BME ASSOCIATES

ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECTS

September 5, 2024 Revised September 11, 2024

Town Board Town of Perinton 1350 Turk Hill Road Fairport, NY 14450

Re: 550 Macedon Center Road T.A. #153.19-1-34 Special Use Permit Application

2951

Dear Board Members:

On behalf of Debbie Kanner, Seal Two Partners LLC, the owner/applicant of 550 Macedon Center Road, we submit this application for a Special Use Permit to allow for duplex residential units on the abovereferenced property. We request the Town Board schedule a public hearing for this application pursuant to Section 208-54.B of the Town Code, and we provide twelve (12) sets of the following application materials for your use and review:

- · Letter of Intent, dated August 16, 2024
- · Special Use Permit Application Form
- Site Plan Package (BME Dwg. 2951_01-10)
- · Building Architectural Elevations
- · Short Environmental Assessment Form Parts 1, 2 & 3
- Engineer's Narrative Supplement (3 copies)
- · Owner's Authorization Form
- · Property Deed
- \$150.00 Special Use Permit Application Fee

The project includes the subdivision of an approximately 2.4-acre parcel located at 550 Macedon Center Road into three (3) lots that are compliant with the Class-B residential code. The property is zoned Residential B, and the property currently has an existing 2-unit /duplex residential unit on the site (Lot #1). Lots #2 and #3 will be developed with new residential 2-unit structures. Section 208-32A(2) of the Town Code allows for duplex units within the Residential Class-B district through obtaining a Special Use Permit pursuant to Code Section 208-54.

The project will be served by the existing entrance onto Macedon Center Road. The two additional lots, Lot #2 and Lot #3, will be accessed via a private driveway with a cross access and utility easement. The proposed lots have been designed to be in conformance with the Town subdivision criteria for duplex lots within the Residential B district and each will have a fifteen-foot-wide flag connection to Macedon Center Road.

The project will include the implementation of a stormwater management plan to be prepared per the Town and NYSDEC requirements. The outline of this plan is provided in the enclosed Engineer's Narrative prepared in support of the EAF.

This Narrative also provides information regarding the environmental setting of the property, which includes a municipal LDD. The applicant, members of the Town's Conservation Board, and Town representatives walked the site on July 3, 2024, to review and confirm the limits of the Town LDD area adjacent to an unnamed creek on the property. The site plan for the proposed project has been prepared to avoid these areas to the greatest extent practicable.

As required by Town Code Section 208-54.D, we offer the following information to satisfy the twelve (12) standards the Town Board is to consider in reviewing this Special Use Permit request:

(1) The use will not prevent the orderly and reasonable use of adjacent properties or of properties in adjacent use districts.

The proposal is an expansion of the current use on the property and is consistent with the allowable use within the Class B Residential District. The proposed use will not have an adverse effect on the adjacent properties.

(2) The public health, safety, general welfare, or order of the Town will not be adversely affected by the proposed use in its location.

The approval of the Special Use Permit to allow the duplex residential units will not adversely affect the public health, safety, and welfare of the community. The proposed infill project will increase residential opportunities within the Town and is consistent with the allowable uses within the Class B residential zoning district.

(3) The use will be in general harmony with and promote the general purposes and intent of the most recent Comprehensive Plan of the Town and the Zoning Ordinance.

The issuance of the requested Special Use Permit will allow the use of the site as allowed by Town Code and would serve to increase the residential opportunities within the Town.

The proposal meets several goals and policies of the Town of Perinton's 2021 Comprehensive Plan including:

Land Use and Community Character:

- Goal 1: Protect the long-term viability of residential areas in the Town by "Promote infill development of single-. two-, and multi-family residential homes on character and scale within existing neighborhoods."
- Goal 2: Encourage the development of a range of housing types enhancing access and choice to support a diverse and inclusive population.
- (4) The proposed use will not interfere with the preservation of the general character of the neighborhood in which such building is to be placed or use is to be conducted and that the proposed use will, in fact, be compatible with its surroundings and with the character of the neighborhood and of the community in general, particularly with regard to visibility, scale and overall appearance.

The proposal is consistent with the general character of the surrounding residential neighborhood and is compatible with the overall appearance of the residential neighborhood.

(5) The physical characteristics and topography of the proposed site make it suitable for the proposed special use.

The property is suitable for the development of two (2) two-family duplex lots with available access to public utilities.

(6) The proposed special use provides sufficient landscaping and/or other forms of buffering to protect surrounding land uses.

The proposed use is consistent with the surrounding residential uses. As such, buffering is not necessary to protect any of the adjoining properties.

(7) The property has sufficient, appropriate, and adequate area for the use, as well as reasonably anticipated operation thereof.

The site plan submitted with the Special Use Permit application illustrates the proposed lot configuration, building footprints and associated vehicular access within the site that shows it is adequate for the proposed use. The required lot size for a duplex unit within the Class B district is 17,600 SF with a lot width of 110 feet. The proposal depicts lot sizes in compliance with the minimum requirements.

(8) Access to facilities is adequate for the estimated vehicular and pedestrian traffic generated by the proposed use on public streets and sidewalks, so as to assure public safety and to avoid traffic congestion.

The property is served by an existing access to Macedon Center Road (NYS Route 31F). The existing highway network can serve the additional two-lot subdivision.

(9) Adequate parking and internal vehicular and pedestrian traffic circulation can be accommodated on the property in compliance with other sections of the Code, taking into account adequate buffering and landscaping.

The internal traffic circulation will be provided by a common access drive to serve the proposed three lots. The proposed access is in compliance with the Town of Perinton code.

(10) Adequate facilities exist or can be integrated into the site development to property deal with stormwater runoff, sanitary sewers, fire protection, electrical power needs, refuse or other waste that may be generated, odors, noise or lights which may go beyond property boundaries.

Adequate utility service exists to serve the proposed expansion. Water, sanitary sewer, gas, and electric supply will be provided from the existing utilities serving the site. The stormwater runoff will be managed on-site through the implementation of a stormwater management plan.

(11) The natural characteristics of the site are such that the proposed use may be introduced on the property without undue disturbance or disruption of important natural features, systems, or processes and without negative impact to groundwater and surface waters on and off the site.

The site plan has been prepared to avoid encroachment into or disturbance of the creek and the associated Town LDD to the greatest extent practicable. There are no mapped NYSDEC or USCOE wetlands on the site.

Groundwater and surface waters will be protected through the implementation of a stormwater management plan. This plan will be designed per local and NYSDEC stormwater design regulations and will treat run-off for water quality and attenuate the peak discharge rate for the post-development condition.

(12) The proposed use can and will comply with all provisions of this chapter and of the Code which are applicable to it and can meet every other applicable federal, state, county and local law, ordinance, rule, or regulation.

The proposal use is in compliance with the provisions of the Town of Perinton Code and can meet all other applicable regulations. The property will be developed per the Town of Perinton's Design and Construction Standards and the NYS Building and Fire Code. The project will also comply with all state and federal regulations concerning the stream corridor.

Upon review of the above information, it is our belief the proposal meets the standard established for a Special Use Permit for the proposed duplex residential use within a Residential B zone.

We request the Town Board to declare themselves lead agency for the purposes of conducting the NY State Environmental Quality Review (SEQR). Pursuant to 6NYCRR 617.4 and 617.5, we believe the proposed action is an Unlisted Action. We have prepared the short-form Environmental Assessment Form Part 1 as required by SEQRA.

To assist the Town in their review pursuant to SEQRA, we also provide an Engineer's Narrative to provide technical information in support of the EAF and site plan package. Also, at the request of the Town of Perinton, we have prepared and submitted a draft of the EAF parts 2 & 3 for your use.

Upon receipt and review of this application, we request the Town Board accepts this application and set a public hearing date for review of this proposal.

Upon completion of the public hearing, we would look to the Town Board to refer this application to the Conservation Board and Planning Board for review at their respective September meetings and provide a recommendation back to the Town Board to grant the Special Use Permit for the duplex residential use on the property.

If you require any additional information concerning this application, please contact our office.

Sincerely, BME Associates

R. Spencer

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ARS:blr

Encl.

c: Debbie Kanner; Seal Two Partners, LLC



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Sincerely, BME ASSOCIATES

Andrew R. Spence

ARS:blr

Encl.

c: Debbie Kanner; Seal Two Partners, LLC



TOWN OF PERINTON

1350 TURK HILL ROAD. FAIRPORT, NEW YORK 14450-8796 (585) 223-0770, Fax: (585) 223-3629, <u>www.perinton.org</u>

NUMBER _____FEE \$_____(verify fee with staff)

MEETING DATE_____

APPLICATION FORM - SPECIAL USE PERMIT - Town Board

See attached instructions/requirements

1. APPLICANT Name Debbie Kanner (Seal Two Partners LLC) Phone Street& Number ¹ Emerald Hill Circle City Fairport, New York Zip ¹⁴⁴⁵⁰ Interest in Property: X Owner Lessee Other **OWNER** (if other than applicant) 2. Name_____Phone_____ Street& Number_____City____Zip____ 3. **ATTORNEY** (If represented) Name_____Phone_____ Street& Number_____City____Zip____ 4. INTEREST: Does any officer or employee of the State of New York, County of Monroe, or Town of Perinton have any interest in the owner/applicant or the subject property? Yes____No X Explain INTEREST If yes, who? Name Address 5. LOCATION: Street Address or Legal Description (subdivision and lot number) 550 Macedon Center Road Fairport, New York 14450 SIZE OF PARCEL: 2.64 acres 6.

7. PRESENT USE OF PROPERTY: Two-family residential

8. ZONING DISTRICT: Res CLass B TAX ACCOUNT# 159.19-1-34

9. Describe specifically the nature of your request Request a Special Permit to allow two-family resdidential use within the Residential Class B district as allowed per

Section 208-54.

10. Describe the location, use and size of structures and other land use within 100 feet of the boundaries of the subject property The proposal includes the subdivivision of the 2.64 acre parcel into a total of three lots conforming to the Res Class B distrcit requirements. The proposed two-unit residential structures will be placed on the site and will be in character with the surrounding residential uses. Other uses in the area include both single family and two-unit reidential buildings.

11. The criteria used by the Town Board of the Town of Perinton are set forth in Section 208-54 of the Zoning Law. Special Use Permits can only be granted where the proposed is already a permitted use, but requires Town Board approval. That approval can only be given when the applicant offers proof that his proposed use will not violate any of the following factors:

A. You must show that your proposal will be in harmony with the general purpose and intent of the Zoning Ordinance of the Town of Perinton, considering the location, magnitude of the use, the nature and intensity of the operations involved in or conducted in connection with it, and the size of the subject property with respect to the streets giving access to the subject property.

Will your proposed use be detrimental to the neighborhood due to Location? No_X_Yes_____ The nature or magnitude of use? No_X_Yes_____ Inadequate access to property? No_X_Yes_____

If yes to any of above, explain how it will be detrimental. If effect can be lessened in some manner, explain how:

D. This your proposed use tend to depr	reciate adjacent property or alter or be detrimental to the
character of the neighborhood? No X Yes	·
If yes, explain how it will be detrimental. If effe	ect can be lessened in some manner, explain how:
C. Will your proposed use create a hazar significantly alter the flow of traffic? No \times	rd to health, or the general welfare of the neighborhood o Yes
If yes, explain how. If effect can be lessened in s	some manner, explain how.
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I certify that the information supplied on this project described, if approved, will be comple	application is complete and accurate, and that the ted and the premises used as stipulated in this request
I certify that the information supplied on this project described, if approved, will be complet Signature of Applicant:	application is complete and accurate, and that the ted and the premises used as stipulated in this request Date 9-3-24
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3/21/19

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550 MACEDON CENTER ROAD

TOWN OF PERINTON, MONROE COUNTY, NEW YORK STATE

PREPARED FOR: SEAL TWO PARTNERS, LLC PO BOX 1260 FAIRPORT, NY 14450

FINAL - SECTION 1 SUBDIVISION PLANS 550 MACEDON CENTER ROAD

. No.	TITLE
01	COVER SHEET
02	SUBDIVISION PLAT
03	SITE PLAN
04	EXISTING CONDITIONS & DEMOLITION PLAN
05	UTILITY PLAN
06	GRADING & CONSTRUCTION EROSION CONTROL PLAN
07	NOTE AND PROFILE SHEET
08	DETAIL SHEET 01
09	DETAIL SHEET 02

SCALE: 1"=30' DRAWING NUMBER: 2951-01 DATE ISSUED: SEPTEMBER 4, 2024 LAST REVISED: NA **BME** ASSOCIATES

ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECT 10 LIFT BRIDGE LANE EAST

WWW.BMEPC.COM

PHONE 585-377-7360 FAIRPORT, NEW YORK 14450 FAX 585-377-7309

THIS MAP AND THE INFORMATION SHOWN HEREON IS NOT TO BE USED WITH AN "AFFIDAVIT OF NO CHANGE." BME ASSOCIATES ASSUMES NO LIABILITY TO THE PARTIES NOTED HEREON OR TO ANY FUTURE OWNER, TITLE COMPANY, OVERNMENTAL AGENCY, ATTORNEY OR LENDING INSTITUTION IN THE EVENT THAT THIS MAP IS USED WITH AN 'AFFIDAVIT OF NO CHANGE," OR SIMILAR INSTRUMENT. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S ORIGINAL INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

"UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY MAP IS A VIOLATION OF SECTION 7209, OF THE NEW YORK STATE EDUCATION LAW."

<u>LEGEND</u>



TWO PROPOSED DUPLEX UNITS AND ONE EXISTING DUPLEX=6 UNITS TOTAL

BOUNDARY LINE CENTERLINE CREEK PROPOSED LOT LINE ADJOINER/RIGHT-OF-WAY LINE CENTERLINE ROADWAY PROPOSED EASEMENT LINE EXISTING EASEMENT LINE PROPERTY MARKER FOUND



CENTERLINE ROADWAY

FMC 14-24

EXISTING FRAME

HOUSE

ROBERT J. & LYNN C. LITTLE

6 CAMDEN COURT

T.A. No. 153.19-01-33

M.C.C.O. L. 193 OF M., P. 53

LOT 291

REFERENCES:

28. 2008.

SUBDIVISION NOTES:

1. EXISTING ZONING: RESIDENTIAL CLASS B DISTRICT

50 FT

12 FT

15 FT

MINIMUM BUILDING SIZE: 1800 SQ FT (ONE STORY)

RIGHT-OF-WAY MONUMENTS IN THE AREA OF CONSTRUCTION.

17,600 SQ FT

1100 SQ FT (TWO STORY)

TOWN OF PERINTON AND THE APPROPRIATE AGENCIES UNLESS OTHERWISE NOTED.

INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEODETIC SURVEY MONUMENTS.

1300 SQ FT (ONE AND ONE HALF STORY)

5. THE SETBACK LINES AND NOTES RELATING TO SETBACKS SHOWN HEREON ARE INTENDED TO SHOW APPLICABLE

ZONING REQUIREMENTS OF THE TOWN OF PERINTON FOR THE TOWN ZONING DISTRICT REQUIREMENTS AS OF THE

6. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE

8. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED TO LOCAL LAW No. 6 OF 1971 REGARDING LIABILITY

100-YEAR FLOODPLAIN AND IS DESIGNATED ZONE X IN FEMA FLOODPLAIN PANEL 0342G, EFFECTIVE DATE AUGUST

9. A REVIEW OF THE FEMA MAPS INDICATES THAT NO PORTION OF THIS PROPERTY WAS RECOGNIZED TO BE IN A

10. NO MAPPED FEDERAL OR STATE WETLANDS OR ASSOCIATED BUFFERS EXIST WITHIN THE PROPERTY LIMITS.

7. CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD, AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND

DATE OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING

2. TOTAL PROJECT AREA: ±2.64 ACRES

4. APPLICABLE ZONING REQUIREMENTS:

FRONT BUILDING SETBACK:

SIDE BUILDING SETBACK:

REAR BUILDING SETBACK:

MINIMUM LOT AREA:

REQUIREMENTS.

3. PROPOSED USE: TWO-FAMILY DWELLING

- 1. A PLAN ENTITLED "SECTION 1A, WHITNEY COUNTRY, FINAL SUBDIVISION PLAN," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 183 OF MAPS, PAGE 47.
- 2. A PLAN ENTITLED "SECTION 3, WHITNEY COUNTRY SUBDIVISION," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 188 OF MAPS, PAGE 51.
- 3. A PLAN ENTITLED "WHITNEY COUNTRY SUBDIVISION, SECTION 4," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 193 OF MAPS, PAGE 53.
- 4. AN ABSTRACT OF TITLE WAS NOT PROVIDED FOR THE COMPLETION OF THIS SURVEY.

SURVEY NOTES:

- 1. THE PROJECT BOUNDARY SURVEY WAS MADE USING PROCEDURES NECESSARY TO ACHIEVE A HORIZONTAL ACCURACY OF 1 PART IN 20,000 (1:20,000) OR BETTER PROPORTIONAL ACCURACY AND A NETWORK POSITIONAL ACCURACY AT 95% CONFIDENCE LEVEL NOT EXCEEDING 0.05
- 2. THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM OF 1983, WESTERN ZONE, TRANSVERSE MERCATOR PROJECTION, NAD 27.





NOT APPROVED This plan has not received final approval of all reviewing agencies. This plan is subject to revisions until all approvals are obtained and should not be used for construction purposes.

FIRE CHIEF

CHAIRMAN OF THE PLANNING BOARD



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Base.c	1.	EXISTING ZONING: RESIDENTIAL CLASS B DISTRICT		\	\backslash
ayout	2.	TOTAL PROJECT AREA: ±2.64 ACRES			
2951 L	3.	PROPOSED USE: TWO-FAMILY DWELLING TWO PROPOSED DUPLEX UNITS AND ONE	EXISTING DUPLEX=6 UNITS TOTAL		\backslash
Final \;	4.	APPLICABLE ZONING REQUIREMENTS:			\backslash
awings/		FRONT BUILDING SETBACK: 50 FT SIDE BUILDING SETBACK: 12 FT BEAD BUILDING SETBACK: 15 FT			
951\Dr		MINIMUM LOT AREA: 17,600 SQ FT			
P: \29		MINIMUM BUILDING SIZE: 1800 SQ FT (ONE STORY) 1300 SQ FT (ONE AND ONE HALF	STORY)		
	-	1100 SQ FT (TWO STORY)			
	э. 6.	THE SETBACK LINES AND NOTES RELATING TO SETBACKS SH	OWN HEREON ARE INTENDED TO SHOW APPLICABLE		
		ZONING REQUIREMENTS OF THE TOWN OF PERINTON FOR THE DATE OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY	TOWN ZONING DISTRICT REQUIREMENTS AS OF THE ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING		
	7.	ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MO	ST RECENT STANDARDS AND SPECIFICATIONS OF THE		0
	•	TOWN OF PERINTON AND THE APPROPRIATE AGENCIES UNLES	S OTHERWISE NOTED.		
	8.	RIGHT-OF-WAY MONUMENTS IN THE AREA OF CONSTRUCTION	RVE ALL SURVET CONTROL MONUMENTS AND		
	9.	THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTE INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEO	D TO LOCAL LAW No. 6 OF 1971 REGARDING LIABILITY DETIC SURVEY MONUMENTS.		
	10.	A REVIEW OF THE FEMA MAPS INDICATES THAT NO PORTION 100-YEAR FLOODPLAIN AND IS DESIGNATED ZONE X IN FEMA	OF THIS PROPERTY WAS RECOGNIZED TO BE IN A		
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	11. 12.	NO MAPPED FEDERAL OR STATE WEILANDS OR ASSOCIATED THE LDD LIMITS ARE THOSE OF THE TOWN OF PERINTON.	BUFFERS EXIST WITHIN THE PROPERTY LIMITS.		
	12.				
					N /F
					ROBERT J. & LYNI 6 CAMDEN C
					T.A. No. 153.19 M.C.C.O. L. 193 OF
					LUI 29
				FND RR SPIKE 0.2' W	
					DRIVEWAY (SEE
					N/F DINA MCGU
					5 CAMDEN C T.A. No. 153.19
					M.C.C.O. L. 193 0 LOT 292
					20' EASEMEN MCW
					DEEDS PA
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				45 MPH d	
					CENTERLINE ROADWA
		LEGEND			
			BOUNDARY LINE PROPOSED LOT LINE		
.			CENTERLINE		
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			PROPOSED EASEMENT LINE		
		0 A	PROPERTY MARKER FOUND		
		•	WOOD FENCE POST FOUND		
·			LLD LINE		

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	GRAP	HIC	SCALE		
30	0	15	30	60 I	
(IN FEET) 1 inch = 30 ft.					

DEMOLITION NOTES:



2. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR UTILITY COMPANY RECORDS PLANS. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1-800-962-7962 FOR STAKE-OUT OF EXISTING UTILITIES.

3. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY COMPANY RECORD PLANS. EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA MAY NOT BE SHOWN ON THE DRAWINGS. IF UNKNOWN UTILITIES ARE ENCOUNTERED IT SHALL BE COORDINATED WITH THE ENGINEER AND OWNER.

4. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS TO LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET THE EXISTING CONDITIONS.

- 5. THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811 FOR STAKE-OUT OF EXISTING UTILITIES.
- 6. THE CONTRACTOR SHALL SAWCUT TO FULL DEPTH FOR REMOVAL OF EXISTING SIDEWALK, CURBING AND PAVEMENT AS DELINEATED ON THIS PLAN AND AS NECESSARY FOR CONSTRUCTION.
- 7. WHERE NEW PAVEMENT, CURBING OR SIDEWALK MEETS WITH EXISTING, THE CONTRACTOR SHALL MAKE FULL DEPTH SAWCUTS TO CREATE A SMOOTH EDGE AND MEET SURFACES FLUSH. WHERE NEW PAVEMENT MEETS EXISTING, THE EXISTING PAVEMENT SHALL BE TREATED WITH TAC COAT PER MANUFACTURES RECOMMENDATION.
- 8. ALL MATERIALS REMOVED FROM THE PROJECT SHALL BE DISPOSED OF ACCORDING TO NEW YORK STATE AND TOWN OF PERINTON REQUIREMENTS UNLESS OTHERWISE NOTED.



<u>LEGEND</u>



BOUNDARY LINE EXISTING WATERMAIN, HYDRANT, AND VALVE EXISTING STORM SEWER, MANHOLE, AND INLET EXISTING SANITARY SEWER AND MANHOLE EXISTING TREE LINE PROPERTY MARKER FOUND EXISTING CONTOUR W/ ELEVATION

EXISTING SPOT ELEVATION EXISTING GAS MAIN

EXISTING UNDERGROUND ELECTRIC/CONDUIT

LDD LINE EXISTING STRUCTURE, FULL DEPTH ASPHALT/CONCRETE PAVEMENT, AND CONCRETE

CURBING TO BE REMOVED AS SHOWN LIMITS OF EXISTING UNDERGROUND UTILITY TO BE REMOVED AS SHOWN

EXISTING TREE/BUSH TO BE REMOVED

	GRA	PHIC	: SC	ALE	
30	0	15	5 3	0	6
(IN FEET) 1 inch = 30 ft.					

