AIO" AIR INJECTION OXIDIZING FILTER SYSTEM, OR APPROVED EQUAL. THE SYSTEM SHALL BE EQUIPPED WITH A PENTAIR FLECK 5600AIO SXT CONTROL VALVE. THE CONTROL VALVE SHALL BE PROGRAMMED TO PROVIDE A BACKWASH CYCLE AS FOLLOWS:
- BACKWASH: 4 MINUTES AT 5 GALLONS PER MINUTE (GPM) = 20 GALLONS
- RAPID RINSE: 1 MINUTE AT 5 GPM = 5 GALLONS
- START / STOP DRAW: ASSUME 5 GALLONS EACH
- TOTAL ANTICIPATED BACKWASH FLOW OF 35 GALLONS PER DAY (GPD).

4.) THE PROPOSED SEWAGE DISPOSAL SYSTEMS ON LOTS 1 -4 HAVE BEEN DESIGNED TO ACCOMMODATE A FOUR (4) BEDROOM DWELLING WITH A MAXIMUM BACKWASH RATE OF 45 GALLONS PER DAY (GPD). LOT 5 WILL BE SERVED BY A CONNECTION TO THE PUBLIC WATER SUPPLY AND DOES NOT REQUIRE ADDITIONAL TREATMENT CAPACITY..

Sewage Disposal System Requirements

LOT	DESIGN FLOW RATE (GPD)	SEPTIC TANK SIZE (GALLONS)	DISTRIBUTION BOX MODEL NUMBER	TYPE OF SYSTEM	DESIGN STABILIZED PERCOLATION RATE (MIN.)	MIN. LENGTH OF ABSORPTION TRENCH (L.F.)	PROPOSED LENGTH OF ABSORPTION TRENCH (L.F.)	SEWAGE DISPOSAL SYSTEM DESIGN
1	485	1,250	DB-20	A.T.	31 - 45	485	495	9 ROWS @ 55 L.F.
2	485	1,250	DB-12	A.T.	21 - 30	405	406	7 ROWS @ 58 L.F.
3	485	1,250	DB-12	A.T.	21 - 30	405	406	7 ROWS @ 58 L.F.
4	485	1,250	DB-12	A.T.	11 - 15	304	330	6 ROWS @ 55 L.F.
5	440	1,250	DB-12	A.T.	6 - 7	220	220	4 ROWS @ 55 L.F.

NOTES:
1.) A.T. = ABSORPTION TRENCH TYPE SYSTEM

2.) THE DESIGN FLOW RATE FOR LOTS 1-4 OF 485 GALLONS PER DAY (GPD) IS BASED UPON 110 GPD PER BEDROOM * 4 BEDROOM PLUS 45 GPD FOR WATER TREATMENT BACKWASH.

3.) THE DESIGN FLOW RATE FOR LOT 5 OF 440 GALLONS PER DAY (GPD) IS BASED UPON 110 GPD PER BEDROOM * 4 BEDROOM. LOT 5 IS SERVED BY A CONNECTION TO THE EXISTING PUBLIC WATER MAIN.

4.) THE DISTRIBUTION BOX SHALL BE SIZED TO ACCOMMODATE BOTH THE PRIMARY SEWER LATERALS AND THE 50% EXPANSION AREA. LOTS 1, 2, AND 3 WILL REQUIRE THE USE OF A DOSING CHAMBER IF THE EXPANSION AREA IS INSTALLED AS THE TOTAL SYSTEM LENGTH WOULD EXCEED 500 LINEAR FEET.. SEE DETAIL ON SHEET 6.