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Ţ	ITILITY NOTES:			\backslash
1	THE SETBACK LINES AND NOTES RELATING TO SETBACK SHOW REQUIREMENTS (AND APPROVALS UNDER SECTION 278 OF TOW OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITION REQUIREMENTS	N HEREON ARE INTENDED TO SHOW APPLICABLE ZONING IN LAW) OF THE TOWN OF PERINTON AS OF THE DATE DNAL RESTRICTIONS OTHER THAN SAID ZONING		
2	. BUILDINGS SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTA	TIONS ONLY.		
3	. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST TOWN OF PERINTON, THE APPROPRIATE AGENCIES (IE, MONROE HEALTH DEPARTMENT) UNLESS OTHERWISE NOTED.	T RECENT STANDARDS AND SPECIFICATIONS OF THE COUNTY WATER AUTHORITY, AND THE MONROE COUNTY		СВ
4	. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD, AND PR RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION. MONUMENTS, CALL THE MONROE COUNTY GEODETIC SURVEY OF	ESERVE ALL SURVEY CONTROL MONUMENTS AND . FOR DESCRIPTIVE AND SURVEY DATA ON THE CONTROL .FICE.		TR=483.56 INV=477.64
5	. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEOD	TO LOCAL LAW NO. 6 OF 1971 REGARDING LIABILITY ETIC SURVEY MONUMENTS.		
6	. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTE COMPANY RECORD PLANS. EXISTING UTILITIES WHETHER FUNCTI NOT BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL (FOR STAKE-OUT OF EXISTING UTILITIES.	ED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY ONAL OR ABANDONED WITHIN THE PROJECT AREA MAY CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811		SAN MH TR=484.98 INV=472.97
7	. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLO UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCT EXISTING CONDITIONS.	EVATION OF UNDERGROUND UTILITIES BEFORE DRATION EXCAVATIONS TO LOCATE EXISTING ION TO PERMIT REVISIONS AS REQUIRED TO MEET		0-
8	. HIGHWAY DRAINAGE ALONG MACEDON CENTER ROAD IS TO BE	MAINTAINED.		
M	ATERMAIN:			
9	. WATERMAINS AND APPURTENANCES TO BE CONSTRUCTED TO T THE (WATER AUTHORITY). (SEE MCWA PUBLIC WATER SYSTEM I	HE MOST RECENT STANDARDS AND SPECIFICATIONS OF NOTES).		PROPOSED WATER SEF
1	0. ALL WATERMAINS SHALL HAVE A MINIMUM OF FIVE FEET OF CO MINIMUM OF SIX FEET OF COVER FROM FINISHED GRADE IN PA STAKES BEFORE TRENCHING TO INSURE THAT ALL INSTALLED V	OVER FROM FINISHED GRADE IN LAWN AREAS AND A VED AREAS. THE CONTRACTOR SHALL CHECK ALL CUT WATERMAINS WILL HAVE THE REQUIRED COVER.		
1	1. MINIMUM SEPARATION BETWEEN WATER SERVICES AND SEWER N OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM STORM/SANITARY SEWER MAINS TO BE 10 FEET MEASURED FR WATERMAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SEWER AS POSSIBLE. WHERE A WATERMAIN CROSSES UNDER SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PRE ON AND BREAKING THE WATERMAINS.	WAINS TO BE 18" VERTICALLY MEASURED FROM THE I HORIZONTAL SEPARATION BETWEEN WATERMAINS AND OM THE OUTSIDE OF THE PIPES. ONE FULL LENGTH OF SO THAT BOTH JOINTS WILL BE AS FAR FROM THE A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED EVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING		
S	ANITARY SEWER:			N/F
1	2. ALL SANITARY LATERALS ARE IN COMPLIANCE WITH THE SPECI PERINTON.	FICATIONS AND SEWER POLICY OF THE TOWN OF		ROBERT J. & LYN 6 CAMDEN T.A. No. 153.1 M.C.C.O. L. 193 (
1	3. SANITARY SEWERS, HOUSE LATERALS AND APPURTENANCES SH PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIO	IALL BE CONSTRUCTED ACCORDING TO THE TOWN OF NS FOR LAND DEVELOPMENT.		LOT 2
1	4. SANITARY LATERAL PIPE SHALL BE 4" PVC SDR-21 OR AS NO	TED ON THE PLAN.		WATER
1	 FLOOR DRAINS TO BE CONNECTED TO THE SANITARY LATERAL. FOOTER DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GI MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND, 	FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF ROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER /OR THE MONROE COUNTY SEWER USE LAW.		
1	 NEW SEWERS ARE TO BE PLUGGED WHEN CONNECTED TO EXIS TESTED, AND READY FOR SERVICE. 	TING MANHOLES UNTIL THE NEW SEWERS ARE FLUSHED,		
S	TORM SEWER:			
1	7. STORM SEWERS, HOUSE LATERALS AND APPURTENANCES SHAL PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIO	L BE CONSTRUCTED ACCORDING TO THE TOWN OF INS FOR LAND DEVELOPMENT.	CB <u>TC=</u> 484.00 □ INV=479.45	EDGE PAVEMENT
1	B. STORM SEWER PIPE SHALL BE HIGH-DENSITY POLYETHYLENE (I	HDPE) SMOOTH INTERIOR, OR AS NOTED ON THE PLAN.		
1 2	 CHECK VALVES TO BE PROVIDED ON SUMP PUMPS. DOWNSPOUTS SHALL DISCHARGE ON SPLASH BLOCKS OR CONN IDENTIFIED ON THE UTILITY PLAN. FOUNDATION DRAINS SHALL 	IECT TO THE PROPOSED STORM SEWER SYSTEM AS DISCHARGE ON SPLASH BLOCKS VIA SUMP PUMPS	M	
L	ATERALS AND SERVICES:			
2	1. ALL LATERALS OR SERVICES SHALL BE AS NOTED BELOW UNLE	ESS OTHERWISE NOTED ON THE PLANS:		
	WATER – 1.5" INCH TYPE K COPPER FROM THE WATERMAI 1.5" INCH PE #4710 FROM THE CURB BOX TO TI SANITARY – 4" PVC SDR-21 INSTALLED AT 2.00% MIN SLOPE	n to the curb box He meter (unless noted otherwise) 		N/F
2	2. NO CURB VALVE BOXES (WATER LATERAL) ARE ALLOWED IN DI	 RIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE		DINA MCC 5 CAMDEN TA NO 1531
2	RELOCATED IF THIS CONFLICT ARISES.	e provided with a meter pit and a meter at the		M.C.C.O. L. 193 (LOT 29
2	RIGHT-OF-WAY.	YOOD EXTENDED 2-3' ABOVE CRADE AND PAINTED		
2	GREEN.	NOU, EXTENDED 2-3 ADOVE GIVADE AND FAINTED		
2	5. ANY LAUNDRY WASTEWATER SHALL BE DIRECTED TO THE SANI	TARY SEWER.		
2	THE LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL BE INSTALLED AT AL THE LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL B AT ALL BENDS 45° OR GREATER. AND AT 90 FOOT INTERVALS	E INSTALLED AT THE RIGHT-OF-WAY OR EASEMENT LINE, THEREAFTER.		CONTRACTOR
				1.5" WATER S PROPOSED ME
				WITH MCWA A
				PROPO
			M G	
			/	⁹ FMC 14-24
			□ PR(∮ SEF	oposed 1.5" type "k" copp Rvice from watermain to 1
			RIG	HT-OF-WAY. 1.5" TAP BY M SET FEE TO THE OWNER (TYP
	LEGEND			CENTERLINE ROADW
		BOUNDARY LINE		
-		PROPOSED LOT LINE		
-		CENTERLINE		
-		EXISTING EASEMENT LINE PROPOSED EASEMENT LINF		

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BOUNDARY LINE PROPOSED LOT LINE CENTERLINE EXISTING EASEMENT LINE PROPOSED EASEMENT LINE PROPOSED EASEMENT LINE PROPORTY MARKER FOUND EXISTING WATERMAIN, HYDRANT, AND VALVE PROPOSED WATERMAIN, HYDRANT, AND VALVE EXISTING STORM SEWER, MANHOLE, AND INLET PROPOSED STORM SEWER, MANHOLE, AND INLET EXISTING SANITARY SEWER AND MANHOLE PROPOSED SANITARY SEWER AND MANHOLE LDD LINE





n	UTILITY NOTES:	SANITARY SEWER:
Ū.	1. THE SETBACK LINES AND NOTES RELATING TO SETBACK SHOWN HEREON ARE INTENDED TO SHOW APPLICABLE ZONING REQUIREMENTS (AND APPROVALS UNDER SECTION 278 OF TOWN LAW) OF THE TOWN OF PERINTON AS OF THE DATE THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING REQUIREMEN	 ALL SANITARY LATERALS ARE IN COMPLIANCE WITH THE SPECIFICATIONS AND SEWER POLICY OF THE TOWN OF PARTY OF SANITARY SEWERS, HOUSE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN (PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT.
	2. BUILDINGS SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTATIONS ONLY.	14. SANITARY LATERAL PIPE SHALL BE 4" PVC SDR-21 OR AS NOTED ON THE PLAN.
-	5. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE TOMOF PERINTON, THE APPROPRIATE AGENCIES (IE, MONROE COUNTY WATER AUTHORITY, AND THE MONROE COUNTY HEAL DEPARTMENT) UNLESS OTHERWISE NOTED. 4. THE CONTRACTOR SHALL LOCATE MARK SAFECHARD, AND DEESERVE ALL SUBVEY CONTROL MONIMUMENTS AND	WN LTH 15. FLOOR DRAINS TO BE CONNECTED TO THE SANITARY LATERAL. FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER M COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.
	4. THE CUNTRACTOR SHALL LUCATE, MARK, SAFEGUARD, AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION. FOR DESCRIPTIVE AND SURVEY DATA ON THE CONTRO MONUMENTS, CALL THE MONROE COUNTY GEODETIC SURVEY OFFICE.	16. NEW SEWERS ARE TO BE PLUGGED WHEN CONNECTED TO EXISTING MANHOLES UNTIL THE NEW SEWERS ARE FLUS TESTED, AND READY FOR SERVICE.
	5. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED TO LOCAL LAW NO. 6 OF 1971 REGARDING LIABILITY INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEODETIC SURVEY MONUMENTS.	STORM SEWER:
	6. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY COMPANY RECORD PLANS. EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA MAY BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811 FOR STAKE-OUT OF EXISTING UTILITIES	 17. STORM SEWERS, HOUSE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN OF PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT. 18. STORM SEWER PIPE SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) SMOOTH INTERIOR. OR AS NOTED ON THE P
	7. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCI	ING 19. CHECK VALVES TO BE PROVIDED ON SUMP PUMPS.
	SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET EXISTING CONDITIONS. 8. HIGHWAY DRAINAGE ALONG MACEDON CENTER ROAD IS TO BE MAINTAINED.	20. DOWNSPOUTS SHALL DISCHARGE ON SPLASH BLOCKS OR CONNECT TO THE PROPOSED STORM SEWER SYSTEM AS IDENTIFIED ON THE UTILITY PLAN. FOUNDATION DRAINS SHALL DISCHARGE ON SPLASH BLOCKS VIA SUMP PUMPS LATERALS AND SERVICES:
	WATERMAIN:	21. ALL LATERALS OR SERVICES SHALL BE AS NOTED BELOW UNLESS OTHERWISE NOTED ON THE PLANS:
	 WATERMAINS AND APPURTENANCES TO BE CONSTRUCTED TO THE MOST RECENT STANDARDS AND SPECIFICATIONS OF (WATER AUTHORITY). (SEE MCWA PUBLIC WATER SYSTEM NOTES). ALL WATERMAINS SHALL HAVE A MINIMUM OF FIVE FEET OF COVER FROM FINISHED GRADE IN LAWN AREAS AND A AUTHORITY OF AVER AVERAGE AND A AUTHORITY AND AVERAGE AND A AUTHORITY. 	THEWATER -1.5" INCH TYPE K COPPER FROM THE WATERMAIN TO THE CURB BOX 1.5" INCH PE #4710 FROM THE CURB BOX TO THE METER (UNLESS NOTED OTHERWISE)SANITARY -4" PVC SDR-21 INSTALLED AT 2.00% MIN SLOPE. 6" PVC SDR-35 INSTALLED AT 1.00% MIN SLOPE.
	MINIMUM OF SIX FEET OF COVER FROM FINISHED GRADE IN PAVED AREAS. THE CONTRACTOR SHALL CHECK ALL CUT STAKES BEFORE TRENCHING TO INSURE THAT ALL INSTALLED WATERMAINS WILL HAVE THE REQUIRED COVER.	22. NO CURB VALVE BOXES (WATER LATERAL) ARE ALLOWED IN DRIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE RE IF THIS CONFLICT ARISES.
	OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAINS AND STORM/SANITARY SEWER MAINS TO BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED LINDER OF OVER THE SEWER SO THAT ROTH JOINTS WILL DE AS EAD EDON THE SEWER SO THAT SEW	23. ANY LOTS WITH WATER SERVICE LONGER THAN 250 LF WILL BE PROVIDED WITH A METER PIT AND A METER AT 1 F RIGHT-OF-WAY. WFR
	AS POSSIBLE. WHERE A WATERMAIN CROSSES UNDER A SEWER SU THAT BUTH JUINTS WILL BE AS FAR FROM THE SEV SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING	ON 25. ANY LAUNDRY WASTEWATER SHALL BE DIRECTED TO THE SANUTARY SEWED
	AND BREAKING THE WATERMAINS.	25. ANT LAUNURT WASTEWATER SHALL BE DIRECTED TO THE SANITARY SEWER. 26. CLEANOUTS FOR STORM LATERALS SHALL BE INSTALLED AT ALL HORIZONTAL BENDS AND AT 90' INTERVALS ALC
		LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL BE INSTALLED AT THE RIGHT-OF-WAY OR EASEMENT LIN ALL BENDS 45° OR GREATER, AND AT 90 FOOT INTERVALS THEREAFTER.
	CONSTRUCTION EROSION CONTROL NOTES.	
! 1	. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONSISTS OF THE STORMWATER MANAGEMENT 17. DI	ISTURBED AREAS SHALL BE STABILIZED USING PERMANENT LAWN SEEDING MIX UPON COMPLETION OF
	REPORT, THE PROJECT PLANS, INCLUDING THE GRADING, CONSTRUCTION EROSION CONTROL PLAN AND DETAIL SHEET, AND THE TOWN OF PERINTON DESIGN CRITERIA AND CONSTRUCTION SPECIFICATION FOR LAND DEVELOPMENT. THE SWPPP FOR THIS PROJECT IS INTENDED TO CONFORM WITH THE NYSDEC GENERAL PERMIT GP-0-20-001 AND THE REQUIREMENTS OF LOCAL AND NYSDEC AUTHORITIES REGARDING THE CONTROL OF STORMWATER QUANTITY AND QUALITY.	RADING AND CONSTRUCTION: <u>LBS/ACRE % BY PURITY % GERM</u> PERENNIAL RYE GRASS 35 85 85 RED FESCUE 35 97 80
:	2. THE OWNER IS RESPONSIBLE FOR IMPLEMENTING THE REQUIRED SWPPP. THE OWNER'S CONTRACTOR, SUB-CONTRACTOR AND ALL OTHERS ASSOCIATED WITH THE IMPLEMENTATION OF THE PLAN SHALL BE FAMILIAR WITH THE PLAN AND THE CONDITIONS OF THE NYSDEC GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES	KENTUCKY BLUEGRASS 30 85 80 SEEDING RATE: 6.0 LBS PER 1,000 SQ FT. MULCH: STRAW OR WOOD FIBER MULCH USED WITH HYDROSEEDING METHOD, AT TWO TONS PER ACRE WITH TACKIFIER
	3. ANY MODIFICATIONS OR DEVIATIONS FROM THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT FACILITIES, SHALL BE DOCUMENTED IN THE INSPECTION REPORT AND 18. SL CONSIDERED PART OF THE SWPPP FOR THE PROJECT.	STARTING FERTILIZER: 5–10–10 AT 20 LBS PER 1,000 SQ. FT LOPES 3:1 OR GREATER SHALL BE SEEDED WITH HEAVY MULCH AND MAY REQUIRE ADDITIONAL TABILIZATION MEASURES. SLOPES SHALL BE FINE GRADED WITH A MINIMUM OF 6" TOPSOIL AND
	4. THE OWNER IS RESPONSIBLE FOR FILING THE NOTICE OF INTENT (NOI) FOR CONSTRUCTION ACTIVITY WITH NYSDEC PRIOR TO COMMENCING ANY CONSTRUCTION. A COPY OF THE NOI SHALL BE KEPT ON-SITE AND PROVIDED TO THE MUNICIPALITY.	EEDED WITH FOLLOWING SEED MIX: NATIVE STEEP SLOPE MIX WITH ANNUAL RYE GRASS — ERNMX—181
!	5. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ON SITE INSPECTIONS BY A LICENSED PROFESSIONAL REGARDING EROSION CONTROL DURING CONSTRUCTION. INSPECTIONS ARE TO BE PROVIDED AT A MINIMUM OF TWICE A WEEK FOR DISTURBANCES OF 5 ACRES AND GREATER AND ONCF	29.0% Andropogon gerardii BIG BLUESTEM, 'SOUTHLOW'-MI ECOTYPE 20.0% Lolium multiflorum ANNUAL RYEGRASS 15.0% Sorghastrum nutans INDIANGRASS
1	A WEEK FOR DISTURBANCES LESS THAN 5 ACRES. AN INSPECTION REPORT LOG AND THE SWPPP ARE TO BE KEPT ON-SITE BY THE OWNER. 5. FOR SITES WHERE SOIL DISTURBANCE ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED (F.G. WINTER	13.4% Liymus virginicus VIRGINIA WILDRYE, MADISON-NY ECOTYPE 6.60% Elymus canadensis CANADA WILDRYE 4.80% Panicum virgatum 'Shawnee' SWITCHGRASS, 'SHAWNEE'' 4.00% Agrostis perennans AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE
	SHUTDOWN) AND TEMPORARY STABILIZATION MEASURES HAVE BEEN APPLIED TO ALL DISTURBED AREAS, THE OWNER/OPERATOR MAY REDUCE THE SELF-INSPECTION FREQUENCY, BUT SHALL MAINTAIN A MINIMUM OF MONTHLY INSPECTIONS. (30 CALENDAR DAYS)	2.80%Panicum clandestinumDEERTONGUE, TIOGA1.00%Rudbeckia hirtaBLACKEYED SUSAN0.70%Coreopsis lanceolataLANCELEAF COREOPSIS0.70%Echinacea purpureaPURPLE CONEFLOWER
-	7. THE OWNER'S CONTRACTOR/REPRESENTATIVE SHALL IDENTIFY AT LEAST ONE INDIVIDUAL TO BE TRAINED FROM THEIR COMPANY THAT WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP. THE INDIVIDUAL MUST RECEIVE (4) HOURS OF NYSDEC TRAINING EVERY (3) YEARS. THE OWNER/OPERATOR	0.70%Heliopsis helianthoidesOXEYE SUNFLOWER, PA ECOTYPE0.60%Chamaecrista fasciculataPARTRIDGE PEA, PA ECOTYPE0.20%Aster pilosusHEATH ASTER, PA ECOTYPE0.20%Monorada fistulosaWILD BERGAMONT
	SHALL ENSURE THAT AT LEAST ONE OF THE TRAINED INDIVIDUALS IS ON SITE ON A DAILY BASIS WHEN SOIL DISTURBANCE ACTIVITIES ARE BEING PERFORMED.	0.10% Apocynum cannabinum INDIANHEMP, PA ECOTYPE 0.10% Asclepias syriaca COMMON MILKWEED 0.10% Soldiago rugosa WRINKLELEAF GOLDENROD, PA ECOTYPE
ł	5. FOR DISTURBANCES OF 5 ACRES AND GREATER, IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 7 DAYS. FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED IF THE SEASON DEVENTS THE ESTABLISHMENT OF	SEEDING RATE: 60 LBS PER ACRE OR 1 LB PER 1000 SF INOCULANT: RATE AS RECOMMENDED BY THE MANUFACTURER (FOR HYDROSEEDING USE FOUR
	TEMPORARY GROUNDCOVER, THE DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL. ADDITIONAL TIME FRAMES FOR STABILIZATION ARE SUBJECT TO THE REQUIREMENTS OF A REGULATED TRADITIONAL LAND USE MS4.	IIME'S MANUFACTURER'S RECOMMENDED RATE) MULCH: STRAW OR WOOD FIBER MULCH USED WITH A HYDROSEEDING METHOD, AT TWO TONS PER ACRE WITH TACKIFIER.
9	9. FOR DISTURBANCES LESS THAN 5 ACRES, IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE	_OOD TOLERANT EROSION CONTROL SEED MIX TO BE PROVIDED AS FOLLOWS:
	INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 14 DAYS. FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY GROUNDCOVER, THE DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR EQUIVALENT	PERENNIAL RYE GRASS 20 ANNUAL RYEGRASS 20 RED TOP 20
	MATERIAL. ADDITIONAL TIME FRAMES FOR STABILIZATION ARE SUBJECT TO THE REQUIREMENTS OF A REGULATED TRADITIONAL LAND USE MS4.	MULCH: STRAW OR WOOD FIBER MULCH USED WITH A HYDROSEEDING METHOD AT TWO TONS PER ACRE WITH TACKIFIER.
1	IU. IHE OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT, MAINTENANCE, CLEANING, REPAIR AND REPLACEMENT OF EROSION CONTROL MEASURES DURING SITE CONSTRUCTION. 20. AL 11. INFILTRATION BASIN EXCAVATION SHOLLD BE CARDIED TO MATHIN 2 FEET OF THE FINAL FUEVATION OF BE	LL SEEDED AREAS ARE TO BE MONITORED FOR GERMINATION AND EROSION. ERODED AREAS ARE TO BACKFILLED, FINE GRADED AND RE-SEEDED. AREAS THAT FAIL TO GERMINATE A MINIMUM OF 80%
1	THE BASIN FLOOR. FINAL EXCAVATION TO THE FINISHED GRADE SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS ON THE WATERSHED HAVE BEEN STABILIZED OR PROTECTED. 21. AN	HALL BE RE-SEEDED. NY EXCAVATIONS THAT MUST BE DEWATERED SHALL BE PUMPED INTO AN APPROVED FILTERING ENCE REFORE ENTERING AN ACTIVE DRAINAGE SYSTEM OF DISPERSED TO AN UNDERFIDERED ADDA
1	12. THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED. 22. TH	EVICE DEFORE ENTERING AN ACTIVE DRAINAGE STSTEM OR DISPERSED TO AN UNDISTURBED AREA. HE HOME BUILDER SHALL BE RESPONSIBLE FOR IMPLEMENTING INDIVIDUAL LOT EROSION CONTROL FASTIRES AS SHOWN ON THE PLAN DETAIL FOR INDIVIDUAL HOUSE CONSTRUCTION THE MEASURES
1	 ALL DISTURBED AREAS TO BE RESTORED PER TABLE 5.3 SOIL RESTORATION REQUIREMENTS FOUND IN CHAPTER 5: GREEN INFRASTRUCTURE PRACTICES OF THE NYS STORMWATER MANAGEMENT DESIGN MANUAL. 	RE TO REMAIN IN PLACE UNTIL HOUSE CONSTRUCTION IS COMPLETE AND THE LAWN IS ESTABLISHED. HE OWNER SHALL BE RESPONSIBLE FOR REMOVING EXISTING FROSION CONTROL MEASURES THAT ARE
1	14. ALL DISTURBED AREAS TO BE RECLAIMED WITH A MINIMUM OF 6" TOPSOIL.	DCATED WITHIN ESTABLISHED AREAS. MATERIALS ARE TO BE DISPOSED OF PROPERLY.
1	15. AREAS OR EMBANKMENTS REQUIRING AN EROSION CONTROL BLANKET SHALL UTILIZE ECS-1B (EASTCOAST) OR AN APPROVED EQUIVALENT.	ERMINATION (NOT) WITH NYSDEC PER THE REQUIREMENTS OF THE GENERAL PERMIT GP-0-20-001.
1	16. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE PROVIDED AS FOLLOWS: THE SURFACE TWO INCHES OF SOIL SHOULD BE LOOSENED BY DISKING, RAKING, OR BACK-BLADING	
	WITH A BULLDOZER. IMMEDIATELY FERTILIZE WITH 300 LBS PER ACRE (OR 7 LBS. PER 1000 SQ. FT.) OF 10-10-10 FERTILIZER. IMMEDIATELY SEED WITH THE FOLLOWING MIX:	
	LBS./ACRELBS./1000 SQ. FT.ANNUAL RYEGRASS401PERENNIAL RYEGRASS401OATS401WHITE CLOVER (+ INOCULANT)40.1	
	SEED SHOULD HAVE A GERMINATION RATE OF AT LEAST 85 PERCENT AND MINIMAL INERT MATERIAL.	

COP	rright © 2024	Ł
BME	Associates	

LS ARE IN COMPLIANCE WITH THE SPECIFICATIONS AND SEWER POLICY OF THE TOWN OF PERINTON. USE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN OF RITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT.

CONNECTED TO THE SANITARY LATERAL. FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF FOOTER INTERCEPT UNCONTAMINATED GROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER MUST LUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.

BE PLUGGED WHEN CONNECTED TO EXISTING MANHOLES UNTIL THE NEW SEWERS ARE FLUSHED,

(WATER LATERAL) ARE ALLOWED IN DRIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE RELOCATED

MITNESS STAKES SHALL BE 2"x4" HARDWOOD, EXTENDED 2-3' ABOVE GRADE AND PAINTED GREEN. ATER SHALL BE DIRECTED TO THE SANITARY SEWER.

M LATERALS SHALL BE INSTALLED AT ALL HORIZONTAL BENDS AND AT 90' INTERVALS ALONG THE S FOR SANITARY LATERALS SHALL BE INSTALLED AT THE RICHT-OF-WAY OR EASEMENT LINE, AT EATER, AND AT 90 FOOT INTERVALS THEREAFTER.



SCALE: HOR: 1"=30' VER: 1"=3'

NOT APPROVED

This plan has not received final approval of all reviewing agencies. This plan is subject to revisions until all approvals are obtained and should not be used for construction purposes.









Proposed Building Style

550 Macedon Center Road

Short Environmental Assessment Form Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

550 Macedon Center Road

Project Location (describe, and attach a location map):

550 Macedon Center Road, Perinton NY

Brief Description of Proposed Action:

Proposed subdivision of a 2.64 acre tax parcel (# 159.19-1-34) at 550 Macedon Center Road to create 3 separate lots (Lot 1 = +/- 0.87 acres) (Lot 2 = +/- 0.75 acres) (Lot 3 = +/- 1.02 acres). Lots 2 and 3 are proposed to be developed with new residential duplex units, through a Special Use Permit application.

Name of Applicant or Sponsor:	Telephone:		
Seal Two Partners, LLC (Debbie Kanner)	E-Mail:		
Address:			
PO Box 1260			
City/PO: Fairport	State: NY	Zip Code: 14450	
1. Does the proposed action only involve the legislative adoption of a plan, loca	al law, ordinance,	NO	YES
If Yes, attach a narrative description of the intent of the proposed action and the e may be affected in the municipality and proceed to Part 2. If no, continue to ques	environmental resources th stion 2.	at 🔽	
2. Does the proposed action require a permit, approval or funding from any other If Yes, list agency(s) name and permit or approval: Town of Perinton Planning Board;	er government Agency? MCWA; MCDOH; MCPW	NO	YES
 a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 	2.64 acres 1.29 acres 2.64 acres		
 4. Check all land uses that occur on, are adjoining or near the proposed action: 5. Urban Rural (non-agriculture) Industrial Commerci	al Z Residential (subu	rban)	

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?		\checkmark	
b. Consistent with the adopted comprehensive plan?			
	L	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?			\checkmark
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		NO	YES
If Yes, identify:			
		NO	VES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?			
b. Are public transportation services available at or near the site of the proposed action?			
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?			
9. Does the proposed action meet or exceed the state energy code requirements?		NO	YES
If the proposed action will exceed requirements, describe design features and technologies:			\checkmark
10. Will the proposed action connect to an existing public/private water supply?		NO	YES
If No, describe method for providing potable water:			\checkmark
11. Will the proposed action connect to existing wastewater utilities?		NO	YES
If No, describe method for providing wastewater treatment:			
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district	ct	NO	YES
which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	3		
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		\checkmark	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO	YES
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?			
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:		
Shoreline 🖌 Forest 🗌 Agricultural/grasslands 🔲 Early mid-successional		
🗌 Wetland 🔲 Urban 🖌 Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or	NO	YES
Federal government as threatened or endangered?	\checkmark	
16. Is the project site located in the 100-year flood plan?	NO	YES
	\checkmark	
17 Will the proposed action create storm water discharge, either from point or non-point sources?	NO	YES
If Yes,		\checkmark
a. Will storm water discharges flow to adjacent properties?		\checkmark
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:		\checkmark
Stormwater runoff will flow into the existing creek within the property. The creek conveys water south below Macedon Center Road and into Thomas Creek.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Vac. explain the purpose and size of the impoundment:	NO	YES
Small bio-retention practices.		\checkmark
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	NO	YES
If Yes, describe:	\checkmark	
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or	NO	YES
completed) for hazardous waste? If Yes, describe:		
No remediation actions are listed for this site on the NYSDEC Remediation Database. EAF Mapper "Yes" answer may be in regard to a remediation site within +/- 3,000' of the site.		\checkmark
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BE MY KNOWLEDGE	ST OF	
Applicant/sponsor/name: James Cretekos, P.E. BME Associates (As Agent to Applicant) Date: 8/21/24		
Signature:		

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Sound Barrie Toronto Hamillon Reflector Reflector Buffato
153,19-1-44 153,19-1-39 153,20-1,33153,20-1-34 153,19-1-38 Sources EsuitPIERE9 Ga Valit, USQ 5 Integrapping INCREMENDERING and Esuitable of the State of the Stat	Sourcesi Esr. HERE Garmin, USGS Intermac, INCREMENT P PCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri Thailand, NGCC, J.; OpenStreetMap contributors, and the GIS User Commonity Esri, HERE, Garmin, MSY 100SS, NPS Pette Suirab

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Νο
Part 1 / Question 12b [Archeological Sites]	
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	

Agency Use Only [If applicable]

550 Macedon Center Road **Project:**

Date:

8/21/2024

Short Environmental Assessment Form Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

		No, or small impact may occur	Moderate to large impact may occur
1.	Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2.	Will the proposed action result in a change in the use or intensity of use of land?		
3.	Will the proposed action impair the character or quality of the existing community?		
4.	Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5.	Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6.	Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7.	Will the proposed action impact existing: a. public / private water supplies?		
	b. public / private wastewater treatment utilities?		
8.	Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	 Image: A start of the start of	
9.	Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		
10.	Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	 Image: A start of the start of	
11.	Will the proposed action create a hazard to environmental resources or human health?	 Image: A start of the start of	

Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

Check this box if you have determined, based on the information and analysis above, a	and any su	pportin	g docu	imentation,
that the proposed action may result in one or more potentially large or significant ad	lverse imp	acts and	d an	
environmental impact statement is required.				11 11 12

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency

Date

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer James Cretekus BME Assoc. Signature of Preparer (if different from Responsible Officer)

Signature of Responsible Officer in Lead Agency

Engineer's Report for 550 Macedon Center Road

Town of Perinton, Monroe County, New York

Prepared for:

Seal Two Partners, LLC PO Box 1260 Fairport, NY 14450

Prepared by:



10 Lift Bridge Lane East Fairport, NY 14450 (585) 377-7360

September 4, 2024

Project No. 2951



Table of Contents

Figure 01 – Location Map

A)	Introduction	.1
B)	Water Supply System	.1
Ć)	Sanitary Sewer System	.2
D)	Stormwater Management Analysis	.2
,	1) Overview	.2
	2) Methodology	.2
	3) Soils	.3
	4) Existing Conditions	.3
	5) Proposed Conditions	.3
	6) Stormwater Management Facilities	.4
	7) Stormwater Quality	.6
	8) Channel Protection	.7
	9) Stormwater Quantity and Quality Analysis and Results	.7
E)	Construction Erosion Control	.8
F)	NY State Historic Preservation Office (SHPO)	.9
Ġ)	NYS Natural Heritage Program	.9
H)	Wetlands / LDD	.9
Ŋ	Traffic Assessment	.10

Appendices 1) Water

- Water Supply
 - (1) Water Service Calculations
 - (2) MCWA Flow Test and Mapping
- 2) **Background Information**
 - (1) Figure 02-Soils Map

 - (2) Rainfall Data
 (3) NYS Cultural Resource Information System (CRIS) Map
 - (4) NYSDEC EAF Mapper Summary Report & NYSDEC Environmental Resource Map
 (5) PM Vehicle Trip Generation Calculations

Storm Water Management 3)

- i) **Quantity Calculations**
 - (1) Figure 03 Existing Conditions Drainage Map
 - (2) Figure 04 - Proposed Conditions Drainage Map
 - (3) Stormwater Hydrographs
- **Quality Calculations** ii)
 - (1) Figure 05 WQv/RRv Exhibit
 - (2) Water Quality and Runoff Reduction Calculations

4) Storm Sewers

- Figure 06 Storm Sewer Drainage Areas Map (1)
- Storm Sewer Sizing Calculations (2)
- (3) Rip-Rap Outlet Protection Calculations
- Fire Truck Turning Template 5)

A. Introduction

Seal Two Partners, LLC is proposing a subdivision and site improvements located in the Town of Perinton, Monroe County at 550 Macedon Center Road (NYS RT 31F) to create 2 new lots, each with a new residential duplex unit. The existing duplex unit at the property will remain and be located within its own lot. The project site is approximately 2.64 acres and is located on the north side of Macedon Center Road, approximately 300' east of the Squirrels Heath Road intersection.

The property is zoned Residential Class B and Section 208-32A(2) of the Town Code allows for duplex units within this district by a Special Use Permit pursuant to Code Section 208-54. The proposed lots have been designed to be in conformance with the Town subdivision criteria for duplex lots within the Residential B district and each will have a fifteen-foot-wide flag connection to Macedon Center Road.

The project will be served by the existing entrance onto Macedon Center Road. The two additional lots, Lot #2 and Lot #3 will be accessed via a private driveway with a cross access and utility easement. The site has been designed to accommodate a fire truck, including a turnaround area west of the proposed buildings. A fire truck turning template exhibit has been provided as Figure 07 in Appendix 5 showing the turning movements within the project site.

The proposed water services for the development will connect to the existing public watermain along Maceon Center Road. The sanitary laterals for the buildings will connect to the existing public sanitary sewer main located along the eastern portion of the property. Stormwater drainage will be managed by collecting runoff from the developed areas and directing it to two bio-retention facilities with extended detention capacity. The bio-retention facilities will provide both water quality and quantity control before releasing runoff to the downstream areas.

The following report provides the technical data to support the proposed overall development. The report includes discussion on the water and sanitary sewer service, stormwater management, construction erosion control, environmental setting, and other site design components.

B. <u>Water Supply System</u>

Water supply will be provided by new 1.5" PE #4710 private water services for each new building which will connect to the 12" Cast Iron public watermain along Macedon Center Road. Within the right-of-way the service will be 1.5" copper. Due to the length of the services a meter in tile will be provided at the right-of-way limits.

The estimated daily water usage for the development is 880 gpd and was calculated using the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems 2014, Table B-3 (110 gpd/bedroom * 4 units * 2 bedroom/unit).

The water supply calculations have been included in Appendix 1 and show adequate water pressure is available at the project site for domestic use, which has been summarized below.

Domestic Demand Lot 2= 15 gpm (2 units at 7.5 gpm per unit) Approximate Domestic Pressure at Base of Riser = 64 psi

Domestic Demand Lot 3= 15 gpm (2 units at 7.5 gpm per unit) Approximate Domestic Pressure at Base of Riser = 67 psi

C. <u>Sanitary Sewer System</u>

The proposed buildings will each be served by a new 4" PVC SDR-21 sanitary lateral and constructed with a minimum slope of 2.0%. Each lateral will be connected to the existing public 16" sewer main located on the eastern portion of the property. The sanitary laterals are proposed to be directionally drilled below the creek invert to minimize disturbances to the stream bed and banks. The sanitary laterals will connect to the existing main using insert-a-tee fittings. The estimated daily sewage generated from the site is 880 gpd (see Water Supply System for calculations).

D. <u>Stormwater Management Analysis</u>

D.1 Overview

Stormwater runoff associated with the proposed project will be treated during and after construction to meet New York State Department of Environment Conservation (NYSDEC) water quality and quantity requirements. Two permanent stormwater management areas will be constructed to capture and detain runoff from the developed areas of the property, then release the runoff to a downstream area at a controlled rate. The proposed stormwater management facilities will be constructed as filtering bio-retention practices with extended detention capabilities. The project's stormwater management plan is designed according to the current rules and regulations set in the NYSDEC Stormwater Management Design Manual (January 2015) and the Town of Perinton Design Criteria and Construction Specifications.

The NYSDEC recently released an updated version of the Stormwater Design Manual Dated July 31, 2024. The NYSDEC indicated the use of the updated standards is encouraged and is not considered deviations from the 2020 Construction General Permit. The stormwater design for this project is generally consistent with the 2015 SWDM, however, the following criteria/standards from the 2024 SWDM have been utilized.

- Channel Protection Volume Requirement may be waived if, "CPv is not required at sites where the 1-year post-development peak discharge is less than or equal to 2.0 cfs"
- Bio-Retention sizing completed per updated sizing calculation.
- Bio-Retention soil media per updated design standards.

D.2 Methodology

The NYSDEC Stormwater Management Design Manual provides specifications and sizing criteria for stormwater management practices for stormwater discharges. The proposed stormwater management for this project has been designed to meet the five key criteria outlined in the Design Manual:

- Water quality volume (WQv) to meet pollutant removal goals;
- Runoff reduction volume (RRv) by application of runoff reduction practices to replicate predevelopment flows;
- Channel protection volume (Cpv) to reduce channel erosion;
- Overbank flood protection (Qp) to prevent overbank flooding; and
- Extreme storm protection (Qf) to help control extreme floods.

The existing and proposed drainage conditions at the project site were analyzed following the methods outlined in Soil Conservation Service Technical Release No. 20 & 55. Peak runoff rates for existing and post-development conditions were modeled for the 1, 2, 5, 10, 25, 50, and 100-year design storm events

using the HydroCAD V10.20 software. Runoff rates were determined based on the hydrologic characteristics of the site (soil conditions, existing and proposed land cover, time of concentration for the contributing drainage areas) and the hydraulic characteristics of the proposed stormwater management facility (type of storage, size of facility and outlet structure features and sizing as applicable). Twenty-four (24) hour extreme storm event precipitation amounts were obtained from Northeast Regional Climate Center online web tool and have been included in Appendix 2 for reference.

Appendix 3 contains the stormwater hydrographs and subarea information. These stormwater hydrograph reports show the subarea routings, subarea data, stormwater management facility and outlet structure sizing, estimated detention times, storage volumes, peak ponding elevations, and discharge rates.

D.3 Soils

The Natural Resources Conservation Service (NRCS) indicates the project site contains soils of hydrologic class "B" and "B/D". Soils within the property are primarily composed of Appleton loam (B/D) and some Ontario loam (B). A soils map has been included as Figure 02 in Appendix 2 for reference.

Based upon field observations the site appears well drained within the proposed development area east the creek routing through the eastern portion of the property and therefore all stormwater modeling has been completed using class B soils.

D.4 Existing Conditions

The analyzed watershed for the project totals approximately 2.05 acres and under existing conditions consist of 1 drainage area and 1 analysis point (see Figure 03 in Appendix 3). Table 1 below provides a summary of the existing subareas, which are described in further detail following the table.

Subarea	Area	Curve Number (CN)	Time of Concentration (Tc)
Existing Subarea 'A'	2.05 acres	64.0	9.7 min

Table 1: SCS Hydrologic Data, Existing Conditions

Existing Subarea 'A' (2.05 acres)

This subarea contains all the development property west of the existing creek and some additional lands to the west which drain through the property before reaching it. The creek flows south within the property toward Macedon Center Road and enters an existing box culvert. The box culvert was selected as Analysis Point A for the project to allow for comparison to post developed flows.

D.5 Proposed Conditions

The drainage subareas for the post-development conditions (see Figure 04 in Appendix 3) have been delineated per the proposed grading of the site development. The analyzed drainage area includes approximately 2.05 acres, which matches the existing conditions, and is composed of 3 sub areas. Drainage under the proposed conditions will continue to drain toward the analysis point to allow for a comparison to pre-development flow rates. Table 2 below provides a summary of the proposed subareas, which are described in further detail following the table.

Table 2: SCS Hydrologic Data, Proposed Conditions

Subarea	Area	Curve Number (CN)	Time of Concentration (Tc)
Proposed Subarea 'A'	0.88 acres	66	9.7 min
Proposed Subarea 'B'	0.80 acres	73	4.4 min *
			*(6.0 min minimum per Tr -55)
Proposed Subarea 'C'	0.37 acres	75	3.6 min *
			*(6.0 min minimum per Tr -55)

Proposed Subarea 'A' (0.88 acres)

This subarea contains a portion of the existing duplex unit, parking areas at the southern portion of the property, and the areas west of the creek which are not directed to either of the proposed stormwater facilities. All runoff from this subarea will maintain existing drainage patterns and flow into the existing creek and toward Analysis Point A.

Proposed Subarea 'B' (0.80 acres)

This subarea includes the northern portion of the property that will be collected and directed to Bio-Retention Area 1 for quality and quantity controls. Runoff entering the facility will be released at controlled rates toward the existing creek, where it will ultimately flow south to Analysis Point A.

Proposed Subarea 'B' (0.37 acres)

This subarea includes the central portion of the property that will be collected and directed to Bio-Retention Area 2 for quality and quantity controls. Runoff entering the facility will be released at controlled rates toward the existing creek, where it will ultimately flow south to Analysis Point A.

D.6 Stormwater Management Facilities

Both proposed Stormwater Management Facilities will be constructed as bio-retention practices with extended detention capabilities. The facilities will include an upstream vegetated swale, stone level spreader, a bio-retention filter area, an outlet structure, and spillway.

The stormwater facilities will receive runoff from proposed drainage Subarea 'B' and Subarea 'C'. The facilities will detain and treat the post-development runoff and discharge it to the existing creek which flows to the Analysis Point. Sufficient storage volume is provided in the facilities to effectively detain the 1, 2, 5, 10, 25, 50 and 100-year storms and release them below pre-development runoff rates.

Both outlet structures are designed to control the rate at which runoff is discharged from the site, ensuring that runoff rates will remain at or below those for the existing conditions. The outlet structures are similar, and both consist of a 6" underdrain below the filter media, discharging into a 2' x 2' (ID) reinforced concrete structure. The structures will include a 24" x 24" flat grate, and a 6" main outlet pipe. The facilities also include a spillway which was set 0.5' above the 2'x2' grate elevation to maintain a maximum ponding area within the bio-retention practice in accordance with the NYSDEC 2024 SWMD.

The underdrain pipe will discharge runoff from the bottom of the filter media where it has been treated by the filter and is cooler in temperature. The analysis provided within this report has been completed assuming the bio-retention media will have a filtration rate of 0.5 inches/hour in accordance with NYSDEC design standards. Details of each outlet structure are also provided on the design plans. Table 3 and 4 below, contains the ponding elevation and outflow data for each SWMF.

Design Storm Event	Post-Dev. Inflow (cfs)	Post Deve. Outflow (cfs)	Time to Peak Outflow (hrs)	Ponding Elevation (ft)	Storage Volume Used (cf)
1-yr	0.17	0.01	12.10	469.74	346
2-yr	0.36	0.01	12.05	471.72	707
5-yr	0.66	0.01	23.01	472.56	1,338
10-yr	0.97	0.03	17.84	473.00	1,897
25-yr	1.54	0.36	12.57	473.05	1,969
50-yr	2.05	0.83	12.30	473.10	2,031
100-yr	2.72	1.68	12.17	473.19	2,169
6" Outlet Pipe Elev.	468.67		Total AvailableStorage Volume @Elev = 474.00 (cf)		3,494 cf
Top of Filter Media Elev.	472.00				
2'x2' Grate Elev.	473.00				
Spillway Elev.	473.50				
Top of Berm Elev.	474.00				

Table 3: Bio-Retention 1 (North) - SWMF Summary

Table 4: Bio-Retention 2 - SWMF Summary

Design Storm Event	Post-Dev. Inflow (cfs)	Post Deve. Outflow (cfs)	Time to Peak Outflow (hrs)	Ponding Elevation (ft)	Storage Volume Used (cf)
1-yr	0.12	0.01	12.05	469.58	192
2-yr	0.21	0.01	11.95	471.18	367
5-yr	0.36	0.01	21.24	472.38	683
10-yr	0.51	0.01	22.14	472.82	1,003
25-yr	0.79	0.07	12.97	473.01	1,152
50-yr	1.04	0.34	12.39	473.05	1,187
100-yr	1.35	0.76	12.20	473.09	1,221
6" Outlet Pipe Elev.	468.67		Total Available		
Top of Filter Media Elev.	472.00		Storage Volume (a)2, $Elev = 474.00 (cf)$		2,105 cf
2'x2' Grate Elev.	473.00				
Spillway Elev.	473.50]			
Top of Berm Elev.	474.00				

D.7 Stormwater Quality:

The August 2015 NYSDEC Stormwater Management Design Manual outlines numerous practices that can be constructed to improve the water quality and reduce the runoff volume of stormwater runoff. Reduced Runoff Volume (RRv) is the reduction of the total Water Quality Volume (WQv) by application of green infrastructure techniques and standard management practices to replicate pre-development hydrology. To meet the WQv and minimum allowable RRv requirements, the stormwater plan includes two stormwater facilities that will be constructed as bio-retention practices with extended detention.

The proposed site modifications classify as a redevelopment project per the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit Number GP-0-20-001 (General Permit), and the 2015 New York State Stormwater Design Manual (SWDM) "Chapter 9-Redevelopment – Projects" guidelines. Given the anticipated site disturbance of over 1 acre or land area, the site development must address Water Quality Volume (WQv), Runoff Reduction (RRv) and Water Quantity per the SWDM "Chapter 9 – Redevelopment – Projects" guidelines.