MINIMUM SEPARATION DISTANCES FROM EXISTING OR PROPOSED FEATURES

SYSTEM COMPONENTS	WELL OR SUCTION LINE (E,G)	STREAM, LAKE, OR WATERCOURSE (B)	DWELLING	PROPERTY LINE	DRAINAGE DITCH (H)
HOUSE SEWER (WATERTIGHT JOINTS)	50' (E)	25'	3'	10'	10'
SEPTIC TANK	50'	50'	10'	10'	10'
EFFLUENT LINE TO DISTRIBUTION BOX	50'	50'	10'	10'	10'
DISTRIBUTION BOX	100'	100'	20'	10'	20'
ABSORPTION FIELD (C) (D)	100' (A)	100'	20'	10'	50'
SEEPAGE PIT	150' (A)	100'	20'	10'	50'
DRY WELL (ROOF & FOOTING)	50'	25'	20'	10'	10'
RAISED OR MOUND SYSTEM (C) (D)	100' (A)	100'	20'	10'	50'
INTERMITTENT SAND FILTER (D)	100' (A)(F)	100' (F)	20'	10'	20'
NON-WATERBORNE SYSTEMS WITH OFFSITE RESIDUAL DISPOSAL	50'	50	20'	10'	10'
NON-WATERBORNE SYSTEMS WITH ONSITE RESIDUAL DISPOSAL	100'	50	20'	10'	20'

(A) WHEN SEWAGE TREATMENT SYSTEMS ARE LOCATED IN COARSE GRAVEL OR UPGRADE AND IN THE GENERAL PATH OF DRAINAGE TO A WELL, THE CLOSEST PART OF THE TREATMENT SYSTEM SHALL BE AT LEAST 200' AWAY FROM THE WELL.

(B) MEAN HIGH WATER MARK.

(C) FOR ALL SYSTEMS INVOLVING THE PLACEMENT OF FILL MATERIAL, SEPARATION DISTANCES ARE MEASURED FROM THE TOE OF THE SLOPE OF THE FILL.

(D) SEPARATION DISTANCES HALL ALSO BE MEASURED FROM THE EDGE OF THE DESIGNATED ADDITIONAL USABLE AREA (i.e. RESERVE AREA), WHEN AVAILABLE.

(E) THE CLOSEST PART OF THE WASTEWATER TREATMENT SYSTEM SHALL BE LOCATED AT LEAST TEN (10) FEET FROM ANY WATER SERVICE LINE.

(F) WHEN INTERMITTENT SAND FILTERS ARE DESIGNED TO BE WATERTIGHT AND COLLECT ALL EFFLUENT, THE SEPARATION DISTANCE CAN BE REDUCED TO 50 FEET.

(G) THE LISTED WATER WELL SEPARATION DISTANCES FROM CONTAMINANT SOURCES SHALL BE INCREASED BY 50% WHENEVER AQUIFER WATER ENTERS THE WATER WELL AT LEAST 50-FEET BELOW GRADE. IF A 50% INCREASE CANNOT BE ACHIEVED, THEN THE GREATEST POSSIBLE INCREASE IN SEPARATION DISTANCE SHALL BE PROVIDED WITH SUCH ADDITIONAL MEASURES AS NEEDED TO PREVENT CONTAMINATION.

(H) USE SITE EVALUATION TO AVOID ONSITE WASTEWATER TREATMENT SYSTEM SHORT-CIRCUITING TO THE SURFACE OR GROUNDWATER AND TO MINIMIZE IMPACTS ON OWTS FUNCTIONALITY.

SYSTEM COMPONENT	SWALE, STREAM, OR WATERCOURSE	CEMETERY PROPERTY LINE	SUBDIVISION BOUNDARY
WELL	25'	100'	50'

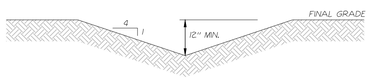
(F) ALL DRAINAGE PIPES WITHIN 25 FEET OF ANY WELL SHALL BE WATERTIGHT

SYSTEM COMPONENT	HIGH WATER LINE OF A WET POND	INTERMITTENT STREAM, DRY WELL, CULVERT OR STORM SEWER (NON-GASKETED PIPE), OR CATCH BASIN	CULVERT OR STORM SEWER (GASKETED, TIGHT PIPE)	CURTAIN DRAIN	TOP OF EMBANKMENT OR STEEP (1 ON 3) SLOPE	SOLID CURTAIN DRAIN, ROOF OR FOOTING PIPES, SNOW STORAGE EASEMENT
ABSORPTION FIELD	100'	50'	35'	15'	50'	10'

Minimum Separation Distances From Existing Or Proposed Features

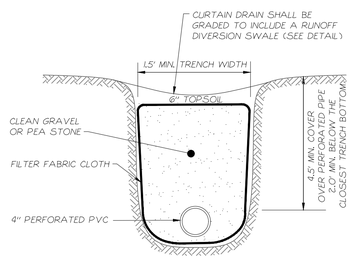
- FOR ORANGE COUNTY -

AS PER NEW YORK STATE DEPARTMENT OF HEALTH "RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK", 2012 EDITION & ORANGE COUNTY POLICY & STANDARDS LAST REVISED SEPTEMBER 2014



NOTE: THE DIVERSION SWALE SHALL BE SEEDED & MULCHED IMMEDIATELY FOLLOWING CONSTRUCTION

Diversion Swale Detail



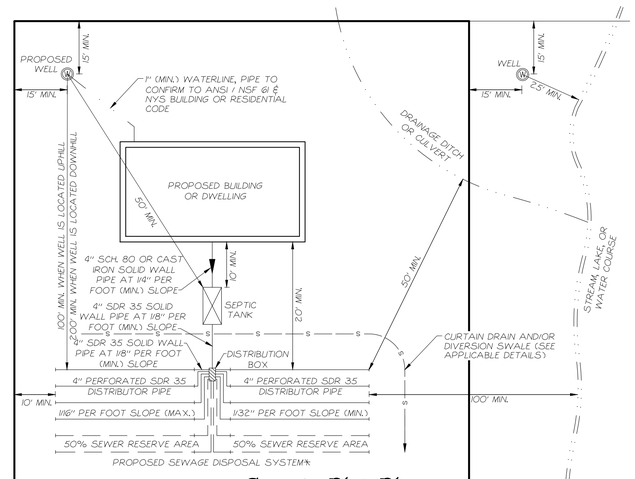
NOTES:
1.) A 15' MINIMUM SEPARATION IS REQUIRED TO THE ABSORPTION TRENCHES.

2.) THE CURTAIN DRAIN SHALL HAVE A MINIMUM SLOPE OF 0.5%.

3.) THE DRAIN SHALL BE RUN TO DAYLIGHT WITH A SCREENED OUTLET.

Curtain Drain Detail

NOT TO SCALE



Generic Plot Plan

* THE 'GENERIC PLOT PLAN' IS INTENDED FOR ILLUSTRATION PURPOSES ONLY. FOR SPECIFIC DESIGN INFORMATION ON THE PROPOSED SEWAGE DISPOSAL SYSTEM, SEE THE SEWAGE DISPOSAL SYSTEM REQUIREMENTS TABLE, DETAILS, AND NOTES ON THIS SHEET.

NO.	DATE	REVISION	BY
4	6-7-22	OCDOH COMMENTS	ZAP
3	3-28-22	OCDOH COMMENTS	ZAP
2	12-9-21	OCDOH COMMENTS	ZAP
1	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS

LAWRENCE MARSHALL P.E. #087107

Water & Sewer Detail Sheet 1 for Malmark Construction Corp.