The intent of the green infrastructure measures is to replicate the pre-construction infiltration, peak runoff flow and discharge volume, as well as minimization of concentrated flow by using runoff control techniques to provide treatment in a distributed manner before runoff reaches offsite discharge locations. The green infrastructure practices have been designed to comply with the NYSDEC guidelines. Calculations were completed to show that the project site can effectively meet the overall WQv and minimum allowable RRv requirements, and these calculations have been provided in Appendix 3.

Based upon field observations and initial percolations test completed at the proposed bioretention practice there is minimal infiltration capacity and therefore the bio-retention area has been designed as filtering practices with underdrains discharging to the stormwater facilities outlet pipes.

As noted previously in this report, this project proposes to use the updated sizing calculations and soil media specification for the Bio-Retention sizing from the NYSDEC July 2024 Stormwater Design Manual. Green infrastructure calculations were completed to show that the project site can effectively meet the overall WQv and minimum allowable RRv requirements have been provided in Appendix 3 for reference and summarized below. The updated soil media specification is listed on the bio-retention detail on the Site Plans.

Figure 05 in Appendix 3 shows the approximate drainage areas to each facility and the overall Water Quality limits utilized in the calculations. Detailed calculations for the site requirements and practice have been included in Appendix 3 and are summarized below.

SWMF / **Bioretention** #1 is located northeast of the proposed duplexes and receives runoff from proposed drainage area B. Runoff from this drainage area will be collected in storm sewers and swales. The swales and a stone level spreader will provide pretreatment and slow runoff down as it enters the facility, where it will be filtered and collected within an underdrain pipe which discharges into the outlet structure and ultimately toward the Analysis Point. See Stormwater Management Facility Section for additional information regarding the outlet structure for this facility.

<u>SWMF / Bioretention #1 (North)</u> WQv Provided by Bio-Retention = 85 cf RRv Provided = 910 cf
SWMF / **Bioretention #2** is located southeast of the proposed duplexes and receives runoff from proposed drainage area B. Runoff from this drainage area will be collected in storm sewers and swales. The swales and a stone level spreader will provide pretreatment and slow runoff down as it enters the facility, where it will be filtered and collected within an underdrain pipe which discharges into the outlet structure and ultimately toward the Analysis Point. See Stormwater Management Facility Section for additional information regarding the outlet structure for this facility

<u>SWMF / Bioretention #2</u> WQv Provided by Bio-Retention = 0 cf RRv Provided = 525 cf

Stormwater Quality Summary

The proposed stormwater management facility satisfies both of the NYSDEC's Stormwater Design Manual key criteria relating to stormwater quality. The total provided WQv and RRv are summarized below;

WQv Required = $1,405$ cf	Total WQv Provided = 85 cf
Minimum allowable $RRv = 483$ cf	Total RRv Provided = 1435 cf
	Total WOv + RRv Provided = 1.520 cf

Due to preliminary percolation testing at the proposed bio-retention locations it is necessary to use filtering "Green Infrastructure" practices for the project site, however the project is still able to provide more than 100% of the runoff reduction requirements. All the proposed impervious surfaces are treated by the proposed stormwater management practice, prior to being conveyed to the Analysis Point, and therefore satisfies the NYSDEC requirements for water quality.

D.8 Channel Protection:

The stream channel protection volume (CPv) criteria is designed to protect stream channels for erosion, by providing 24-hour extended detention of the one-year, 24-hour storm event. As noted above this project proposes to use an updated standard for CPv from the NYSDEC's 2024 SWDM. This new standard allows the CPv requirement to be waived if the 1-year post-development peak discharge is less than or equal to 2.0 cfs. The proposed 1-year peak discharge from the development area at the analysis point is 0.05 CFS and therefore the CPv requirement is satisfied. For reference the 50-year peak runoff rate is only 1.78 CFS.

D.9 Stormwater Quantity and Quality Analysis and Results:

The calculations provided within the appendices show the proposed project results in a reduction of stormwater runoff rates at the Analysis Points for both the 10-year and 100-year events as required by the NYSDEC Stormwater Design Manual quantity criteria. A summary of the existing vs. proposed runoff rates at the Analysis Point has been summarized in Table 5 below. The previous sections showed that the project also satisfies the other key criteria, including WQv, RRv and CPv. These values have been summarized in Table 6 below.

Analysis Point	Design Storm	Existing Peak Runoff Rate (cfs)	Proposed Peak Runoff Rate (cfs)
	1	0.04	0.05
	2	0.13	0.10
	5	0.39	0.26
'Analysis Point'	10	0.81	0.46
	25	1.70	0.86
	50	2.57	1.78
	100	3.77	3.74

Table 5: Comparison of Existing and Proposed Peak Runoff Rates at Analysis Point

Table 6. Compliance with NYSDEC Sizing Requirements

New York Stormwater Sizing Criteria	Compliance
Water Quality Volume (WQv)	WQv Required: 1,405 cf WQv+RRv Provided: 1,520 cf > 1,405 cf OK
Runnoff Reduction Volume (RRv)	Minimum allowable RRv: 483 cf RRv Provided: 1,435 cf > 483 cf OK
Channel Protection Volume (Cpv)	Requirement Waived, 1-year peak discharge (0.05 cfs) is less than 2.0 cfs. (NYSDEC 2024 SWDM)
Overbank Flood Protection (Qp) Control peak discharge from 10-year storm to 10-year pre-development rates	Total Flows from Site (Analysis Point) 0.46 cfs (Proposed) < 0.81 cfs (Existing) <u>OK</u>
Extreme Storm Protection (Qf) Control peak discharge from 100-year storm to 100-year pre-development rates	Total Flows from Site (Analysis Point) 3.74 cfs (Proposed) < 3.77 cfs (Existing) <u>OK</u>

Based on the above information, the proposed stormwater management design for the project satisfies the key criteria of the Stormwater Management Design Manual guidelines and will require a five-day Notice of Intent review to acquire permit coverage from NYSDEC under General Permit GP-0-20-001.

E. <u>Erosion and Sediment Control</u>

The proposed stormwater management facilities and a comprehensive erosion control plan have been designed to control sediment runoff and provide water quality treatment during and after the site construction. As required by the NYSDEC, the project will include a Stormwater Pollution Prevention Plan (SWPPP) that will combine the design presented in this report and on the plans with the requirements of NYSDEC GP-0-20-001 to outline how the owner will address the construction and post construction stormwater condition. The construction erosion control plan has been designed per the New

York Standards and Specifications for Erosion and Sediment Control. The stormwater management facility's pretreatment swale and stone level spreader will provide pretreatment of runoff entering into the facility and help protect the bio-retention media and reduce maintenance.

Additional erosion control measures will be implemented during construction to control silt and minimize disturbance to the existing swales and drainage conditions. Typical practices include the installation and maintenance of silt fence, stone check dams, rip rap outlet protection, and filter fabric inlet protection. The disturbed areas will be seeded and mulched as soon as possible to control erosion. Pipe outlet control rip-rap measures are also proposed with the storm sewer system. Storm sewer and rip-rap sizing calculations have been included in Appendix 4. A stabilized construction entrance will also be installed near the right-of-way limits to access the site during construction.

The design plans include the sequence of construction notes along with specific construction erosion control notes and details. The design plans will be reviewed at the pre-construction meeting with all involved parties. They include a construction erosion control plan that outlines a sequence of construction along with erosion control measures and details. The erosion control practices proposed are shown on the design plans and detailed on the detail sheets. The details are per the New York State Standards and Specifications for Erosion and Sediment Control.

The final component of the erosion control plan will be maintenance. The contractor will be responsible for installing the erosion control features, as well as maintaining and replacing them as necessary throughout construction. An owner's representative and the Town of Perinton will review the erosion control measures to determine their efficiency, need for replacement, or need for additional measures. A SWPPP will be prepared for the project and is to be kept on-site throughout the soil disturbing activities and until groundcover is established.

F. <u>NY State Historic Preservation Office (SHPO)</u>

Per the New York State Office of Parks, Recreation & Historic Preservation (SHPO), Cultural Resource Information System (CRIS), the property is not located within an archaeological sensitive area. A copy of the CRIS mapping has been provided in Appendix 2 for reference.

G. <u>NYS Natural Heritage Program</u>

Per the NYSDEC EAF Mapper Summary Report and the NYSDEC Environmental Resource Mapper, the property does not include rare plants or animals, nor any endangered or threatened species. The EAF Mapper Summary Report and a copy of the Environmental Resource Mapper have been provided in Appendix 2 for reference.

H. <u>Wetlands / LDD</u>

BME Associates completed a review of available wetland mapping and an on-site evaluation of potential wetland areas within the project site limits. No existing regulated wetlands were identified on the site within the proposed development area.

The project site also includes Town of Perinton Limited Development Districts (LDD), as defined by Town Code 208-47.D; in particular 208-47.D.(3) areas prone to inundation by water on a recurring basis or exhibiting a high water table. This area is shown on the Town's existing LDD mapping and the limits were reviewed during a site walk with the Conservation Board members, and water determined to follow along the existing vegetation limits at elevation of approximately 468.0. The limits of this LDD are shown on the site plans. Some small disturbances within the LDD limits are proposed to allow for

connection of the sanitary sewer laterals to the existing public sewer located on the property, and for some minor grading activities. The minor grading activities within the LDD limits allow the site to be designed to reduce the excess fill that would be required to be removed from the project site by approximately 1000 CY.

K. <u>Traffic Assessment</u>

The proposed is estimated to have a PM peak hour vehicle trip generation of 4 total trips (2 entering & 2 exiting). This is below the NYSDOT's threshold for requiring a traffic study and as such the proposed development will not have any noticeable effect on the adjacent road networks.

Appendix 1

Water Supply

Water Supply Calculations

MCWA Flow Test and Mapping

BME ASSOCIATES

Project:	550 Macedon Center Road
Project No:	2951
Date:	8/22/2024
By:	DTT

			CALCU	LATIONS		1	1.5	2	SIZE (INCHES)				
Loss Co	eff. from	selected pir	pe (per 100 f	ft.) =	С	8.60	1.23	0.32	COPPER				
			, and a second s	,	PE	15.99	2.68	0.72	POLYETHYLENE				
					L								
	Main	House	Length of	Length of	Size/M	laterial	Size/M	aterial	Pressure @	Pressure			
Lot #	Elev.	Elev.	Co. Serv.	Cust. Serv.	Co. S	ervice	Cust. Service		House @ 15gpm	at main			
2	506.0	479.0	12	348	1.5	С	1.5	PE	64.22	62			
3	506.0	478.0	12	248	1.5	С	1.5	PE	67.33	62			
4									#N/A				
5									#N/A				
6									#N/A				
7									#N/A				
8									#N/A				
9									#N/A				
10									#N/A				
11									#N/A				
12									#N/A				
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41									#N/A				
42									#N/A				
43									#N/A				
44									#N/A				
45									#N/A				

Village/Town	Perinton	
Location	Macedon Center Rd	
Issue Date	7/24/2024	
Calculated By	BM	
Reference Test Book#/Pg#	46/42	
Flow Nozzle	2.5	
Flow Hydrant #	#723	
Static	62	psi
Pitot	42	psi
Style	A	1.00
Residual Hydrant #	#722	
Static	68	psi
Residual	61	psi
Grade Adjustment		
Static	62	psi
Residual	55	psi
Calculations		
Q Observed	1094	gpm
Q @ 20 psi	2879	gpm
System Status		
Zone	679	
Corrected Grade*	650	ft
Elev. @ Flow Hyd	506	ft
Water Main Size	12	inch

PLEASE NOTE THE FOLLOWING INFORMATION

The pressure and flow data provided herein represents the calculated values for this location in the distribution system based on typical low operating conditions. These values can vary depending on demands, operational parameters, system configurations, subsequent modifications and other related criteria. Please contact Tony Piascik, P.E. at 585-442-2001 ext 273 with any questions or concer *Corrected Grade is based on the Historical Lows for the Zone and is not the same as the Hydraulic Grade for the particular hydrant flow tes



Appendix 2

Background Information

Figure 02-Soils Map Rainfall Data NYS Cultural Resource Information System (CRIS) Map NYSDEC EAF Mapper Summary Report & NYSDEC Environmental Resource Map PM Vehicle Trip Generation Calculations

SOIL MAP FIGURE 02



USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey





Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
АрА	Appleton loam, 0 to 3 percent slopes	B/D	4.8	58.1%
HIB	Hilton loam, 3 to 8 percent slopes	B/D	0.1	1.5%
OnC	Ontario loam, 8 to 15 percent slopes	В	0.2	2.6%
OnF	Ontario loam, 25 to 60 percent slopes	В	1.7	20.7%
PgB	Palmyra gravelly loam, 3 to 8 percent slopes	A	1.4	17.1%
Totals for Area of Intere	st	8.2	100.0%	

Rating Options

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point									
Smoothing	Yes								
State	New York								
Location	New York, United States								
Latitude	43.095 degrees North								
Longitude	77.413 degrees West								
Elevation	140 feet								
Date/Time	Thu Aug 22 2024 12:50:48 GMT-0400 (Eastern Daylight Time)								

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.25	0.39	0.48	0.63	0.79	0.97	1yr	0.68	0.89	1.10	1.32	1.57	1.86	2.08	1yr	1.65	2.00
2yr	0.31	0.47	0.59	0.77	0.97	1.19	2yr	0.84	1.07	1.34	1.60	1.87	2.17	2.43	2yr	1.92	2.34
5yr	0.36	0.56	0.70	0.94	1.20	1.49	5yr	1.04	1.33	1.68	1.99	2.31	2.66	3.00	5yr	2.36	2.88
10yr	0.40	0.63	0.80	1.09	1.42	1.76	10yr	1.22	1.57	1.99	2.35	2.73	3.11	3.52	10yr	2.75	3.38
25yr	0.48	0.76	0.96	1.33	1.77	2.20	25yr	1.52	1.96	2.49	2.93	3.38	3.83	4.34	25yr	3.39	4.18
50yr	0.54	0.87	1.11	1.55	2.09	2.61	50yr	1.80	2.31	2.96	3.47	3.98	4.47	5.10	50yr	3.96	4.90
100yr	0.61	0.99	1.27	1.81	2.47	3.10	100yr	2.13	2.74	3.52	4.11	4.68	5.23	5.99	100yr	4.63	5.76
200yr	0.70	1.14	1.47	2.11	2.91	3.67	200yr	2.51	3.25	4.16	4.85	5.50	6.12	7.03	200yr	5.42	6.76
500yr	0.83	1.37	1.78	2.59	3.64	4.60	500yr	3.14	4.07	5.21	6.05	6.83	7.54	8.70	500yr	6.67	8.37

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.21	0.32	0.39	0.53	0.65	0.74	1yr	0.56	0.72	0.83	1.08	1.42	1.73	1.82	1yr	1.53	1.75
2yr	0.30	0.46	0.56	0.76	0.94	1.05	2yr	0.81	1.02	1.15	1.42	1.72	2.12	2.38	2yr	1.88	2.29
5yr	0.33	0.51	0.64	0.88	1.11	1.24	5yr	0.96	1.21	1.35	1.65	2.02	2.52	2.85	5yr	2.23	2.74
10yr	0.36	0.56	0.70	0.97	1.26	1.39	10yr	1.08	1.36	1.51	1.85	2.26	2.85	3.24	10yr	2.53	3.12
25yr	0.42	0.63	0.79	1.13	1.48	1.62	25yr	1.28	1.59	1.74	2.15	2.59	3.33	3.85	25yr	2.95	3.71
50yr	0.46	0.70	0.87	1.25	1.68	1.82	50yr	1.45	1.78	1.93	2.40	2.87	3.76	4.39	50yr	3.33	4.22
100yr	0.51	0.77	0.96	1.39	1.90	2.03	100yr	1.64	1.99	2.12	2.68	3.17	4.23	5.00	100yr	3.75	4.81
200yr	0.56	0.84	1.07	1.54	2.15	2.27	200yr	1.86	2.22	2.33	2.99	3.48	4.77	5.70	200yr	4.22	5.48
500yr	0.64	0.95	1.22	1.77	2.52	2.64	500yr	2.18	2.58	2.61	3.42	3.92	5.57	6.80	500yr	4.93	6.54

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.28	0.43	0.52	0.70	0.86	0.99	1yr	0.75	0.97	1.10	1.35	1.69	1.98	2.23	1yr	1.75	2.14
2yr	0.32	0.49	0.60	0.82	1.01	1.14	2yr	0.87	1.12	1.25	1.52	1.86	2.25	2.49	2yr	1.99	2.39
5yr	0.39	0.60	0.75	1.02	1.30	1.50	5yr	1.12	1.46	1.64	1.95	2.34	2.82	3.17	5yr	2.50	3.05
10yr	0.46	0.71	0.88	1.22	1.58	1.85	10yr	1.37	1.81	2.03	2.38	2.82	3.39	3.80	10yr	3.00	3.65
25yr	0.58	0.89	1.10	1.58	2.07	2.46	25yr	1.79	2.41	2.69	3.10	3.63	4.33	4.84	25yr	3.84	4.65
50yr	0.69	1.05	1.31	1.88	2.53	3.05	50yr	2.19	2.98	3.36	3.81	4.41	5.20	5.82	50yr	4.60	5.59
100yr	0.83	1.25	1.57	2.27	3.11	3.79	100yr	2.68	3.70	4.19	4.65	5.37	6.28	7.00	100yr	5.56	6.73
200yr	0.99	1.49	1.88	2.72	3.80	4.72	200yr	3.28	4.61	5.25	5.71	6.53	7.56	8.41	200yr	6.69	8.09
500yr	1.26	1.87	2.41	3.50	4.98	6.32	500yr	4.30	6.18	7.09	7.55	8.51	9.70	10.75	500yr	8.58	10.33

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153.15-3-28 153.15-2-23 153.15-1-31 153.16-1-68 153.16-1-58 153.15-3-27 153.15-2-32 153.15-2-31 153.16-1-67 153.16-1-51 153.15-3-25 153.15-2-32 153.15-2-31 153.16-1-66 153.16-1-51 153.15-3-30 153.15-2-26153.15-1-49 153.16-1-65 153.16-1-55 153.15-3-37 153.15-2-26153.15-1-49 153.16-1-55 153.16-1-57 153.15-3-37 153.15-2-277 153.16-1-55 153.16-1-57	Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.
153:15-3:34 153:15-2-30:153:15-2-28 153:16-1-63:153:20-1-3 153:15-3:34 153:19-1-31 153:16-1-63:153:20-1-2 153:15-3:35 153:19-1-30 153:19-1-32 153:15-3:35 153:19-1-30 153:19-1-32 153:19-1-20:153:19-1-32 Perin ton 153:19-1-26:153:19-1-27 153:19-1-34 153:19-1-28 153:19-1-34 153:19-1-28 153:19-1-35 153:19-1-28 153:19-1-35 153:19-1-28 153:19-1-35 153:19-1-27 153:20-1-26 153:19-1-28 153:19-1-35 153:19-1-28 153:19-1-35	Sound Barrie Kingston Montpel Vermont Lake Optimo Hamilton Rochester on Buffalo New York Albany
153.19-1-39 153.20-1-33153.20-1-34 153.19-1-38 153.20-1-35 Sources: Esr J BEREP GatASill, USG ទូ អ្នកខ្លាកខ្លាំ INCREMIN/OPTIMRCian, Esri Japan, MET, Esri China (Hong Kong), ដីទីកើរសិទាខ្លឹង មិនកែ (Thailand) NGCC, (c) OpenStreetMap.op.gr អ្នយឬស្តេ, and 166.08-131/P.R1 the GIS User Community	Sources: Esn, HERE, Garmin, USGS Intermao, INCREMENT P RCan, Esn Japan, METI, Esn China (Hong Kong), Esn Korea, Esn Thailand) NGCC (c) OpenStreet/Map contributors, and the GIS User Commonity, Esni, HERE, Garmin, MSX USGS, NPS

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

Environmental Resource Mapper

Search	
Tools	
Layers and Legend	
All Layers	
🗹 🖈 Unique Geological Features	
Waterbody Classifications for Rivers/Streams	l
✓ ── Waterbody Classifications for Lakes	
 Waterbody Inventory/Priority Waterbodies List Lakes and Reservoirs Estuaries Rivers and Streams Shorelines 	
State Regulated Freshwater Wetlands (Outside of the Adirondack Park)	•
Other Wetland Layers	
Reference Layers	
Tell Me More	
Need A Permit?	
Contacts	



Base Map: NYS Aerial Vising this map

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: On a:	Dwelling Units Weekday, PM Peak Hour of Generator		
Setting/Location:	General Urban/Suburban		
Number of Studies:	34		
Avg. Num. of Dwelling Units:	110		
Directional Distribution:	62% entering, 38% exiting		

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.61	0.29 - 1.25	0.18

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Appendix 3

Drainage Analysis Calculations

Quantity Calculations (Qp, Qf)

Figure 03 - Existing Conditions Drainage Map Figure 04 - Proposed Conditions Drainage Map Stormwater Hydrographs

Quality Calculations (WQv, RRv, CPv)

Figure 05 – WQv/RRv Exhibit Water Quality and Runoff Reduction Calculations

Drainage Analysis Calculations Quantity Calculations

Figure 03 - Existing Conditions Drainage Map Figure 04 - Proposed Conditions Drainage Map Stormwater Hydrographs











Printed 8/22/2024 Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Macedon Center Road Rainfall 24-hr S1	1-yr	Default	24.00	1	1.86	
2	2-yr	Macedon Center Road Rainfall 24-hr S1	2-yr	Default	24.00	1	2.17	
3	5-yr	Macedon Center Road Rainfall 24-hr S1	5-yr	Default	24.00	1	2.66	
4	10-yr	Macedon Center Road Rainfall 24-hr S1	10-yr	Default	24.00	1	3.11	
5	25-yr	Macedon Center Road Rainfall 24-hr S1	25-yr	Default	24.00	1	3.83	
6	50-yr	Macedon Center Road Rainfall 24-hr S1	50-yr	Default	24.00	1	4.47	
7	100-yr	Macedon Center Road Rainfall 24-hr S1	100-yr	Default	24.00	1	5.23	

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.05 cfs @ 12.55 hrs, Volume= Routed to Reach 02 : Full Creek 0.015 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

Area (a	c) CN	Descr	ription						
0.2	23 98	Paveo	Paved parking, HSG B						
1.5	64 61	>75%	Grass cov	ver, Good,	HSG B				
0.2	28 55	Wood	ls, Good, H	ISG B					
2.0)5 64	Weigh	nted Avera	ge					
1.8	32	88.78	% Perviou	s Area					
0.2	23	11.22	% Impervi	ous Area					
			•						
Тс	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow				
					Grass: Short n= 0.150 P2= 2.17"				
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods				
					Woodland Kv= 5.0 fps				
9.7	250	Total							



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 5

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.08" for 1-yr event Inflow = 0.05 cfs @ 12.55 hrs, Volume= 0.015 af Outflow = 0.04 cfs @ 12.85 hrs, Volume= 0.015 af, Atten= 19%, Lag= 17.9 min Routed to Link 03 : Existing Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.57 fps, Min. Travel Time= 11.1 min