MNTM Mercurio-Norton-Tarolli-Marshall ENGINEERING - LAND SURVEYING
PO BOX 166; 45 MAIN STREET; PINE BUSH, NY 12566
P: (845)744.3620 F:(845)744.3805 MNTM@MNTM.CO

THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 9 - 3 - 2

TOWN OF NEWBURGH

COUNTY OF ORANGE

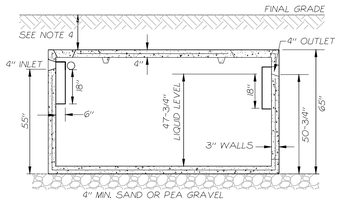
STATE OF NEW YORK

DRAFTED BY: ZAP

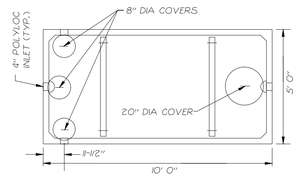
DATE: OCTOBER 22, 2020

PROJECT: 3807-3

SHEET: 5 / 6



CROSS SECTION VIEW



PLAN VIEW

NOTES:
1.) SEPTIC TANK SHALL BE MODEL ST-1250, OR APPROVED EQUAL, AS MANUFACTURED BY:
WOODARDS CONCRETE PRODUCTS, INC
629 LYBOLT ROAD
BULLVILLE, NEW YORK 10915
(845) 361-3471

2.) ALL PIPE JOINTS (INLET & OUTLET PIPES) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

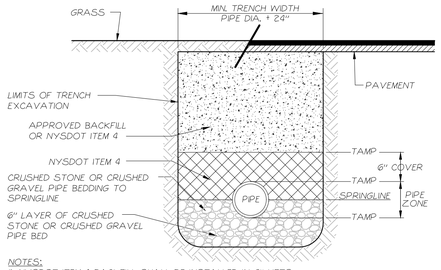
3.) INLET BAFFLE CAN BE RELOCATED TO THE SIDE.

4.) IF COVER EXCEEDS 12" A RISER MUST BE USED TO ALLOW ACCESS.

CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS
STEEL REINFORCEMENT: 6" X 6" X10 GA. STEEL WIRE MESH
#4 REBAR AROUND PERIMETER
CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT
WEIGHT: 9,500 LBS
LOAD RATING: 300 PSF

Typical Precast 1,250-Gallon Concrete Septic Tank

NOT TO SCALE



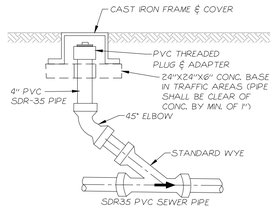
NOTES:
1) NYSDOT ITEM 4 BACKFILL SHALL BE INSTALLED IN 6" LIFTS.

2) IN LAWN AREAS, A MINIMUM OF 6 INCHES OF TOPSOIL SHALL BE PLACED ON TOP OF THE NYSDOT ITEM 4 BACKFILL AND SHALL BE SEEDED AND MULCHED WITH SEED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

3) IN PAVED AREAS, THE EXISTING PAVEMENT SHALL BE SAW CUT PRIOR TO REMOVAL. REPLACEMENT OF THE PAVEMENT SHALL BE COMPLETED WITH A MINIMUM OF 4" NYSDOT ITEM 4 LEVELING COURSE, 3" ASPHALT BINDER COURSE, AND 1-1/2" ASPHALT TOP COURSE.

4) THIS DETAIL DOES NOT APPLY TO THE ABSORPTION TRENCHES OF THE SEWER SYSTEMS.

Typical Trench Detail

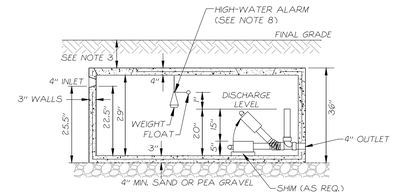


NOTES:
1. CAST IRON FRAME & COVER AND CONCRETE BASE SHALL ONLY BE INSTALLED IF CLEANOUT IS IN VEHICULAR TRAFFIC AREAS.

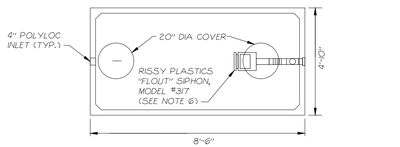
2. IN LAWN AREAS, CLEANOUT SHALL BE INSTALLED A MINIMUM OF 4" ABOVE FINAL GRADE.