Avg. Velocity = 0.41 fps, Avg. Travel Time= 15.4 min

Peak Storage= 25 cf @ 12.66 hrs Average Depth at Peak Storage= 0.03', Surface Width= 2.01' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Are	a =	2.05 ac, 11	.22% Imper	vious,	Inflow D	epth =	0.08"	for 1-yı	event
Inflow	=	0.04 cfs @	12.85 hrs,	Volum	e=	0.015	5 af		
Primary	=	0.04 cfs @	12.85 hrs,	Volum	e=	0.015	5 af, A	tten= 0%	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Hydrograph 0.04 Inflow Primary 0.04 cfs 0.038 0.036 Inflow Area=2.05 ac 0.034 0.032 0.03 0.028 0.026 0.024 (s) 0.024 0.02 0.018 0.016 0.014 0.012 0.01 0.008 0.006 0.004 0.002 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours) 0

Link 03: Existing Point A

Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.03 cfs @ 12.52 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.008 af, Depth= 0.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

_ Area (a	ac) CN	l Descr	ription						
0.4	48 61	>75%	>75% Grass cover, Good, HSG B						
0.	16 98	B Paveo	d parking,	HSG B					
0.2	24 55	5 Wood	ls, Good, H	ISG B					
0.0	88 66	6 Weiał	nted Avera	ae					
0.	72	81.82	% Perviou	s Area					
0.	16	18.18	% Impervi	ous Area					
			•						
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow				
					Grass: Short n= 0.150 P2= 2.17"				
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods				
					Woodland Kv= 5.0 fps				
9.7	250	Total							

Hydrograph 0.036 - Runoff 0.03 cfs 0.034 0.032 Macedon Center Road Rainfall 24-hr S1 1-yr 0.03 Rainfall=1.86" Runoff Area=0.88 ac 0.028-Runoff Volume=0.008 af 0.026 Runoff Depth=0.12" 0.024 Flow Length=250' 0.022 Tc=9.7 min Flow (cfs) 0.02 CN=66 0.018 0.016 0.014 0.012 0.01 0.008 0.006 0.004 0.002 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ò Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.17 cfs @ 12.07 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.017 af, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

_	Area (a	c) CN	Descr	ription						
	0.2	26 98	Paveo	Paved parking, HSG B						
	0.5	54 61	>75%	>75% Grass cover, Good, HSG B						
	0.8	30 73	Weigl	nted Avera	ge					
	0.5	54	67.50% Pervious Area							
	0.2	26	32.50	% Impervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn				
						Grass: Short n= 0.150 P2= 2.17"				
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF				
_						Grassed Waterway Kv= 15.0 fps				
	4 4	110	Tatal							

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	ı =	0.80	ac, 32	.50% Imper	rvious, Inflow Dep	oth = 0	.26" for	1-yr event
Inflow	=	0.17	cfs @	12.07 hrs,	Volume=	0.017 a	af	
Outflow	=	0.01	cfs @	12.10 hrs,	Volume=	0.017 a	af, Atten=	94%, Lag= 1.8 min
Primary	=	0.01	cfs @	12.10 hrs,	Volume=	0.017 a	af	
Routed	to Reac	h 07 :	Creek	Section 1				
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000 a	af	
Routed	to Reac	h 07 :	Creek	Section 1				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 469.74' @ 17.88 hrs Surf.Area= 910 sf Storage= 346 cf

Plug-Flow detention time= 393.3 min calculated for 0.017 af (100% of inflow) Center-of-Mass det. time= 393.4 min (1,319.4 - 926.0)

Volume	Invert	Avail.	.Storage	Storage Description				
#1	468.67'		3,494 cf	Custom Stage	Custom Stage Data (Prismatic)Listed below (Recalc)			
Elevatio (fee	on Su et)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)			
468.6	<i>,</i> 67	910	0.0	0				
469.5	50	910	40.0	302	302			
472.0	00	910	20.0	455	757			
472.0)1	910	100.0	9	766			
474.(00	1,831	100.0	2,727	3,494			
Device	Routing	Inv	vert Out	let Devices				
#1	Primary	468.	67' 6.0 ' L= 3	" Round 6" Culvert 35.0' CPP, square edge headwall, Ke= 0.500				
			Inle	t / Outlet Invert= 4	68.67' / 468.00'	S= 0.0191 '/' Cc= 0.900		
#2	Device 1	468	67' 05	0.013 Corrugated	PE, smooth inter	r Surface area Phase-In= 0.01'		
#2	Device 1	473.	00' 24 .(LO" x 24 0" Horiz Grate C= 0.600				
			Lim	ited to weir flow at	t low heads			
#4	Secondary	473.	50' 10. Hea Coe	D' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63				

Primary OutFlow Max=0.01 cfs @ 12.10 hrs HW=468.83' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.07 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.18" for 1-yr event Inflow = 0.04 cfs @ 12.52 hrs, Volume= 0.026 af Outflow = 0.04 cfs @ 12.55 hrs, Volume= 0.026 af, Atten= 1%, Lag= 2.2 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.60 fps, Min. Travel Time= 2.0 min Avg. Velocity = 0.41 fps, Avg. Travel Time= 2.8 min Peak Storage= 5 cf @ 12.53 hrs Average Depth at Peak Storage= 0.04', Surface Width= 2.01'

Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.12 cfs @ 12.06 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.010 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

_	Area (a	ic) CN	Descr	ription						
	0.1	14 98	Paveo	Paved parking, HSG B						
	0.2	23 61	>75%	>75% Grass cover, Good, HSG B						
	0.3	37 75	i Weigł	Weighted Average						
	0.2	23	62.16	% Perviou	s Area					
	0.1	14	37.84	% Impervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn				
						Grass: Short n= 0.150 P2= 2.17"				
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement				
						Smooth surfaces n= 0.011 P2= 2.17"				
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF				
_						Grassed Waterway Kv= 15.0 fps				

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area =		0.37 ac, 37	.84% Imper	rvious, Inflow Dep	oth = 0.31	" for 1-yr event		
Inflow	=	0.12 cfs @	12.06 hrs,	Volume=	0.010 af			
Outflow	=	0.01 cfs @	12.05 hrs,	Volume=	0.010 af,	Atten= 94%, Lag= 0.0 min		
Primary	=	0.01 cfs @	12.05 hrs,	Volume=	0.010 af	-		
Routed to Reach 10 : Creek Section 2								
Secondary	y =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af			
Routed	l to Reac	h 10 : Creek	Section 2					

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 469.58' @ 16.62 hrs Surf.Area= 550 sf Storage= 192 cf

Plug-Flow detention time= 358.7 min calculated for 0.010 af (100% of inflow) Center-of-Mass det. time= 358.8 min (1,271.6 - 912.8)

Volume	Invert	Avail.	.Storage	Storage Description				
#1	468.67'		2,105 cf	Custom Stage Data (Prismatic)Listed below (Recalc)		Listed below (Recalc)		
Elevatio (fee	on Su	urf.Area (sɑ-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)			
468.6	, 67	550	0.0	0	0			
469.5	50	550	40.0	183	183			
472.0	00	550	20.0	275	458			
472.0)1	550	100.0	5	463			
474.0	00	1,100	100.0	1,642	2,105			
Device	Routing	Inv	vert Out	et Devices				
#1	Primary	468.	67' 6.0'' L= 3 Inlet n= (Round 6" Culv 35.0' CPP, squar t / Outlet Invert= 4 0.013 Corrugated	ert e edge headwall 68.67' / 468.00' PE, smooth inte	, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior, Flow Area= 0.20 sf		
#2	Device 1 468.67'		67' 0.50	0.500 in/hr Bio-Retention Media over Surface area Phase-In= 0.01'				
#3	Device 1	473.	00' 24.0 Limi	24.0" x 24.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads				
#4	Secondary	473.	50' 10.0 Hea Coe	l' long x 20.0' br d (feet) 0.20 0.4 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63		
Primery OutFlow May-0.01 of @ 12.05 hrs. LIW-168.701 (Free Discharge)								

Primary OutFlow Max=0.01 cfs @ 12.05 hrs HW=468.79' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.04 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond 09: Bioretention (South)


Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.21" for 1-yr event Inflow = 0.05 cfs @ 12.55 hrs, Volume= 0.036 af Outflow = 0.05 cfs @ 12.66 hrs, Volume= 0.036 af, Atten= 1%, Lag= 6.1 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.62 fps, Min. Travel Time= 4.0 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.5 min Peak Storage= 12 cf @ 12.59 hrs Average Depth at Peak Storage= 0.04', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.21" for 1-yr event Inflow = 0.05 cfs @ 12.66 hrs, Volume= 0.036 af Outflow = 0.05 cfs @ 12.77 hrs, Volume= 0.036 af, Atten= 1%, Lag= 7.1 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.61 fps, Min. Travel Time= 4.3 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 6.0 min

Peak Storage= 13 cf @ 12.70 hrs Average Depth at Peak Storage= 0.04' , Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, Ir	nflow Depth	= 0.21	" for 1-yr	event
Inflow	=	0.05 cfs @	12.77 hrs,	Volume=	= 0.	036 af		
Primary	=	0.05 cfs @	12.77 hrs,	Volume=	= 0.	036 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

0.006 0.004 0.002 0-

0

Link 12: Proposed Point A Hydrograph 0.054 0.052 Inflow Primary 0.05 cfs 0.05 0.048 Inflow Area=2.05 ac 0.046 0.044 0.042 0.04 0.038 0.036 0.034 0.032 **(§)** 0.03 0.028 **8** 0.026 **1** 0.024 0.022 0.02 0.018 0.016 0.014 0.012 0.01 0.008

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours)

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.13 cfs @ 12.36 hrs, Volume= Routed to Reach 02 : Full Creek 0.028 af, Depth= 0.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_ Area (a	ac) CN	Descr	ription		
0.2	23 98	B Paveo	d parking,	HSG B	
1.	54 61	>75%	Grass co	ver, Good,	HSG B
0.2	28 55	Wood	ls, Good, H	ISG B	
2.0	05 64	Weial	nted Avera	ae	
1.8	82	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
			•		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 21

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.16" for 2-yr event Inflow = 0.13 cfs @ 12.36 hrs, Volume= 0.028 af Outflow = 0.13 cfs @ 12.63 hrs, Volume= 0.028 af, Atten= 2%, Lag= 15.7 min Routed to Link 03 : Existing Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.91 fps, Min. Travel Time= 6.9 min

Avg. Velocity = 0.47 fps, Avg. Travel Time= 13.4 min

Peak Storage= 55 cf @ 12.51 hrs Average Depth at Peak Storage= 0.07', Surface Width= 2.03' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Are	ea =	2.05 ac, 11	.22% Imper	vious,	Inflow D)epth =	0.16"	for 2-yr	event
Inflow	=	0.13 cfs @	12.63 hrs,	Volum	e=	0.028	8 af		
Primary	=	0.13 cfs @	12.63 hrs,	Volum	e=	0.028	8 af, A	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.09 cfs @ 12.22 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.015 af, Depth= 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_ Area (a	ac) CN	Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.	16 98	B Paveo	d parking,	HSG B	
0.1	24 55	Wood	ls, Good, H	ISG B	
0.	88 66	Weigl	nted Avera	ge	
0.	72	81.82	% Perviou	s Area	
0.	16	18.18	% Impervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			

Hydrograph 0.1 0.095 - Runoff 0.09 cfs 0.09 Macedon Center Road Rainfall 24-hr S1 2-yr 0.085 Rainfall=2.17" 0.08 Runoff Area=0.88 ac 0.075 Runoff Volume=0.015 af 0.07 Runoff Depth=0.21" 0.065 Flow Length=250' 0.06 Tc=9.7 min **ີ** ຍິ 0.055 CN=66 0.05 0.045 0.04 0.035 0.03 0.025 0.02 0.015 0.01 0.005 0-0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.36 cfs @ 12.06 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.027 af, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_	Area (a	c) CN	I Descr	ription		
	0.2	26 98	B Paveo	d parking,	HSG B	
	0.5	54 61	>75%	Grass co	ver, Good,	HSG B
	3.0	30 73	3 Weigł	nted Avera	ge	
	0.5	54	67.50	% Perviou	s Area	
	0.2	26	32.50	% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
		440	T			

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	ı =	0.80	ac, 32	.50% Imper	rvious, Inflow Dep	oth = 0.4	0" for	2-yr event
Inflow	=	0.36	cfs @	12.06 hrs,	Volume=	0.027 af		
Outflow	=	0.01	cfs @	12.05 hrs,	Volume=	0.027 af,	Atten=	97%, Lag= 0.0 min
Primary	=	0.01	cfs @	12.05 hrs,	Volume=	0.027 af		
Routed	to Reac	h 07	Creek	Section 1				
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	to Reac	h 07	Creek	Section 1				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 471.72' @ 21.20 hrs Surf.Area= 910 sf Storage= 707 cf

Plug-Flow detention time= 733.8 min calculated for 0.027 af (100% of inflow) Center-of-Mass det. time= 734.2 min (1,633.6 - 899.4)

Volume	Invert	Avail.St	orage	Storage Descrip	otion						
#1	468.67'	3,	494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)					
Elevatio	on Su	rf.Area Vo	oids	Inc.Store	Cum.Store						
<u> </u>		00	(1991-91009) 0	0							
469.5	50	910 4	0.0	302	302						
472.0	00	910 2	0.0	455	757						
472.0)1	910 10	0.0	9	766						
474.0	00	1,831 10	0.0	2,727	3,494						
Device	Routing	Inver	t Outl	et Devices							
#1 Primary 468.67' 6.0 L= Inle				5.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.20 sf							
#2	Device 1	468.67	0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'					
#3	Device 1	473.00	24.0	" x 24.0" Horiz.	Grate C= 0.600						
#4	Secondary	473.50	Limi ' 10.0 Hea Coe	imited to weir flow at low heads 0.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63							
Drimony		ov-0.01 of	@ 12	05 bro 411/1-169 (01' (Eroo Dicob						

Primary OutFlow Max=0.01 cfs @ 12.05 hrs HW=468.91' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.15 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.30" for 2-yr event Inflow = 0.10 cfs @ 12.22 hrs, Volume= 0.042 af Outflow = 0.10 cfs @ 12.27 hrs, Volume= 0.042 af, Atten= 1%, Lag= 2.9 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.81 fps, Min. Travel Time= 1.4 min Avg. Velocity = 0.42 fps, Avg. Travel Time= 2.8 min

Peak Storage= 9 cf @ 12.25 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'



Hydrograph 0.11 - Inflow 0.105 0.10 cfs Outflow 0.1 Inflow Area=1.68 ac 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 0.075 Max Vel=0.81 fps 0.07 **දු 0**.065 0.06 n=0.025 **8** 0.055 0.05 L=70.0' 0.045 S=0.0083 '/' 0.04 0.035 Capacity=22.19 cfs 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.21 cfs @ 12.06 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.014 af, Depth= 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

	Area (a	c) CN	l Descr	ription			
	0.1	14 98	Paveo	d parking,	HSG B		
_	0.2	23 61	>75%	Grass cov	ver, Good,	HSG B	
	0.3	37 75	i Weigł	nted Avera	ge		_
	0.2	23	62.16	% Perviou	s Area		
	0.1	14	37.84	% Impervi	ous Area		
	Тс	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn	
						Grass: Short n= 0.150 P2= 2.17"	
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement	
						Smooth surfaces n= 0.011 P2= 2.17"	
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF	
_						Grassed Waterway Kv= 15.0 fps	

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area = 0.37 ac, 37.84% Impervious, Inflow Depth = 0.47" for 2-yr event 0.21 cfs @ 12.06 hrs, Volume= Inflow = 0.014 af Outflow = 0.01 cfs @ 11.95 hrs, Volume= 0.014 af, Atten= 97%, Lag= 0.0 min 0.01 cfs @ 11.95 hrs, Volume= Primary = 0.014 af Routed to Reach 10 : Creek Section 2 0.00 hrs. Volume= 0.00 cfs @ 0.000 af Secondary = Routed to Reach 10 : Creek Section 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 471.18' @ 19.03 hrs Surf.Area= 550 sf Storage= 367 cf

Plug-Flow detention time= 645.1 min calculated for 0.014 af (100% of inflow) Center-of-Mass det. time= 645.3 min (1,534.6 - 889.3)

Volume	Invert	Avail	.Storage	Storage Descrip	otion					
#1	#1 468.67'		2,105 cf	Custom Stage	Data (Prismatic	Listed below (Recalc)				
Elevatio (fee	on Su t)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)					
468.6	67 67	550	0.0	0	0					
469.50		550	40.0	183	183					
472.0	00	550	20.0	275	458					
472.0)1	550	100.0	5	463					
474.00 1		1,100	100.0	1,642	2,105					
Device	Routing	Inv	vert Ou	tlet Devices						
#1	Primary	468.	67' 6.0 L= Inle n=	7' 6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' C						
#2	Device 1	468.	67' 0.5	00 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'				
#3 Device 1 473.00' 24.0 Limi			0" x 24.0" Horiz. hited to weir flow a	Grate C= 0.600 t low heads						
#4	Secondary	473.	50' 10. He Co	10.0' long x 20.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63						

Primary OutFlow Max=0.01 cfs @ 11.95 hrs HW=468.72' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.01 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)





Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.33" for 2-yr event Inflow 0.11 cfs @ 12.27 hrs, Volume= 0.056 af Outflow 0.11 cfs @ 12.37 hrs, Volume= 0.056 af, Atten= 1%, Lag= 5.7 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.83 fps, Min. Travel Time= 3.0 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.5 min

Peak Storage= 19 cf @ 12.32 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.03' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'



0.115 - Inflow 0.11 cfs 0.11 Outflow 0.105 Inflow Area=2.05 ac 0.1 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 Max Vel=0.83 fps 0.075 0.07 n=0.025 ີ <u>ອີ</u> 0.065 0.06 L=147.0' 0.000 0.05 S=0.0083 '/' 0.045 0.04 Capacity=22.20 cfs 0.035 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 10: Creek Section 2

Hydrograph

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.33" for 2-yr event Inflow 0.11 cfs @ 12.37 hrs, Volume= 0.056 af Outflow 0.10 cfs @ 12.47 hrs, Volume= 0.056 af, Atten= 1%, Lag= 6.3 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.82 fps, Min. Travel Time= 3.2 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.9 min

Peak Storage= 20 cf @ 12.42 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'



0.115 - Inflow 0.11 0.10 cfs Outflow 0.105 0.1 Inflow Area=2.05 ac 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 Max Vel=0.82 fps 0.075 0.07 n=0.025 **දි** 0.065 0.06 L=160.0' **8** 0.055 0.05 S=0.0083 '/' 0.045 0.04 Capacity=22.22 cfs 0.035 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 11: Creek Section 3

Hydrograph

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious,	Inflow	Depth =	0.33	for 2-yr	event
Inflow	=	0.10 cfs @	12.47 hrs,	Volume	e=	0.056	3 af		
Primary	=	0.10 cfs @	12.47 hrs,	Volume	e=	0.056	5 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.43 cfs @ 12.17 hrs, Volume= Routed to Reach 02 : Full Creek 0.056 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

_ Area (a	ac) CN	Descr	ription		
0.:	23 98	B Paveo	d parking,	HSG B	
1.	54 61	>75%	Grass co	ver, Good,	HSG B
0.3	28 55	i Wood	ls, Good, I	ISG B	
2.	05 64	Weial	nted Avera	ae	
1.	82	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 37

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.33" for 5-yr event Inflow = 0.43 cfs @ 12.17 hrs, Volume= 0.056 af Outflow = 0.39 cfs @ 12.34 hrs, Volume= 0.056 af, Atten= 9%, Lag= 10.1 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.37 fps, Min. Travel Time= 4.6 min Avg. Velocity = 0.58 fps, Avg. Travel Time= 10.8 min

Peak Storage= 109 cf @ 12.26 hrs Average Depth at Peak Storage= 0.14', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Area	a =	2.05 ac, 11	.22% Imper	vious,	Inflow De	epth =	0.33"	for 5-yr	event	
Inflow	=	0.39 cfs @	12.34 hrs,	Volum	e=	0.056	6 af			
Primary	=	0.39 cfs @	12.34 hrs,	Volum	e=	0.056	6 af, A	Atten= 0%,	Lag= 0.0	min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.26 cfs @ 12.15 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.029 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

Area (a	ic) CN	Descr	ription								
0.4	48 61	>75%	>75% Grass cover, Good, HSG B								
0.1	16 98	Paveo	Paved parking, HSG B								
0.2	24 55	Wood	ls, Good, H	ISG B							
0.8	88 66	Weigh	nted Avera	qe							
0.7	72	81.82	% Perviou	s Area							
0.1	16	18.18	% Impervi	ous Area							
			•								
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									

Hydrograph 0.28 - Runoff 0.26 cfs 0.26 Macedon Center Road Rainfall 24-hr S1 5-yr 0.24 Rainfall=2.66" 0.22 Runoff Area=0.88 ac Runoff Volume=0.029 af 0.2 Runoff Depth=0.39" Flow Length=250' 0.18 Tc=9.7 min (\$) 0.16 0.14 0.12 CN=66 0.12 0.1 0.08 0.06 0.04 0.02 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ó Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.66 cfs @ 12.06 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.044 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

	Area (a	c) CN	l Descr	ription							
	0.2	26 98	B Paveo	Paved parking, HSG B							
_	0.5	64 61	>75%	Grass cov	ver, Good,	HSG B					
	0.8	30 73	8 Weigł	nted Avera	ge						
	0.5	54	67.50	% Perviou	s Area						
	0.2	26	32.50	% Impervi	ous Area						
	Тс	Length	Slope	Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn					
						Grass: Short n= 0.150 P2= 2.17"					
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF					
_						Grassed Waterway Kv= 15.0 fps					
		440	T			To 0.0 mile					

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	ı =	0.80	ac, 32	.50% Impei	vious, Inf	flow Dep	th =	0.66'	' for	5-yr e	vent	
Inflow	=	0.66 c	fs @	12.06 hrs,	Volume=	-	0.044	af		-		
Outflow	=	0.01 c	sfs @	23.01 hrs,	Volume=		0.044	af, /	Atten=	98%,	Lag= 6	57.3 min
Primary	=	0.01 c	sfs @	23.01 hrs,	Volume=		0.044	af				
Routed	to Reac	h 07 :	Creek	Section 1								
Secondary	=	0.00 c	ofs @	0.00 hrs,	Volume=		0.000	af				
Routed	to Reac	h 07 :	Creek	Section 1								

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.56' @ 23.01 hrs Surf.Area= 1,165 sf Storage= 1,338 cf

Plug-Flow detention time= 1,134.9 min calculated for 0.044 af (100% of inflow) Center-of-Mass det. time= 1,134.6 min (2,014.3 - 879.7)

Volume	Invert	Avail.S	Storage	Storage Descrip	tion	
#1	468.67'	3	,494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)
Elevatio (fee	on Su et)	rf.Area V (sq-ft)	/oids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
468.6	67 67	910	0.0	0	0	
469.5	50	910	40.0	302	302	
472.0)U)1	910 010 1	20.0	455	/5/ 766	
472.0)0	1,831 1	00.0	2,727	3,494	
Device	Routing	Inve	rt Outl	et Devices		
#1	Primary	468.6	7' 6.0'' L= 3 Inlet n= 0	Round 6" Culve 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall, 68.67' / 468.00' PE, smooth inter	Ke= 0.500 S= 0.0191 '/' Cc= 0.900 fior. Flow Area= 0.20 sf
#2	Device 1	468.6	7' 0.50	0 in/hr Bio-Reter	ntion Media ove	r Surface area Phase-In= 0.01'
#3	Device 1	473.0	0' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600 low heads	
#4	Secondary	473.5	0' 10.0 Hea Coe	' long x 20.0' br d (feet) 0.20 0.40 f. (English) 2.68	eadth Broad-Cro 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63
. .		0.04				

Primary OutFlow Max=0.01 cfs @ 23.01 hrs HW=472.56' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.54 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.52" for 5-yr event Inflow = 0.27 cfs @ 12.15 hrs, Volume= 0.072 af Outflow = 0.27 cfs @ 12.17 hrs, Volume= 0.072 af, Atten= 1%, Lag= 1.7 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.18 fps, Min. Travel Time= 1.0 min Avg. Velocity = 0.44 fps, Avg. Travel Time= 2.7 min

Peak Storage= 16 cf @ 12.16 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.36 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.023 af, Depth= 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

_	Area (a	ic) CN	Descr	ription							
	0.1	14 98	Paveo	Paved parking, HSG B							
	0.2	23 61	>75%	Grass co	ver, Good,	HSG B					
	0.3	37 75	i Weigł	Weighted Average							
	0.2	23	62.16	% Perviou	s Area						
	0.1	14	37.84	% Impervi	ous Area						
	Тс	Length	Slope	Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn					
						Grass: Short n= 0.150 P2= 2.17"					
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement					
						Smooth surfaces n= 0.011 P2= 2.17"					
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF					
_						Grassed Waterway Kv= 15.0 fps					

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area	ı =	0.37	ac, 37	.84% Impe	vious, Inflow [Depth =	0.75'	' for	5-yr e	vent	
Inflow	=	0.36 c	cfs @	12.05 hrs,	Volume=	0.023	3 af		-		
Outflow	=	0.01 c	cfs @	21.24 hrs,	Volume=	0.023	8 af, <i>1</i>	Atten=	98%,	Lag= 551.5	5 min
Primary	=	0.01 c	cfs @	21.24 hrs,	Volume=	0.023	3 af				
Routed	to Reac	h 10 :	Creek	Section 2							
Secondary	=	0.00 0	cfs @	0.00 hrs,	Volume=	0.000) af				
Routed	to Reac	h 10 :	Creek	Section 2							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.38' @ 21.24 hrs Surf.Area= 651 sf Storage= 683 cf

Plug-Flow detention time= 1,025.8 min calculated for 0.023 af (100% of inflow) Center-of-Mass det. time= 1,026.4 min (1,898.3 - 871.9)

Volume	Invert	Avail.	Storage	Storage Descrip	tion		
#1	468.67'	2	2,105 cf	Custom Stage	Data (Prismatic)	₋isted below (Recalc)	
Elevatio (fee	on Su et)	rf.Area \ (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)		
468.6	67	550	0.0	0	0		
469.5	50	550	40.0	183	183		
472.0	00	550	20.0	275	458		
472.0)1	550	100.0	5	463		
474.(00	1,100	100.0	1,642	2,105		
Device	Routing	Inve	ert Outl	et Devices			
#1	Primary	468.6	67' 6.0" L= 3 Inlet n= 0	Round 6" Culve 5.0' CPP, squar / Outlet Invert= 4 0.013 Corrugated	e rt e edge headwall, 68.67' / 468.00' PE. smooth interi	Ke= 0.500 S= 0.0191 '/' Cc= 0.900 ior. Flow Area= 0.20 sf	
#2	Device 1	468.6	67' 0.50	0 in/hr Bio-Retei	ntion Media over	Surface area Phase-In= 0.01'	
#3	#3 Device 1 473.00' 24.0 Limi		I.0" x 24.0" Horiz. Grate C= 0.600 mited to weir flow at low heads				
#4	Secondary	473.5	50' 10.0 Hea Coe	' long x 20.0' br d (feet) 0.20 0.40 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.00 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63	
		0.04				\	

Primary OutFlow Max=0.01 cfs @ 21.24 hrs HW=472.38' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.50 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.56" for 5-yr event Inflow = 0.27 cfs @ 12.17 hrs, Volume= 0.095 af Outflow = 0.26 cfs @ 12.25 hrs, Volume= 0.095 af, Atten= 3%, Lag= 4.5 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.18 fps, Min. Travel Time= 2.1 min

Avg. Velocity = 0.46 fps, Avg. Travel Time= 5.3 min

Peak Storage= 33 cf @ 12.21 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.56" for 5-yr event Inflow = 0.26 cfs @ 12.25 hrs, Volume= 0.095 af Outflow = 0.26 cfs @ 12.32 hrs, Volume= 0.095 af, Atten= 2%, Lag= 4.2 min Routed to Link 12 : Proposed Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.16 fps, Min. Travel Time= 2.3 min Avg. Velocity= 0.46 fps, Avg. Travel Time= 5.8 min

Peak Storage= 36 cf @ 12.27 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, In	nflow Depth =	0.56'	' for 5-yr	event
Inflow	=	0.26 cfs @	12.32 hrs,	Volume=	= 0.09	5 af		
Primary	=	0.26 cfs @	12.32 hrs,	Volume=	= 0.098	5 af, <i>I</i>	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Hydrograph 0.26 cfs Inflow Area=2.05 ac



Link 12: Proposed Point A

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.86 cfs @ 12.13 hrs, Volume= Routed to Reach 02 : Full Creek 0.088 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_ Area (a	ac) CN	Descr	ription								
0.:	23 98	B Paveo	Paved parking, HSG B								
1.	54 61	>75%	>75% Grass cover, Good, HSG B								
0.3	28 55	i Wood	ls, Good, I	ISG B							
2.	05 64	Weial	nted Avera	ae							
1.	82	88.78	% Perviou	s Area							
0.2	23	11.22	% Impervi	ous Area							
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									


Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 53

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.52" for 10-yr event Inflow = 0.86 cfs @ 12.13 hrs, Volume= 0.088 af Outflow = 0.81 cfs @ 12.26 hrs, Volume= 0.088 af, Atten= 6%, Lag= 7.4 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.77 fps, Min. Travel Time= 3.6 min Avg. Velocity = 0.66 fps, Avg. Travel Time= 9.5 min

Peak Storage= 173 cf @ 12.19 hrs Average Depth at Peak Storage= 0.22', Surface Width= 2.09' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01'. Outlet Invert= 461.88'





Reach 02: Full Creek

Summary for Link 03: Existing Point A

Inflow Area	a =	2.05 ac, 11	.22% Imper	vious,	Inflow Dept	h = 0.52	2" for	10-yr eve	nt
Inflow	=	0.81 cfs @	12.26 hrs,	Volume	e= ().088 af			
Primary	=	0.81 cfs @	12.26 hrs,	Volum	e= ().088 af,	Atten=	0%, Lag=	= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.48 cfs @ 12.12 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.044 af, Depth= 0.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

Area (a	ic) CN	Descr	ription							
0.4	48 61	>75%	Grass co	ver, Good,	HSG B					
0.1	16 98	B Paveo	d parking,	HSG B						
0.2	24 55	i Wood	Voods, Good, HSG B							
.0	88 66	Weigl	nted Avera	qe						
0.7	72	81.82	% Perviou	s Area						
0.1	16	18.18	% Impervi	ous Area						
			•							
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow					
					Grass: Short n= 0.150 P2= 2.17"					
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods					
					Woodland Kv= 5.0 fps					
9.7	250	Total								

Hydrograph 0.52 - Runoff 0.48 cfs 0.5 0.48 Macedon Center Road Rainfall 24-hr S1 10-yr 0.46 0.44 Rainfall=3.11" 0.42 Runoff Area=0.88 ac 0.4 Runoff Volume=0.044 af 0.38-Runoff Depth=0.60" 0.36 Flow Length=250' 0.34 Tc=9.7 min 0.32 (**5**) 0.3-0.28--CN=66 **8** 0.26 ■ 0.24 0.22-0.2 0.18 0.16 0.14-0.12 0.1 0.08 0.06 0.04 0.02 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ò Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

0.97 cfs @ 12.05 hrs, Volume= Runoff = Routed to Pond 06 : Bioretention (North)

0.062 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_	Area (a	ic) CN	l Descr	ription							
	0.2	26 98	B Paveo	d parking,	HSG B						
_	0.5	54 61	>75%	Grass co	ver, Good,	HSG B					
	0.0	30 73	8 Weigł	nted Avera	ge						
	0.5	54	67.50	67.50% Pervious Area							
	0.2	26	32.50	% Impervi	ous Area						
	Тс	Length	Slope	Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn					
						Grass: Short n= 0.150 P2= 2.17"					
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF					
_						Grassed Waterway Kv= 15.0 fps					
		440	T () (T 00 '					

Total, Increased to minimum Tc = 6.0 min 4.4 116

Subcatchment 05: Proposed Drainage Subarea 'B'



Hydrograph

Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80	ac, 32	.50% Imper	rvious,	Inflow De	epth =	0.93	" for	10-yr	event	
Inflow	=	0.97	cfs @	12.05 hrs,	Volume	e=	0.062	af		-		
Outflow	=	0.03	cfs @	17.84 hrs,	Volume	e=	0.062	af,	Atten=	97%,	Lag= 3	347.0 min
Primary	=	0.03	cfs @	17.84 hrs,	Volume	e=	0.062	af			-	
Routed	to Reac	h 07 :	Creek	Section 1								
Secondary	=	0.00	cfs @	0.00 hrs,	Volume	e=	0.000	af				
Routed to Reach 07 : Creek Section 1												

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.00' @ 17.84 hrs Surf.Area= 1,369 sf Storage= 1,897 cf

Plug-Flow detention time= 1,334.5 min calculated for 0.062 af (100% of inflow) Center-of-Mass det. time= 1,334.5 min (2,201.2 - 866.7)

Volume	Invert	Avail.	Storage	Storage Descrip	tion				
#1	468.67'	3	3,494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)			
Elevatio (fee	on Su	rf.Area \ (sq-ft)	√oids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
468.6	68.67 910 0.0		0.0	0	0				
469.5	50	910	40.0	302	302				
472.0	00	910	20.0	455	757				
472.0)1	910 <i>´</i>	100.0	9	766				
474.0	00	1,831 ´	100.0	2,727	3,494				
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	468.6	67' 6.0" L= 3 Inlet n= 0	Round 6" Culve 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall, 68.67' / 468.00' PE, smooth inter	Ke= 0.500 S= 0.0191 '/' Cc= 0.900 ior, Elow Area= 0.20 sf			
#2	Device 1	468.6	67' 0.50	0 in/hr Bio-Reter	ntion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473.0	0' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600 low heads				
#4	Secondary	473.5	50' 10.0 Hea Coe	0' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63					
D			6 0 17						

Primary OutFlow Max=0.02 cfs @ 17.84 hrs HW=473.00' (Free Discharge)

-1=6" Culvert (Passes 0.02 cfs of 1.62 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.00 cfs @ 0.15 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 59



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.75" for 10-yr event Inflow 0.49 cfs @ 12.12 hrs, Volume= 0.106 af = 0.48 cfs @ 12.15 hrs, Volume= Outflow 0.106 af, Atten= 3%, Lag= 1.9 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.46 fps, Min. Travel Time= 0.8 min Avg. Velocity = 0.44 fps, Avg. Travel Time= 2.6 min Peak Storage= 23 cf @ 12.13 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.51 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.032 af, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_	Area (a	ic) CN	l Descr	ription					
	0.	14 98	B Paveo	d parking,	HSG B		-		
_	0.2	23 61	>75%	Grass co	ver, Good,	HSG B			
	0.3	37 75	5 Weigł	nted Avera	ige				
	0.2	23	62.16% Pervious Area						
	0.	14	37.84	% Impervi	ous Area				
	Tc	Length	Slope	Velocity	Capacity	Description			
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		_		
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn			
						Grass: Short n= 0.150 P2= 2.17"			
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement			
						Smooth surfaces n= 0.011 P2= 2.17"			
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF			
_						Grassed Waterway Kv= 15.0 fps	_		

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area	a =	0.37	'ac, 37	.84% Impe	rvious,	Inflow D	epth =	1.03	" for	10-yr	event	
Inflow	=	0.51	cfs @	12.05 hrs,	Volume	e=	0.032	af		-		
Outflow	=	0.01	cfs @	22.14 hrs,	Volume	e=	0.032	af,	Atten=	98%,	Lag= 6	05.3 min
Primary	=	0.01	cfs @	22.14 hrs,	Volume	e=	0.032	af				
Routed	to Reac	h 10 :	Creek	Section 2								
Secondary	=	0.00	cfs @	0.00 hrs,	Volume	e=	0.000	af				
Routed to Reach 10 : Creek Section 2												

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.82' @ 22.14 hrs Surf.Area= 775 sf Storage= 1,003 cf

Plug-Flow detention time= 1,286.8 min calculated for 0.032 af (100% of inflow) Center-of-Mass det. time= 1,286.7 min (2,146.8 - 860.1)

Volume	Invert	Avail	.Stora	ge Storage Descr	Storage Description	
#1	468.67'		2,105	cf Custom Stage	e Data (Prismatic	Listed below (Recalc)
Elevatio (fee	on Sui et)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
468.6	468.67 550 0.0		0	0		
469.5	50	550	40.0	183	183	
472.0	00	550	20.0	275	458	
472.0)1	550	100.0	5	463	
474.(00	1,100	100.0	1,642	2,105	
Device	Routing	Inv	vert (Dutlet Devices		
#1	Primary	468.	.67' (5.0" Round 6" Cul	lvert	Ka- 0 500
			L	_= 35.0 CPP, squ nlet / Outlet Invert=	are edge neadwai	I, KE= 0.500 S= 0.0101 '/' Cc= 0.000
			r	= 0.013 Corrugate	d PF_smooth inte	S = 0.01917 $CC = 0.900$
#2	Device 1	468.	.67' (.500 in/hr Bio-Ref	tention Media over	er Surface area Phase-In= 0.01
#3	Device 1	473.	.00' 2	24.0" x 24.0" Horiz	. Grate C= 0.600)
			L	imited to weir flow	at low heads	
#4	Secondary	473.	.50' ′	0.0' long x 20.0' l	breadth Broad-Ci	rested Rectangular Weir
			ŀ	lead (feet) 0.20 0	.40 0.60 0.80 1.0	00 1.20 1.40 1.60
			(Coef. (English) 2.6	8 2.70 2.70 2.64	2.63 2.64 2.64 2.63
				~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

Primary OutFlow Max=0.01 cfs @ 22.14 hrs HW=472.82' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.59 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.80" for 10-yr event Inflow = 0.48 cfs @ 12.15 hrs, Volume= 0.137 af Outflow = 0.47 cfs @ 12.21 hrs, Volume= 0.137 af, Atten= 2%, Lag= 3.3 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.46 fps, Min. Travel Time= 1.7 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 5.1 min

Peak Storage= 48 cf @ 12.17 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.80" for 10-yr event Inflow 0.47 cfs @ 12.21 hrs, Volume= 0.137 af Outflow 0.46 cfs @ 12.27 hrs, Volume= 0.137 af, Atten= 2%, Lag= 3.5 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.44 fps, Min. Travel Time= 1.9 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 5.6 min

Peak Storage= 51 cf @ 12.23 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'



0.52 0.5 - Inflow 0.47 cfs 0.48 Outflow 0.46 Inflow Area=2.05 ac 0.44 0.42 Avg. Flow Depth=0.16' 0.4 0.38 0.36 Max Vel=1.44 fps 0.34 0.32 n=0.025 0.3 (S) 0.28 Flow 0.26 L=160.0' 0.24 0.22 S=0.0083 '/' 0.2 0.18 Capacity=22.22 cfs 0.16 0.14 0.12 0.1 0.08 0.06 0.04 0.02 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 11: Creek Section 3

Hydrograph

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, Inflo	w Depth =	0.80'	' for 10	0-yr event	
Inflow	=	0.46 cfs @	12.27 hrs,	Volume=	0.13	7 af		-	
Primary	=	0.46 cfs @	12.27 hrs,	Volume=	0.13	7 af, <i>1</i>	Atten= 0°	%, Lag= 0.0) min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 1.80 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.150 af, Depth= 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_ Area (a	ac) CN	Descr	ription							
0.2	23 98	B Paveo	d parking,	HSG B						
1.	54 61	>75%	Grass co	ver, Good,	HSG B					
0.2	28 55	Wood	Voods, Good, HSG B							
2.0	05 64	Weial	nted Avera	ae						
1.8	82	88.78	% Perviou	s Area						
0.2	23	11.22	% Impervi	ous Area						
			•							
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow					
					Grass: Short n= 0.150 P2= 2.17"					
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods					
					Woodland Kv= 5.0 fps					
9.7	250	Total								



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 69

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.88" for 25-yr event Inflow = 1.80 cfs @ 12.11 hrs, Volume= 0.150 af Outflow = 1.70 cfs @ 12.20 hrs, Volume= 0.150 af, Atten= 5%, Lag= 5.4 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.28 fps, Min. Travel Time= 2.8 min Avg. Velocity = 0.77 fps, Avg. Travel Time= 8.2 min

Peak Storage= 283 cf @ 12.16 hrs Average Depth at Peak Storage= 0.36', Surface Width= 2.14' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow A	rea =	2.05 ac, 11	.22% Imperv	vious,	Inflow Depth	= 0.88	3" for 2	25-yr event	
Inflow	=	1.70 cfs @	12.20 hrs, \	Volume	e= 0.	150 af			
Primary	=	1.70 cfs @	12.20 hrs, \	Volume	e= 0.	150 af,	Atten= 0	0%, Lag= 0.0 n	nin

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.91 cfs @ 12.11 hrs, Volume= 0 Routed to Reach 07 : Creek Section 1

0.072 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_ Area (a	ic) CN	l Descr	ription								
0.4	48 61	>75%	Grass co	ver, Good,	HSG B						
0.1	16 98	B Paveo	aved parking, HSG B								
0.2	24 55	Wood	Voods, Good, HSG B								
0.8	88 66	Weigl	nted Avera	qe							
0.	0.72 81.82% Pervious Area										
0.1	16	18.18	% Impervi	ous Area							
			-								
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									

Subcatchment 04: Proposed Drainage Subarea 'A'



Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 1.54 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.094 af, Depth= 1.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_	Area (a	c) CN	l Descr	ription						
	0.2	26 98	B Paveo	Paved parking, HSG B						
_	0.5	54 61	>75%	Grass cov	ver, Good,	HSG B				
	3.0	30 73	8 Weigł	nted Avera	ge					
	0.5	54	67.50	% Perviou	s Area					
	0.2	26	32.50	% Impervi	ous Area					
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn				
						Grass: Short n= 0.150 P2= 2.17"				
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF				
_						Grassed Waterway Kv= 15.0 fps				
		110	- · · ·			T 00 :				

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80 ac, 32	2.50% Impe	rvious, Inflow	Depth = 1	1.41" for	25-yr event	
Inflow	=	1.54 cfs @	12.05 hrs,	Volume=	0.094	af		
Outflow	=	0.36 cfs @	12.57 hrs,	Volume=	0.094	af, Atten=	= 76%, Lag= 31.5 mi	n
Primary	=	0.36 cfs @	12.57 hrs,	Volume=	0.094	af		
Routed	to Reac	h 07 : Creek	Section 1					
Secondary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000	af		
Routed	to Reac	h 07 : Creek	Section 1					

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.05' @ 12.57 hrs Surf.Area= 1,393 sf Storage= 1,969 cf

Plug-Flow detention time= 901.5 min calculated for 0.094 af (100% of inflow) Center-of-Mass det. time= 901.4 min (1,753.9 - 852.5)

Volume	Invert	Avai	il.Stora	age	Storage Description				
#1	468.67'		3,49	4 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)		
Elevatior (feet	n Su	rf.Area (sɑ-ft)	Void %)	s)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)			
468.6	7	910	0.	0	0	0			
469.50	0	910	40.	0	302	302			
472.0	0	910	20.	0	455	757			
472.0	1	910	100.	0	9	766			
474.00	0	1,831	100.	0	2,727	3,494			
Device	Routing	In	vert	Outle	et Devices				
#1	Primary	468	8.67'	6.0" L= 3 Inlet n= 0	.0" Round 6" Culvert = 35.0' CPP, square edge headwall, Ke= 0.500 nlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900				
#2	Device 1	468	8.67'	0.50	0 in/hr Bio-Reten	tion Media ove	r Surface area Phase-In= 0.01'		
#3	Device 1	473	8.00'	24.0 Limit	" x 24.0" Horiz. G ed to weir flow at	Grate C= 0.600 low heads			
#4	Secondary	473	8.50'	10.0 Head Coef	l long x 20.0' bre d (feet) 0.20 0.40 f. (English) 2.68 2	adth Broad-Cr 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63		
Primary	OutFlow Ma	ax=0.32	cfs @) 12.5	57 hrs HW=473.0	5' (Free Discha	arge)		

-1=6" Culvert (Passes 0.32 cfs of 1.63 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.31 cfs @ 0.74 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 75



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 1.19" for 25-yr event 0.92 cfs @ 12.11 hrs, Volume= 0.89 cfs @ 12.13 hrs, Volume= Inflow = 0.166 af Outflow = 0.166 af, Atten= 4%, Lag= 1.2 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.84 fps, Min. Travel Time= 0.6 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 2.4 min Peak Storage= 35 cf @ 12.12 hrs Average Depth at Peak Storage= 0.24', Surface Width= 2.10' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.79 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.047 af, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

Area (a	<u>c) CN</u>	Descr	ription		
0.1	14 98	Paveo	d parking,	HSG B	
0.2	23 61	>75%	Grass cov	ver, Good,	HSG B
0.3	37 75	Weigh	nted Avera	ge	
0.2	23	62.16	% Perviou	s Area	
0.1	14	37.84	% Impervi	ous Area	
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn
					Grass: Short n= 0.150 P2= 2.17"
0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement
					Smooth surfaces n= 0.011 P2= 2.17"
0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Hydrograph

Summary for Pond 09: Bioretention (South)

Inflow Area	a =	0.37 ac, 37	7.84% Impe	rvious, Inflow De	pth = 1.54"	for 25-yr	event
Inflow	=	0.79 cfs @	12.05 hrs,	Volume=	0.047 af	-	
Outflow	=	0.07 cfs @	12.97 hrs,	Volume=	0.047 af, A	Atten= 91%,	Lag= 55.1 min
Primary	=	0.07 cfs @	12.97 hrs,	Volume=	0.047 af		-
Routed	to Reac	h 10 : Creek	Section 2				
Secondary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	to Reac	h 10 : Creek	Section 2				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.01' @ 12.97 hrs Surf.Area= 827 sf Storage= 1,152 cf

Plug-Flow detention time= 1,070.9 min calculated for 0.047 af (100% of inflow) Center-of-Mass det. time= 1,070.9 min (1,917.8 - 846.9)