In-Line Sewer Cleanout

NOT TO SCALE



CROSS SECTION VIEW



PLAN VIEW

NOTES:
1.) DOSING CHAMBER SHALL BE A PRECAST SIPHON CHAMBER, MODEL SC-5X9 AS MANUFACTURED BY:
WOODARDS CONCRETE PRODUCTS, INC.
629 LYBOLT ROAD
BULLVILLE, NEW YORK 10915
(845) 361-3471
DOSING CHAMBERS ARE NOT STOCK, ALLOW A MINIMUM OF TWO (2) WEEKS FOR DELIVERY.

2.) ALL PIPE JOINTS (INLET & OUTLET PIPES) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

3.) IF COVER EXCEEDS 12", A RISER MUST BE USED TO ALLOW ACCESS.

4.) REQUIRED DOSE VOLUME (R" DISTRIBUTION PIPES) = 0.65 * L.F. OF TRENCH, INCLUDING 50% EXPANSION AREA (GALLONS) * 0.75 (75% OF PIPE VOLUME).

5.) THIS DETAIL IS APPLICABLE TO LOTS 1, 2 AND 3. THE DOSING CHAMBER SHALL BE INSTALLED FOR THE APPLICABLE LOT IF THE EXPANSION SYSTEM IS INSTALLED.

6.) SIPHON SHALL BE A SINGLE SIPHON "FLOUT", MODEL #317, AS MANUFACTURED BY RISSY PLASTICS. THE FLOUT SHALL BE ADJUSTED FROM STANDARD 17" DRAW TO PROVIDE THE SPECIFIED 15" DRAW.

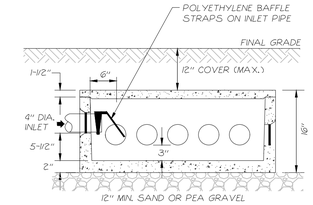
7.) THE PROPOSED DOSE FOR LOTS 1, 2 AND 3 IS 324.1 GALLONS AND WILL REQUIRE A 15" DRAW AND THE TANK DIMENSIONS SPECIFIED ABOVE.

8.) THE INSTALLATION OF A HIGH-WATER ALARM IS RECOMMENDED FOR THE DOSING CHAMBER.

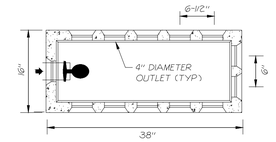
CONCRETE MINIMUM STRENGTH: 4,000 P.S.I. AT 28 DAYS
STEEL REINFORCEMENT: 6" X 6" X10 GA. STEEL WIRE MESH
#3 REBAR AROUND PERIMETER
CONSTRUCTION JOINT: SEALED WITH BUTYL RUBBER CEMENT

Typical Precast Dosing Chamber

NOT TO SCALE



CROSS-SECTION VIEW



PLAN VIEW

NOTES:
1.) DISTRIBUTION BOX SHALL BE MODEL DB-12, OR APPROVED EQUAL, AS MANUFACTURED BY:
WOODARDS CONCRETE PRODUCTS, INC.
629 LYBOLT ROAD
BULLVILLE, NEW YORK 10915
(845) 361-3471

2.) FLOW EQUALIZERS SHALL BE USED TO ENSURE EQUAL FLOW TO EACH OUTLET PIPE. YEARLY CHECKING AND ADJUSTMENT IS RECOMMENDED.

3.) ALL PIPE JOINTS (INLET & OUTLET) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

4.) A POLYETHLENE BAFFLE, SANITARY TEE, 90° ELBOW, OR OTHER APPROVED BAFFLE SHALL BE INSTALLED AT THE INLET TO THE DISTRIBUTION BOX.

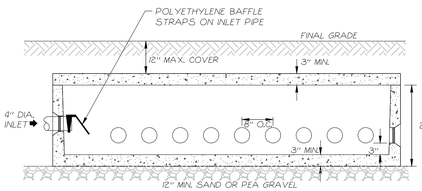
5.) OUTLET INVERTS SHALL BE SET AT THE SAME ELEVATION.