Volume	Invert	Avail.St	orage	e Storage Description					
#1	468.67'	2,	105 cf	Custom Stage	Custom Stage Data (Prismatic)Listed below (Recalc)				
Elevatio (fee	on Su	rf.Area Vo	oids (%)	Inc.Store	Cum.Store				
468.6	67 67	550	0.0	0	0				
469.5	50	550 4	0.0	183	183				
472.0)0)1	550 Z	0.0	275	458 463				
474.0	00	1,100 10	0.0	1,642	2,105				
Device	Routing	Inver	t Outl	et Devices					
#1	Primary	468.67	' 6.0'' L= 3 Inlet n= 0	Round 6" Culv 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall, 68.67' / 468.00' PE. smooth intel	, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior, Flow Area= 0.20 sf			
#2	Device 1	468.67	0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473.00	' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600				
#4	Secondary	473.50	' 10.0 Hea Coe	.0' long x 20.0' breadth Broad-Crested Rectangular Weir ead (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 pef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63					
Drimary		av-0.04 cfs	@ 12	07 bre H\M-173 (11' (Eree Discha	arge)			

Primary OutFlow Max=0.04 cfs @ 12.97 hrs HW=473.01' (Free Discharge)

-1=6" Culvert (Passes 0.04 cfs of 1.62 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.03 cfs @ 0.34 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.25" for 25-yr event Inflow = 0.90 cfs @ 12.13 hrs, Volume= 0.214 af Outflow = 0.88 cfs @ 12.17 hrs, Volume= 0.214 af, Atten= 2%, Lag= 2.6 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.83 fps, Min. Travel Time= 1.3 min

Avg. Velocity = 0.52 fps, Avg. Travel Time= 4.7 min

Peak Storage= 72 cf @ 12.15 hrs Average Depth at Peak Storage= 0.24' , Surface Width= 2.10' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.25" for 25-yr event Inflow = 0.88 cfs @ 12.17 hrs, Volume= 0.214 af Outflow = 0.86 cfs @ 12.22 hrs, Volume= 0.214 af, Atten= 3%, Lag= 2.9 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.81 fps, Min. Travel Time= 1.5 min Avg. Velocity = 0.52 fps, Avg. Travel Time= 5.2 min

Peak Storage= 77 cf @ 12.20 hrs Average Depth at Peak Storage= 0.23', Surface Width= 2.09' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious,	Inflow	Depth =	1.25	" for 25-	yr event	
Inflow	=	0.86 cfs @	12.22 hrs,	Volume	e=	0.214	laf		-	
Primary	=	0.86 cfs @	12.22 hrs,	Volume) =	0.214	l af,	Atten= 0%	, Lag= 0.	0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 2.73 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.213 af, Depth= 1.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_ Area (a	ac) CN	Descr	ription		
0.2	23 98	B Paveo	d parking,	HSG B	
1.	54 61	>75%	Grass co	ver, Good,	HSG B
0.2	28 55	i Wood	ls, Good, H	ISG B	
2.0	05 64	Weial	nted Avera	ae	
1.8	82	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
			•		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 85

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 1.25" for 50-yr event Inflow = 2.73 cfs @ 12.11 hrs, Volume= 0.213 af Outflow = 2.57 cfs @ 12.19 hrs, Volume= 0.213 af, Atten= 6%, Lag= 4.7 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.62 fps, Min. Travel Time= 2.4 min Avg. Velocity = 0.85 fps, Avg. Travel Time= 7.4 min

Peak Storage= 376 cf @ 12.15 hrs Average Depth at Peak Storage= 0.48', Surface Width= 2.19' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow A	rea =	2.05 ac, 11	.22% Impervious	, Inflow Depth =	1.25"	for 50-yr ev	/ent
Inflow	=	2.57 cfs @	12.19 hrs, Volun	ne= 0.21	3 af		
Primary	=	2.57 cfs @	12.19 hrs, Volun	ne= 0.21	3 af, Atte	en= 0%, Lag	g= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 1.33 cfs @ 12.11 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.101 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

Area (a	ic) CN	Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.1	16 98	B Paveo	d parking,	HSG B	
0.2	24 55	i Wood	ls, Good, H	ISG B	
.0	88 66	Weigl	nted Avera	qe	
0.7	72	81.82	% Perviou	s Area	
0.1	16	18.18	% Impervi	ous Area	
			•		
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			
Subcatchment 04: Proposed Drainage Subarea 'A'



Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 2.05 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.125 af, Depth= 1.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_	Area (ad	c) CN	Descr	ription		
	0.2	6 98	Paveo	d parking,	HSG B	
_	0.5	4 61	>75%	Grass co	ver, Good,	HSG B
	0.8	0 73	Weigł	nted Avera	ge	
	0.5	4	67.50	% Perviou	s Area	
	0.2	6	32.50	% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
		440	- · · ·			T 0.0 i

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Are	a =	0.80 ac, 32	.50% Impe	rvious, Inflow	Depth = 1.87"	for 50-yr event	
Inflow	=	2.05 cfs @	12.05 hrs,	Volume=	0.125 af		
Outflow	=	0.83 cfs @	12.30 hrs,	Volume=	0.125 af, A	tten= 60%, Lag= 15	5.1 min
Primary	=	0.83 cfs @	12.30 hrs,	Volume=	0.125 af		
Routed	l to Read	h 07 : Creek	Section 1				
Secondary	/ =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	l to Read	h 07 : Creek	Section 1				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.10' @ 12.30 hrs Surf.Area= 1,414 sf Storage= 2,031 cf

Plug-Flow detention time= 681.0 min calculated for 0.125 af (100% of inflow) Center-of-Mass det. time= 680.9 min (1,523.9 - 843.0)

Volume	Invert	Avail	l.Stora	ge Storage Descr	ription						
#1	468.67'		3,494	cf Custom Stage	e Data (Prismatio	Listed below (Recalc)					
Elevatio (fee	on Su	urf.Area (sq-ft)	Voids	Inc.Store	Cum.Store						
468.6	67	910	0.0	0	0						
469.5	50	910	40.0	302	302						
472.0	00	910	20.0	455	757						
472.0 474.0)0	910 1,831	100.0	9 2,727	3,494						
Device	Routing	Inv	vert	Outlet Devices							
#1 Primary 468.67'			.67' (6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900 n= 0.013 Corrugated PE smooth interior. Flow Area= 0.20 sf							
#2	Device 1	468	.67' (0.500 in/hr Bio-Ref	tention Media over	er Surface area Phase-In= 0.01'					
#3	Device 1	473	.00' 2	24.0" x 24.0" Horiz. Grate C= 0.600							
#4 Secondary 473.50' 10.0' long x 20.0' breadth Broad-Crested Rectangular We Head (feet) 0.20 0.40 0.60 0.80 1.00 1.40 1.60 Coef. (English) 2.68 2.70 2.64 2.64 2.63											
Drimary	rimary OutFlow Max=0.82 of (2.20) hrs $HW=473.10^{1}$ (Free Discharge)										

Primary OutFlow Max=0.82 cfs @ 12.30 hrs HW=473.10' (Free Discharge)

-1=6" Culvert (Passes 0.82 cfs of 1.64 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.81 cfs @ 1.03 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 91



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 1.61" for 50-yr event 1.69 cfs @ 12.27 hrs, Volume= 1.65 cfs @ 12.30 hrs, Volume= 0.226 af Inflow = Outflow = 0.226 af, Atten= 3%, Lag= 1.7 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.26 fps, Min. Travel Time= 0.5 min Avg. Velocity = 0.50 fps, Avg. Travel Time= 2.4 min Peak Storage= 52 cf @ 12.29 hrs Average Depth at Peak Storage= 0.36', Surface Width= 2.14' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 1.04 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.062 af, Depth= 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_	Area (a	c) CN	Descr	ription		
	0.1	14 98	Paveo	d parking,	HSG B	
_	0.2	23 61	>75%	Grass co	ver, Good,	HSG B
	0.3	37 75	Weigh	nted Avera	ge	
	0.2	23	62.16	% Perviou	s Area	
	0.1	14	37.84	% Impervi	ous Area	
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement
						Smooth surfaces n= 0.011 P2= 2.17"
0.4 88		88	0.0568	3.57		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
	~ ~					

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Are	a =	0.37 ac, 37	.84% Impe	rvious, Inflow	Depth = 2.03"	for 50-yr ev	ent
Inflow	=	1.04 cfs @	12.05 hrs,	Volume=	0.062 af	-	
Outflow	=	0.34 cfs @	12.39 hrs,	Volume=	0.062 af, A	tten= 67%, La	ag= 20.8 min
Primary	=	0.34 cfs @	12.39 hrs,	Volume=	0.062 af		-
Routed	I to Rea	ach 10 : Creek	Section 2				
Secondary	y =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	I to Rea	ach 10 : Creek	Section 2				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.05' @ 12.39 hrs Surf.Area= 838 sf Storage= 1,187 cf

Plug-Flow detention time= 817.6 min calculated for 0.062 af (100% of inflow) Center-of-Mass det. time= 818.9 min (1,656.8 - 837.9)

Volume	Invert	Avail.	.Storage	Storage Descrip	otion						
#1	468.67'		2,105 cf	Custom Stage	Data (Prismatic)	_isted below (Recalc)					
Elevatio (fee	on Su t)	urf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)						
468.6	<u>,</u> 67	550	0.0	0	0						
469.5	50	550	40.0	183	183						
472.0	00	550	20.0	275	458						
472.0)1	550	100.0	5	463						
474.0	00	1,100	100.0	1,642	2,105						
Device	Routing	Inv	vert Out	et Devices							
#1 Primary 468.67'			67' 6.0'' L= 3 Inlet n= (6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900 n= 0.013 Corrugated PE smooth interior. Flow Area= 0.20 sf							
#2	Device 1	468.	67' 0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'					
#3	Device 1	473.	00' 24.0 Limi	24.0" x 24.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads							
#4	Secondary	473.	50' 10.0 Hea Coe	' long x 20.0' br d (feet) 0.20 0.4 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir D 1.20 1.40 1.60 2.63 2.64 2.64 2.63					
Drimary	rimary OutElow Max=0.32 cfs @ 12.30 brs. $HW=473.05'$ (Free Discharge)										

Primary OutFlow Max=0.32 cfs @ 12.39 hrs HW=473.05' (Free Discharge)

-1=6" Culvert (Passes 0.32 cfs of 1.63 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.31 cfs @ 0.75 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 95



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.69" for 50-yr event Inflow = 1.82 cfs @ 12.35 hrs, Volume= 0.288 af Outflow = 1.79 cfs @ 12.38 hrs, Volume= 0.288 af, Atten= 1%, Lag= 1.8 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.33 fps, Min. Travel Time= 1.1 min Avg. Velocity = 0.54 fps, Avg. Travel Time= 4.6 min

Peak Storage= 114 cf @ 12.36 hrs Average Depth at Peak Storage= 0.38', Surface Width= 2.15' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

 Inflow Area =
 2.05 ac, 27.32% Impervious, Inflow Depth =
 1.69" for 50-yr event

 Inflow =
 1.79 cfs @
 12.38 hrs, Volume=
 0.288 af

 Outflow =
 1.78 cfs @
 12.41 hrs, Volume=
 0.288 af, Atten= 1%, Lag= 2.3 min

 Routed to Link 12 : Proposed Point A
 0.288 af, Atten= 1%, Lag= 2.3 min
 0.288 af, Atten= 1%, Lag= 2.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.32 fps, Min. Travel Time= 1.2 min Avg. Velocity = 0.54 fps, Avg. Travel Time= 5.0 min

Peak Storage= 123 cf @ 12.39 hrs Average Depth at Peak Storage= 0.37', Surface Width= 2.15' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Summary for Link 12: Proposed Point A

Inflow Are	a =	2.05 ac, 27	.32% Imper	vious, I	Inflow D	epth = [·]	1.69"	for 50-y	r event
Inflow	=	1.78 cfs @	12.41 hrs,	Volume	;=	0.288	af		
Primary	=	1.78 cfs @	12.41 hrs,	Volume	;=	0.288	af, A	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 3.95 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.296 af, Depth= 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

Area (a	c) CN	Descr	ription		
0.2	23 98	Paveo	d parking,	HSG B	
1.5	54 61	>75%	Grass cov	ver, Good,	HSG B
0.2	28 55	Wood	ls, Good, H	ISG B	
2.0)5 64	Weigh	nted Avera	ge	
1.8	32	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
			·		
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dr***Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23*" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 101

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 1.73" for 100-yr event Inflow = 3.95 cfs @ 12.11 hrs, Volume= 0.296 af Outflow = 3.77 cfs @ 12.17 hrs, Volume= 0.296 af, Atten= 5%, Lag= 4.0 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.93 fps, Min. Travel Time= 2.1 min Avg. Velocity = 0.92 fps, Avg. Travel Time= 6.8 min

Peak Storage= 488 cf @ 12.14 hrs Average Depth at Peak Storage= 0.61', Surface Width= 2.24' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Reach 02: Full Creek

Summary for Link 03: Existing Point A

Inflow Ar	rea =	2.05 ac, 11	.22% Impervio	ous, Inflow	Depth = 1.73"	for 100-y	r event
Inflow	=	3.77 cfs @	12.17 hrs, Vo	olume=	0.296 af		
Primary	=	3.77 cfs @	12.17 hrs, Vo	olume=	0.296 af, <i>A</i>	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 1.88 cfs @ 12.10 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.138 af, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

Area (a	c) CN	Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.1	16 98	Paveo	d parking,	HSG B	
0.2	24 55	Wood	ls, Good, H	ISG B	
0.0	38 66	Weiał	nted Avera	ae	
0.7	72	81.82	% Perviou	s Area	
0.1	16	18.18	% Impervi	ous Area	
			•		
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	•
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 2.72 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.164 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

_	Area (a	c) CN	l Descr	ription		
	0.2	26 98	B Paveo	d parking,	HSG B	
_	0.5	54 61	>75%	Grass cov	ver, Good,	HSG B
	3.0	30 73	8 Weigł	nted Avera	ge	
	0.5	54	67.50	% Perviou	s Area	
	0.2	26	32.50	% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
		440	— · · ·			T oo i

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80	ac, 32	.50% Impe	rvious, Inflow De	epth = 2	2.46"	for	100-yr	⁻ event	
Inflow	=	2.72	cfs @	12.05 hrs,	Volume=	0.164	af				
Outflow	=	1.69	cfs @	12.17 hrs,	Volume=	0.164	af, Atte	en=	38%,	Lag= 7.6	min
Primary	=	1.69	cfs @	12.17 hrs,	Volume=	0.164	af				
Routed	to Reac	h 07 :	Creek	Section 1							
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000	af				
Routed	to Reac	h 07 :	Creek	Section 1							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.19' @ 12.17 hrs Surf.Area= 1,458 sf Storage= 2,169 cf

Plug-Flow detention time= 521.0 min calculated for 0.164 af (100% of inflow) Center-of-Mass det. time= 520.9 min (1,355.3 - 834.4)

Volume Invert Avail.Stor		.Storage	Storage Description									
#1	468.67'		3,494 cf	Custom Stage I	Custom Stage Data (Prismatic)Listed below (Recalc)							
Elevatio	on Su	rf.Area	Voids	Inc.Store	Cum.Store							
(fee	et)	(sq-ft)	(%)	(cubic-feet)	(cubic-feet)							
468.6	67	910	0.0	0	0							
469.5	50	910	40.0	302	302							
472.0	00	910	20.0	455	757							
472.0)1	910	100.0	9	766							
474.0	00	1,831	100.0	2,727	3,494							
Device	Routing	Inv	vert Out	let Devices								
#1	Primary	468.	67' 6.0	D" Round 6" Culvert 35.0' CPP square edge beadwall Ke= 0.500								
			Inle	Inlet / Outlet Invert= $468.67' / 468.00'$ S= 0.0191 '/' Cc= 0.900								
#2	Device 1	468.	67' 0.5	00 in/hr Bio-Reter	ntion Media over	Surface area Phase-In= 0.01						
#3	Device 1	473.	00' 24 .	24.0" x 24.0" Horiz. Grate C= 0.600								
			Lim	Limited to weir flow at low heads								
#4	Secondary	473.	50' 10 .	0' long x 20.0' bre	eadth Broad-Cres	sted Rectangular Weir						
	-		Hea	ead (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60								
Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63												
Primary	OutFlow Ma Culvert (Bar	ax=1.65 o rrel Contr	cfs @ 12 rols 1 65	.17 hrs HW=473.1 cfs @ 8 41 fps)	8' (Free Dischar	ge)						

2=Bio-Retention Media (Passes < 0.02 cfs potential flow)

-3=Grate (Passes < 2.05 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 2.16" for 100-yr event Inflow = 3.33 cfs @ 12.16 hrs, Volume= 0.302 af Outflow = 3.30 cfs @ 12.17 hrs, Volume= 0.302 af, Atten= 1%, Lag= 0.6 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.82 fps, Min. Travel Time= 0.4 min Avg. Velocity = 0.51 fps, Avg. Travel Time= 2.3 min Peak Storage= 83 cf @ 12.16 hrs

Average Depth at Peak Storage= 0.56', Surface Width= 2.23' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 1.35 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.081 af, Depth= 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

_ Area (a	ac) CN	l Desci	ription								
0.	14 98	B Pave	d parking,	HSG B							
0.	23 61	>75%	Grass cov	ver, Good,	HSG B						
0.	37 75	5 Weigl	nted Avera	ge							
0.	23	62.16	% Perviou	s Area							
0.	14	37.84	% Impervi	ous Area							
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description						
2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn						
					Grass: Short n= 0.150 P2= 2.17"						
0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement						
<u> </u>			o		Smooth surfaces n= 0.011 P2= 2.17"						
0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF						
					Grassed vvalerway Kv= 15.0 fps						

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Hydrograph

Summary for Pond 09: Bioretention (South)

Inflow Are	a =	0.37 ac, 37	.84% Impe	rvious, Inflow D	Depth =	2.64"	for	100-y	r event	
Inflow	=	1.35 cfs @	12.05 hrs,	Volume=	0.081	af		-		
Outflow	=	0.76 cfs @	12.20 hrs,	Volume=	0.081	af, At	tten=	44%,	Lag= 9.3 r	min
Primary	=	0.76 cfs @	12.20 hrs,	Volume=	0.081	af			-	
Routed	to Read	ch 10 : Creek	Section 2							
Secondary	y =	0.00 cfs @	0.00 hrs,	Volume=	0.000	af				
Routed	to Read	ch 10 : Creek	Section 2							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.09' @ 12.20 hrs Surf.Area= 849 sf Storage= 1,221 cf

Plug-Flow detention time= 631.2 min calculated for 0.081 af (100% of inflow) Center-of-Mass det. time= 632.6 min (1,462.3 - 829.7)

Volume	/olume Invert Avail.Stora		.Storage	e Storage Description								
#1	468.67'		2,105 c	f Custom Stage	Data (Prismatic)∟	isted below (Recalc)						
Elevatio (fee	on Su	rf.Area (sg-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)							
468.6	67	550	0.0	0	0							
469.5	50	550	40.0	183	183							
472.0	00	550	20.0	275	458							
472.0)1	550	100.0	5	463							
474.0	00	1,100	100.0	1,642	2,105							
Device	vice Routing Invert Outlet Devices											
#1	Primary	468.	67' 6 .)" Round 6" Culvert								
	-		L=	L= 35.0' CPP, square edge headwall, Ke= 0.500								
			Inl	et / Outlet Invert= 4	68.67' / 468.00'	S= 0.0191 '/' Cc= 0.900						
			n=	0.013 Corrugated	PE, smooth interio	or, Flow Area= 0.20 sf						
#2	Device 1	468.	67' 0.	.500 in/hr Bio-Retention Media over Surface area Phase-In= 0.01'								
#3	Device 1	473.	00' 24	4.0" x 24.0" Horiz. Grate C= 0.600								
	_		Lir	nited to weir flow a	ited to weir flow at low heads							
#4	Secondary	473.	50' 10	.0' long x 20.0' br	eadth Broad-Cres	sted Rectangular Weir						
			He	ead (feet) 0.20 0.4	ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60							
			Co	pef. (English) 2.68	2.70 2.70 2.64 2	2.63 2.64 2.64 2.63						
Primary	OutFlow Ma	ax=0.75	cfs @ 1	2.20 hrs HW=473.0	09' (Free Dischar	ge)						

1=6" Culvert (Passes 0.75 cfs of 1.63 cfs potential flow)

—2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.74 cfs @ 1.00 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dr***Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23*" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 111



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 2.25" for 100-yr event Inflow = 3.91 cfs @ 12.18 hrs, Volume= 0.384 af Outflow = 3.89 cfs @ 12.21 hrs, Volume= 0.384 af, Atten= 1%, Lag= 2.1 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.98 fps, Min. Travel Time= 0.8 min Avg. Velocity = 0.56 fps, Avg. Travel Time= 4.4 min

Peak Storage= 197 cf @ 12.20 hrs Average Depth at Peak Storage= 0.63', Surface Width= 2.25' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 2.25" for 100-yr event Inflow = 3.89 cfs @ 12.21 hrs, Volume= 0.384 af Outflow = 3.74 cfs @ 12.24 hrs, Volume= 0.384 af, Atten= 4%, Lag= 2.0 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.93 fps, Min. Travel Time= 0.9 min Avg. Velocity = 0.56 fps, Avg. Travel Time= 4.8 min

Peak Storage= 210 cf @ 12.22 hrs Average Depth at Peak Storage= 0.62', Surface Width= 2.25' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Are	ea =	2.05 ac, 27	.32% Imper	vious, Infl	low Depth =	2.25	" for 100-	yr event
Inflow	=	3.74 cfs @	12.24 hrs,	Volume=	0.384	1 af		
Primary	=	3.74 cfs @	12.24 hrs,	Volume=	0.384	4 af, .	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Drainage Analysis Calculations Quality Calculations

Figure 05 – WQv/RRv Exhibit Water Quality and Runoff Reduction Calculations





_			Project No.:	2951
SMF Associates	<u>CALCI</u>	<u>JLATIONS</u> :	Date:	8/22/2024
GINEERS • SURVEYORS • LANDSCAPE ARCHITECTS	Project:	550 Macedon Center Road	By:	JGC
		Overall WQv/RRv Calculations	Sheet	1 of 2
<u>Subarea A</u> 90% Rainfall Event Water Quality Area (Dis Imp. Area within Disturb	turbed Area ed Area	P = 1 inches a) A = 1.29 acres Total Imp = 0.42 acres	२econstructed Imp. = New Imp.=	0.07 acres 0.35 acres
I = % Impervious = Weighted S Value =		32.6 % 0.40		
<u>Hydrologic Soil Group (</u>	HSG) Speci	fic Reduction Factor "S" (within new	<u>w impervious areas) =</u>	
Soil Classification	Area (ac)	S Factor Weighted #		
B Soils	1.29	0.0 0.516		
C Soils		0.3 0		
Total Area = Total Weighted # = Weighted S Value = Rv = 0.05 + 0.009(I) Rv = 0.3430233	1.29 0.516 0.40	acres	tod imponyious aroa	
25% WQv for Reconst Required WQv = Req. WQv = 0.032	P * A *Rv AC-FT	a + 100% WQv for New Imperviou $\left(\left(100\% * \frac{\text{New Imp.}}{\text{Total Imp.}} \right) + \left(25\% * \frac{\text{Reconstruction}}{12} \right)$	us Area <u>nstructed Imp.</u>)} <u>rotal Imp.</u>	
Req WQv = 1405	CF]		
Redevelopment I	$R R v = \frac{P}{r}$	New Impervious Area *0.95 12		
Redevelopment RRv =	0.0277083	AC-FT		
Minimum Allowable R Minimum Allowa Min. Allowable RRv =	Rv for Red ble RRv 0.0110833	evelopment is calculated for new $= \frac{P * S * 0.95 * New Imp.}{12}$ B AC-FT	impervious only	
Min Allowable RRv =	483	S CF		