6.) DISTRIBUTION BOXES SHALL BE SIZED TO ACCOMODATE THE PRIMARY SYSTEM AND 50% RESERVE AREA.

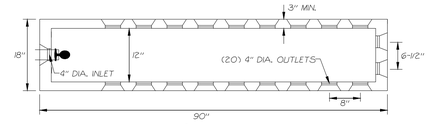
7.) OUTLETS MUST BE USED IN A MANNER TO ALLOW ACCESS TO THE NECESSARY NUMBER OF OUTLETS FOR THE EXPANSION AREA WITHOUT DISTURBING THE INITIAL SYSTEM.

Typical Precast Concrete Distribution Box

NOT TO SCALE



CROSS-SECTION VIEW



PLAN VIEW

DISTRIBUTION BOX NOTES:
1.) DISTRIBUTION BOX SHALL BE MODEL DB-2.0, OR APPROVED EQUAL, AS MANUFACTURED BY:
WOODARDS CONCRETE PRODUCTS, INC.
629 LYBOLT ROAD
BULLVILLE, NY 10915
(845) 361-3471

2.) FLOW EQUALIZERS SHALL BE USED TO ENSURE EQUAL FLOW TO EACH OUTLET PIPE. YEARLY CHECKING AND ADJUSTMENT IS RECOMMENDED.

3.) ALL PIPE JOINTS (INLET & OUTLET) SHALL BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

4.) A POLYETHLENE BAFFLE, SANITARY TEE, 90° ELBOW, OR OTHER APPROVED BAFFLE SHALL BE INSTALLED AT THE INLET TO THE DISTRIBUTION BOX.

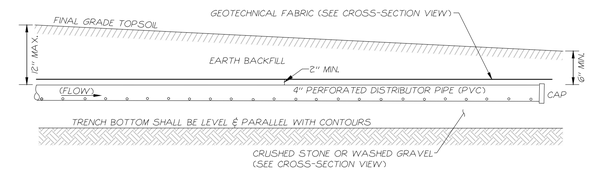
5.) OUTLET INVERTS SHALL BE SET AT THE SAME ELEVATION.

6.) DISTRIBUTION BOXES SHALL BE SIZED TO ACCOMODATE THE PRIMARY SYSTEM AND 50% RESERVE AREA.

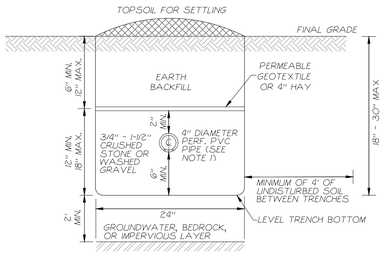
7.) OUTLETS MUST BE USED IN A MANNER TO ALLOW ACCESS TO THE NECESSARY NUMBER OF OUTLETS FOR THE EXPANSION AREA WITHOUT DISTURBING THE INITIAL SYSTEM.

Typical Precast Concrete Distribution Box

NOT TO SCALE



TRENCH PROFILE



CROSS-SECTIONAL VIEW

NOTES:
1.) DISTRIBUTION PIPE SHALL BE INSTALLED WITH PIPE PERFORATIONS FACING DOWN.

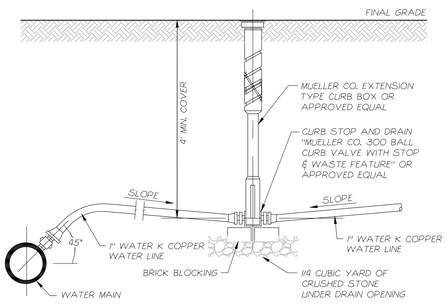
2.) DO NOT INSTALL TRENCHES IN WET SOIL. TRENCH SIDES AND BOTTOMS SHALL BE RAKED PRIOR TO INSTALLATION OF GRAVEL.

3.) THE END OF EACH LATERAL SHALL BE CAPPED.

4.) LATERALS SHALL BE SLOPED 1/16" - 1/32" PER FOOT FOR GRAVITY SYSTEMS.

5.) LATERALS SHALL BE INSTALLED SIX (6) FEET ON CENTER, MINIMUM. MAINTAIN A MINIMUM OF FOUR (4) FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.

Absorption Trench Detail

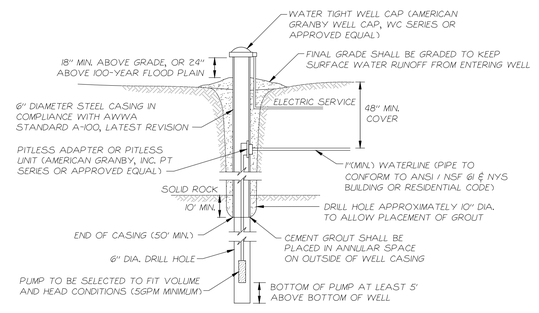


NOTES:
1.) WATER SERVICE CONNECTION SHALL BE COORDINATED WITH THE TOWN OF NEWBURGH DEPARTMENT OF PUBLIC WORKS.

2.) THIS DETAIL APPLICABLE FOR LOT 5 ONLY.

Typical Water Service Detail

NOT TO SCALE



NOTES:
1.) WELL SHALL BE CONSTRUCTED IN ACCORDANCE WITH TABLE 2 OF THE NEW YORK STATE DEPARTMENT OF HEALTH (NYSDOH) APPENDIX 5-B "STANDARDS FOR WATER WELLS."

2.) THE WELL CAP MUST BE A MINIMUM OF TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.

3.) THE END OF WELL CASING SHALL EXTEND TO A MINIMUM DEPTH OF 50 FEET.

4.) THIS DETAIL APPLICABLE FOR LOTS 1, 2, 3, & 4.

Typical Well Detail

NOT TO SCALE

General Notes:

1.) PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.

2.) ALL 4" OUTLET PIPES (SOLID WALL) LEAVE DISTRIBUTION BOX AT SAME ELEVATION ON A MINIMUM SLOPE OF 1/8" PER FOOT UP TO A DISTRIBUTOR LATERAL.

3.) SEWAGE DISPOSAL SYSTEMS LOCATED OF NECESSITY UPGRADE IN THE GENERAL PATH OF DRAINAGE TO A WELL MUST BE SPACED 200' OR MORE AWAY.

4.) NO DRIVEWAY, ROADWAY, PARKING AREAS, STRUCTURES OR ABOVE GROUND SWIMMING POOL IS TO BE CONSTRUCTED OVER ANY PORTION OF THE SEWER SYSTEM. HEAVY EQUIPMENT SHALL BE KEPT OUT OF THE ABSORPTION FIELD AREA.

5.) ALL DISTRIBUTOR LINES (PERFORATED) SHALL BE OF EQUAL LENGTH.

6.) ALL TREES TO BE CUT & REMOVED FROM SEWAGE DISPOSAL AREA IN A MANNER THAT WILL NOT DISTURB THE VIRGIN SOIL LAYER.

7.) MAXIMUM GROUND SLOPE OF TILE FIELD AREA SHALL NOT EXCEED 15%.

8.) NO BASEMENT FIXTURES ARE PERMITTED WITHOUT A SPECIAL DESIGN FOR SEWAGE DISPOSAL.

9.) NO COMPONENT PART OF ANY SEWAGE DISPOSAL SYSTEM SHALL BE LOCATED OR MAINTAINED WITHIN 100' OF ANY SPRING, RESERVOIR, BROOK, MARSH OR ANY OTHER BODY OF WATER.

10.) NO ROOF, CELLAR OR FOOTING DRAINS ARE TO BE DISCHARGED IN THE SEWAGE DISPOSAL SYSTEM.

11.) FLOW EQUALIZERS SHALL BE USED FOR SYSTEMS WHOSE SIDE SLOPES ARE BETWEEN 10-15% AND ARE RECOMMENDED FOR ALL SYSTEMS.

12.) SLOPE BETWEEN SEPTIC TANK OR PUMPING CHAMBER AND THE HOUSE SHALL BE POSITIVE AND UNINTERRUPTED, AS TO ALLOW SEPTIC GASSES TO DISCHARGE THROUGH THE STACK VENT.

13.) THE SEWER PIPE RUNNING FROM THE HOUSE TO THE SEPTIC TANK MUST BE LAID ON SUITABLY COMPACTED EARTH OR VIRGIN SOIL WITH THE FIRST WATERTIGHT JOINT LOCATED AT LEAST 3' FROM THE HOUSE. THE PIPE SHALL BE SCH 80 PVC OR CAST IRON.

14.) THE DESIGN AND LOCATION OF SANITARY FACILITIES (WELL, SEPTIC TANK, AND LEACH FIELD) SHALL NOT BE CHANGED. ANY RELOCATION OF THE SEPTIC SYSTEMS OR WELLS SHOWN, TO AREAS OTHER THAN AS SHOWN ON THE APPROVED PLANS, MUST BE APPROVED BY THE DESIGN ENGINEER AND ORANGE COUNTY DEPARTMENT OF HEALTH (OCDOH).

15.) ALL WELLS AND SEPTIC SYSTEMS WITHIN 300 FEET THAT IMPACT SEPARATION DISTANCES FOR THE PROPOSED WELLS AND SEPTIC SYSTEMS ARE SHOWN ON THE PLANS.

16.) THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.

17.) HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN LOAD WAS BASED.

18.) THE PROPOSED SEWAGE DISPOSAL SYSTEMS FOR LOTS 1 -5 WERE NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, OR JACUZZI TYPE SPA TUBS OVER 100 GALLONS. THE PROPOSED SEWAGE DISPOSAL SYSTEM FOR LOT 5 HAS NOT BEEN DESIGNED TO ACCOMMODATE WATER SOFTENER OR TREATMENT SYSTEMS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REVIEWED AND APPROVED BY OCDOH.

19.) THE OWNER/APPLICANT OF EACH LOT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS-BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES, INCLUDING A COPY OF THE NYSDEC WELL COMPLETION REPORT.

20.) SEPTIC TANKS SHOULD BE INSPECTED PERIODICALLY AND PUMPED EVERY 2-3 YEARS.

21.) DISTRIBUTION BOXES SHOULD BE INSPECTED PERIODICALLY TO ENSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.

22.) A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER (OR OTHER DESIGN PROFESSIONAL AS ALLOWED BY THE NYS EDUCATION DEPARTMENT) SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY, ANY WATER TREATMENT, AND SEWAGE DISPOSAL FACILITIES) AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE ORANGE COUNTY DEPARTMENT OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICE THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN TESTED FOR WATER TIGHTNESS. A COPY OF THE NYSDEC WELL COMPLETION REPORT MUST ALSO BE PROVIDED.

NO.	DATE	REVISION	BY
5	6-7-22	OCDOH COMMENTS	ZAP
4	3-28-22	OCDOH COMMENTS	ZAP
3	12-9-21	OCDOH COMMENTS	ZAP
2	8-25-21	OCDOH COMMENTS & EASEMENTS	RTS
1	5-7-21	OCDOH NOTES	ZAP

LAWRENCE MARSHALL PE #087107

Water & Sewer Detail Sheet II for Malmark Construction Corp.

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THIS MAP IS INCOMPLETE AND INVALID WITHOUT ALL SHEETS IN THE PLAN SET.

TAX MAP PARCEL: 9 - 3 - 2
TOWN OF NEWBURGH
COUNTY OF ORANGE
STATE OF NEW YORK
DRAFTED BY: ZAP
DATE: OCTOBER 22, 2020
PROJECT: 3807-3
SHEET: 6 / 6