	CALC		Project	t No.: 295'
	CALC	ULAHONS:	Date:	8/22/2024
	Project:	550 Macedon Center Road	By:	JGC
		WQv and RRv Summary	Sheet	2 of 2
Overall Required WQv	/ =		1405 cf	
Minimum RRv Reg =			483 cf	
•				
WQv Total	-			
Bio-Retention North			85 cf	
Bio-Retention South			0 cf	
		Total WQv Provided =	85 cf	
		Total WQv Provided =	85 cf	
RRv Total		Total WQv Provided =	85 cf	
RRv Total		<u>Total WQv Provided =</u>	85 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u> <u>Total RRv Provided =</u>	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South	-	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u>	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South	- ward overa	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u> Il WQv Requirement	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South *RRv is also counted to Total WQv = RRv + W0	ward overa	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u> Il WQv Requirement 1520 cf	85 cf 910 cf 525 cf 1435 cf	

	CALC	III ATIONS .	Project No.: 2951
ASSOCIAT	TES <u>CALC</u>	<u>ULATIONS</u> :	Date: 8/8/2024
SURVEYORS LANDSCAPE ARCHI	Project:	550 Macedon Center Road	By: JGC
		Filtering Bio-Retention Calculation	Sheet 1 of 1
Drainage Area to	Pratice (NOR I	H BIORE I EN LION)	
	eni) –		
Impervious Area =		0.26 acres	
I = % Impervious =		32.5 %	
Rv = 0.05 + 0.009(I)	0.34	
WQv = P * Area * F	Rv / 12	995 cf	
Calculate the Mini	imum Filter Ar	<u>ea</u>	
Af = Area of Filter ((sf)		
WQv = Water Qual	lity Volume (cf)		$Af = \frac{WQv * df}{WQv * df}$
df = Depth of Filter	(ft)		k (hf+df)*tf
k = Permeability flo	w rate of filter r	nedia (ft/day)	
nt = Average Heigr	nt of Ponding (11 r bod drain time) (0.5 π max.)	
		(uays)	
df =	2.5 ft	(Use 2.5-4.0 ft)	
k =	1.0 ft/day	(Use 1 ft/day for Bio-Retention)	
hf =	0.5 ft/day	(Use 0.5 ft max.)	
tf =	2.0 days	(Use 2 days for bio-retention)	
Required Filter Ar	rea (Af) =	414 sf	
Determine Actual	Bio-Retention	Area	
Filter Width (ft) =		1 ft 705 ft	
Filter Length (It) =		725 cf	
Filler Area (SI) –		723 51	
Actual Volume Pro	vided (cf) =	1740 sf	
Determine Runoff	Reduction		
		040 -6	
		910 CT	
RRv Applied (cf)		910 cf	
WQv Applied (cf)		85 CF	

Drainage Area to P (90% Rainfall E Area = Impervious Area = I = % Impervious Rv = 0.05 + 0.008 WQv = P * Area * Calculate the Min Af = Area of Filter WQv = Water Quadre df = Depth of Filter WQv = Water Quadre df = Average Height th = Average Height th = Average Height th = tf = Required Filter A Determine Actuat Filter Width (ft) = Filter Area (sf) = Actual Volume Pr Determine Runco RRv Calculated RRv Calculated	ATES CALC		Project No.: 2951
• SURVEYORS • LANDSCAPE ARC • SURVEYORS • LANDSCAPE ARC P (90% Rainfall E Area = Impervious Area = I = % Impervious Rv = 0.05 + 0.005 WQv = P * Area * Calculate the Min Af = Area of Filter WQv = Water Quadif = Depth of Filter k = Permeability f hf = Average Heig tf = Maximum Filter df = k = hf = tf = Petermine Actua Filter Width (ft) = Filter Area (sf) = Actual Volume Pr Determine Runo RRv Calculated RRv Calculated	11.0	<u>ULATIONS</u> :	Date: 8/8/2024
Drainage Area toP (90% Rainfall EArea =Impervious Area =I = % ImperviousRv = 0.05 + 0.008WQv = P * Area *Calculate the MiiAf = Area of FilterWQv = Water Quadif = Depth of Filterk = Permeability fhf = Average Heigtf = Maximum Filterdf =k =hf =tf =Determine ActuaFilter Width (ft) =Filter Length (ft) =Filter Area (sf) =Actual Volume PrDetermine RunoRRv CalculatedRRv Applied (cf)	Project:	550 Macedon Center Road	Ву: ЈGС
Drainage Area to P (90% Rainfall E Area = Impervious Area = I = % Impervious Rv = 0.05 + 0.009 WQv = P * Area *Calculate the Min Af = Area of Filter WQv = Water Quadif = Depth of Filter k = Permeability f hf = Average Heig tf = Maximum Filter df = k = hf = tf =Determine ActuaFilter Width (ft) = Filter Length (ft) = Filter Area (sf) =Determine RunoRRv CalculatedRRv Calculated	CTITION IN	Filtering Bio-Retention Calculation	Sheet 1 of 1
Calculate the MinAf = Area of Filter $WQv = Water Quadifydf = Depth of Filterk = Permeability fhf = Average Heigtf = Maximum Filterdf =k =hf =tf =Required Filter ADetermine ActuarFilter Width (ft) =Filter Length (ft) =Filter Area (sf) =Actual Volume PrDetermine RunoRRv CalculatedRRv Applied (cf)$	to Pratice (SOUT Event) = = = s =)9(I) * Rv / 12	H BIORETENTION) 1 inches 0.37 acres 0.14 acres 37.8 % 0.39 525 cf	
df = k = hf = tf = <u>Determine Actua</u> Filter Width (ft) = Filter Area (sf) = Actual Volume Pr <u>Determine Runo</u> RRv Calculated RRv Applied (cf)	inimum Filter Ar r (sf) uality Volume (cf) ter (ft) flow rate of filter r ight of Ponding (fi lter bed drain time	ea media (ft/day) :) (0.5 ft max.) ⊧ (days)	$Af = \frac{WQv * df}{k (hf + df) * tf}$
Required Filter A Determine Actua Filter Width (ft) = Filter Length (ft) = Filter Area (sf) = Actual Volume Pr Determine Runo RRv Calculated RRv Applied (cf)	2.5 ft 1.0 ft/day 0.5 ft/day 2.0 days	(Use 2.5-4.0 ft) (Use 1 ft/day for Bio-Retention) (Use 0.5 ft max.)	
Determine Actua Filter Width (ft) = Filter Length (ft) = Filter Area (sf) = Actual Volume Pr Determine Runo RRv Calculated	Area (Af) =	219 sf	
Determine Runo RRv Calculated RRv Applied (cf)	i <u>al Bio-Retention</u> : = Provided (cf) =	<u>Area</u> 1 ft 550 ft 550 sf 1320 sf	
RRv Calculated RRv Applied (cf)	off Reduction		
RRv Applied (cf)		528 cf	
	f)	525 cf	
WQv Applied (cf	/	0 CF	
	:f)		

Appendix 4

Storm Sewers

Figure 06 – Storm Sewer Drainage Areas Map Storm Sewer Sizing Calculations Rip-Rap Outlet Protection Calculations





Project:550 Macedon Center RoadProject No:2951Date:08/21/24By:DTT

By: Sheet 1 of 1

	Draii Struo	nage cture		Local Upstream contribution			olling		Pipe			h of t.)	e		city	of to pipe	ty	me	Next F	Point					
	From	То	Тс	с	А	cA	From	Тс	cA	Total cA	Contre To	I	Q (cfs)	DIA (in)	MATL	n	Length pipe (f	% slop	Diff. In	Capac (cfs)	Ratio e liquid t dia of	velocit (fps)	flow tir (min)	То	Тс
MH	D-1.2	D-1.1	10.0	0.5	0.18	0.09				0.00	10.0	1 12	0.20	0		0.012	117	1 45	1 70	1 50	0.22	2 60	0.5		10.5
INV	474.70	473.00								0.09	10.0	4.43	0.39	0	NUFE	0.012	117	1.45	1.70	1.50	0.55	3.09	0.5		10.5
MH	D-1.1	D-1	10.0	0.5	0.17	0.09	D-1.2	10.5	0.09	0.40	10.5	4.00	0.70	0		0.040	200	4.44	0.54	4 50	0.50	4 47	0.4		40.7
INV	473.00	472.49								0.18	10.5	4.30	0.78	ð	HUPE	0.012	30	1.41	0.51	1.50	0.50	4.47	0.1	D-1	10.7
MH	D-2	D-1	10.0	0.7	0.06	0.04				0.04	10.0	4.40	0.40	0		0.040	00	0.05	0.54	0.04	0.40	0.70	0.4		10.4
INV	475.00	472.49								0.04	10.0	4.43	0.18	ð	HDPE	0.012	88	2.85	2.51	2.21	0.19	3.78	0.4	D-1	10.4
MH	D-1	D	10.0	0.7	0.03	0.02	D-2	10.4	0.04	0.04	40.7	4.04	1.04	10		0.040	54	0.07	0.40	0.04	0.04	4.00			40.0
INV	472.49	472.00					D-1.1	10.7	0.18	0.24	10.7	4.34	1.04	12	HDPE	0.012	51	0.97	0.49	3.81	0.34	4.06	0.2		10.9
BME ASSOCIATES ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECTS	CALCULATIONS: Project: 550 Macedon Center Road	Project No.: 29 Date: 8/22/20 By: D Sheet	51 24 TT 1																						
--	--	--	---------------------																						
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	D 12 in 3.8 cfs Do 0.3 ft 8.0 ft 9.0 ft 5 sy 8 in 50 lbs	3	9.0																						
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	DA 6 in 0.8 cfs Do 0.3 ft 8.0 ft 8.5 ft 5 sy 1 IESS 8 in 50 lbs 50 lbs	1.5	8.5																						
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	DB 6 in 1.7 cfs Do 0.3 ft 0.3 ft 8.0 ft 8.5 ft 5 sy 8 in 50 lbs 50 lbs	1.5	8.5																						

Appendix 5

Fire Truck Turning Template







TOWN OF PERINTON

1350 TURK HILL ROAD. FAIRPORT, NEW YORK 14450-8796 (585) 223-0770, Fax: (585) 223-3629, www.perinton.org

Owner Authorization to Make Application

I, Debbie Kanner (Seal Two Partners, LLC) , authorize (print owner name legibly)

Andrew Spencer / BME Associates

(applicant/engineer name & company name)

to act as my agent to make application(s) to the Town of Perinton for the purpose of

Site Plan/ Subdivision/ Special Use Permit

(site plan/subdivision/change of use, etc.)

for the property that I own located at _____550 Macedon Center Road

Signature

Date

form date - 3/29/12

MONROE COUNTY CLERK'S OFFICE

<u>Return To:</u>

RICHAF	D C	COUCH	
3000-H	DZ 7	NVILLE	BOULEVARD
SUITE	532	2	
ALAMO	CA	94507	

Index	DEEDS				
Book	10565	Page	0066		
No. Pages 0005					
Instrument DEED					
Date :	1/	02/2008			
Time : 12:26:00					
Contro	1 #.	20080102	0382		

COUCH RICHARD COUCH JULIE SEAL TWO PARTNERS LLC

TT# TT 0000 010224 Employee ID BZ40

MORTGAGE TAX

TRANS TAX	\$.00	MORTGAGE AMOUNT	\$.00
FILE FEE-S	\$ 66.00			
FILE FEE-C	\$ 9.00	BASIC MORTGAGE TAX	\$.00
FILE FEE-S	\$ 19.00		-	
FILE FEE-C	\$ 8.00	SPEC ADDIT MTG TAX	\$.00
REC FEE	\$ 15.00			
MISC FEE-C	\$ 5.00	ADDITIONAL MTG TAX	\$.00
	\$.00			
	\$.00	Total	\$.00
Total:	\$ 122.00			

STATE OF NEW YORK MONROE COUNTY CLERK'S OFFICE

TRANSFER AMT

WARNING - THIS SHEET CONSTITUTES	THE CLERKS	TRANSFER AMT \$.00
ENDORSEMENT, REQUIRED BY SECTION	317-a(5) &		
SECTION 319 OF THE REAL PROPERTY	LAW OF THE		
STATE OF NEW YORK. DO NOT DETACH	OR REMOVE.	TRANSFER TAX \$.00

Cheryl Dinolfo Monroe County Clerk



WARRANTY DEED WITH LIEN COVENANT

THIS INDENTURE, made the 28th day of <u>Decomber</u>, 2007.

2300 J.N -2 PM 12: 26

n Barra an San National San Anna

Between Richard G. Couch, residing at 3000-F Danville Boulevard, Suite 532, Alamo, CA 94507, and Julie Couch, residing at 112 Garden Creek Place, Danville, CA 94526 Grantors, and

Seal Two Partners, LLC, with offices located at 3000-F Danville Boulevard #532, Alamo, CA 94507, Grantee,

WITNESSETH that the Grantors, in consideration of ONE DOLLAR (\$1.00) lawful money of the United States, and other valuable consideration paid by the Grantee, do hereby grant and release unto the Grantee, its heirs or successors, and assigns forever,

ALL THAT TRACT OR PARCEL OF LAND, siutate in the Town of Perinton, County of Monroe and State of New York, being part of Town Lot 29, Township 12, Range 4, and more particularly bounded and described as follows:

Commencing at Section Corner which point is the southeast corner of said Town Lot 29 in center of highway, thence North 5 1/2 degrees East 433 feet to a point, thence westerly on a line parallel with the center line of the Macedon Center Road 293 feet to a point, thence southerly along the line parallel with the first described course 322 feet to the center of the Macedon Center Road, thence easterly along the center of said road 293 feet to the place of beginning.

Subject to all covenants, easements and restrictions of record, if any, affecting said premises.

Being and intending to convey the same premises conveyed to Grantors herein by deed dated July 22, 2002 and recorded on July 23, 2002 in the Monroe County Clerk's Office in Liber 09651 of Deeds, page 0548.

Tax Account Number:	153.19-1-34
Property Address:	550 Macedon Center Road, Fairport, NY 14450
Tax Mailing Address:	3000-F Danville Blvd #532, Alamo, CA 94507

TOGETHER with the appurtenances and all the estate and rights of the Grantors in and to said premises,

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, its heirs or successor and assigns forever.

AND said Grantors covenant as follows:

FIRST, that the Grantee shall quietly enjoy the said premises;

SECOND, that said Grantors will forever WARRANT the title to said premises.

THIRD, That, in Compliance with Sec. 13 of the Lien Law, the Grantors will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

WHENEVER the sense of this instrument so requires, the words "Grantor" and "Grantee" shall be construed in their plural forms.

IN WITNESS WHEREOF, the Grantors have executed this Deed on the day and year first above written.

yund G. Comh

Richard Couch

Uie Nome Couch

STATE OF NEW YORK) COUNTY OF WAYNE) ss.:

On the ______ day of February in the year 2007, before me, the undersigned, a notary public in and for said State, personally appeared Richard Couch, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s) or the person on behalf of which the individual(s) acted, executed the instrument.

Notary Public

STATE OF NEW YORK) COUNTY OF WAYNE) ss.:

On the _____ day of February in the year 2006, before me, the undersigned, a notary public in and for said State, personally appeared Julie Couch, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s) or the person on behalf of which the individual(s) acted, executed the instrument.

Sec otherway

(See a Hacked)

Notary Public

ACKNOWLEDGMENT

STATE OF CALIFORNIA)	
COLINITY OF GANTA CLADA)	SS
COUNTY OF SANTA CLARA)	

On March 22, 2007, before me R.A. Robertson, Notary Public, personally appeared Richard G. Couch, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

am

R.A. Robertson, Notary Public



STATE OF CALIFORNIA	} ss:	
COUNTY OF CONTRA COSTA	, se.	
On <u>December 28, 2007</u>	before me,S. Fairbanks	
a Notary Public personally appeared	Julie Couch	
a notary rabitly personally appeared _		
On <u>December 28, 2007</u> a Notary Public, personally appeared _	before me, <u>_S. Fairbanks</u> Julie Couch	

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose names is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

uart

Signature of Notary Public S. Fairbanks

¥ - 4



(This area for official notarial seal)

Record + Return to Richard Couch 3000-F Dawiels Blud Sto 532 alamo, CA 94507



September 5, 2024

Town Board Town of Perinton 1350 Turk Hill Road Fairport, NY 14450

Re: 550 Macedon Center Road T.A. #159.19-1-34 Special Use Permit Application

2951

Dear Board Members:

On behalf of Debbie Kanner, Seal Two Partners LLC, the owner/applicant of 550 Macedon Center Road, we submit this application for a Special Use Permit to allow for duplex residential units on the abovereferenced property. We request the Town Board schedule a public hearing for this application pursuant to Section 208-54.B of the Town Code, and we provide twelve (12) sets of the following application materials for your use and review:

- · Letter of Intent, dated August 16, 2024
- · Special Use Permit Application Form
- Site Plan Package (BME Dwg. 2951_01-10)
- · Building Architectural Elevations
- · Short Environmental Assessment Form Parts 1, 2 & 3
- Engineer's Narrative Supplement (3 copies)
- Owner's Authorization Form
- Property Deed
- \$150.00 Special Use Permit Application Fee

The project includes the subdivision of an approximately 2.4-acre parcel located at 550 Macedon Center Road into three (3) lots that are compliant with the Class-B residential code. The property is zoned Residential B, and the property currently has an existing 2-unit /duplex residential unit on the site (Lot #1). Lots #2 and #3 will be developed with new residential 2-unit structures. Section 208-32A(2) of the Town Code allows for duplex units within the Residential Class-B district through obtaining a Special Use Permit pursuant to Code Section 208-54.

The project will be served by the existing entrance onto Macedon Center Road. The two additional lots, Lot #2 and Lot #3, will be accessed via a private driveway with a cross access and utility easement. The proposed lots have been designed to be in conformance with the Town subdivision criteria for duplex lots within the Residential B district and each will have a fifteen-foot-wide flag connection to Macedon Center Road.

The project will include the implementation of a stormwater management plan to be prepared per the Town and NYSDEC requirements. The outline of this plan is provided in the enclosed Engineer's Narrative prepared in support of the EAF.

This Narrative also provides information regarding the environmental setting of the property, which includes a municipal LDD. The applicant, members of the Town's Conservation Board, and Town representatives walked the site on July 3, 2024, to review and confirm the limits of the Town LDD area adjacent to an unnamed creek on the property. The site plan for the proposed project has been prepared to avoid these areas to the greatest extent practicable.

As required by Town Code Section 208-54.D, we offer the following information to satisfy the twelve (12) standards the Town Board is to consider in reviewing this Special Use Permit request:

(1) The use will not prevent the orderly and reasonable use of adjacent properties or of properties in adjacent use districts.

The proposal is an expansion of the current use on the property and is consistent with the allowable use within the Class B Residential District. The proposed use will not have an adverse effect on the adjacent properties.

(2) The public health, safety, general welfare, or order of the Town will not be adversely affected by the proposed use in its location.

The approval of the Special Use Permit to allow the duplex residential units will not adversely affect the public health, safety, and welfare of the community. The proposed infill project will increase residential opportunities within the Town and is consistent with the allowable uses within the Class B residential zoning district.

(3) The use will be in general harmony with and promote the general purposes and intent of the most recent Comprehensive Plan of the Town and the Zoning Ordinance.

The issuance of the requested Special Use Permit will allow the use of the site as allowed by Town Code and would serve to increase the residential opportunities within the Town.

The proposal meets several goals and policies of the Town of Perinton's 2021 Comprehensive Plan including:

Land Use and Community Character:

- Goal 1: Protect the long-term viability of residential areas in the Town by "Promote infill development of single-. two-, and multi-family residential homes on character and scale within existing neighborhoods."
- Goal 2: Encourage the development of a range of housing types enhancing access and choice to support a diverse and inclusive population.
- (4) The proposed use will not interfere with the preservation of the general character of the neighborhood in which such building is to be placed or use is to be conducted and that the proposed use will, in fact, be compatible with its surroundings and with the character of the neighborhood and of the community in general, particularly with regard to visibility, scale and overall appearance.

The proposal is consistent with the general character of the surrounding residential neighborhood and is compatible with the overall appearance of the residential neighborhood.

(5) The physical characteristics and topography of the proposed site make it suitable for the proposed special use.

The property is suitable for the development of two (2) two-family duplex lots with available access to public utilities.

(6) The proposed special use provides sufficient landscaping and/or other forms of buffering to protect surrounding land uses.

The proposed use is consistent with the surrounding residential uses. As such, buffering is not necessary to protect any of the adjoining properties.

(7) The property has sufficient, appropriate, and adequate area for the use, as well as reasonably anticipated operation thereof.

The site plan submitted with the Special Use Permit application illustrates the proposed lot configuration, building footprints and associated vehicular access within the site that shows it is adequate for the proposed use. The required lot size for a duplex unit within the Class B district is 17,600 SF with a lot width of 110 feet. The proposal depicts lot sizes in compliance with the minimum requirements.

(8) Access to facilities is adequate for the estimated vehicular and pedestrian traffic generated by the proposed use on public streets and sidewalks, so as to assure public safety and to avoid traffic congestion.

The property is served by an existing access to Macedon Center Road (NYS Route 31F). The existing highway network can serve the additional two-lot subdivision.

(9) Adequate parking and internal vehicular and pedestrian traffic circulation can be accommodated on the property in compliance with other sections of the Code, taking into account adequate buffering and landscaping.

The internal traffic circulation will be provided by a common access drive to serve the proposed three lots. The proposed access is in compliance with the Town of Perinton code.

(10) Adequate facilities exist or can be integrated into the site development to property deal with stormwater runoff, sanitary sewers, fire protection, electrical power needs, refuse or other waste that may be generated, odors, noise or lights which may go beyond property boundaries.

Adequate utility service exists to serve the proposed expansion. Water, sanitary sewer, gas, and electric supply will be provided from the existing utilities serving the site. The stormwater runoff will be managed on-site through the implementation of a stormwater management plan.

(11) The natural characteristics of the site are such that the proposed use may be introduced on the property without undue disturbance or disruption of important natural features, systems, or processes and without negative impact to groundwater and surface waters on and off the site.

The site plan has been prepared to avoid encroachment into or disturbance of the creek and the associated Town LDD to the greatest extent practicable. There are no mapped NYSDEC or USCOE wetlands on the site.

Groundwater and surface waters will be protected through the implementation of a stormwater management plan. This plan will be designed per local and NYSDEC stormwater design regulations and will treat run-off for water quality and attenuate the peak discharge rate for the post-development condition.

(12) The proposed use can and will comply with all provisions of this chapter and of the Code which are applicable to it and can meet every other applicable federal, state, county and local law, ordinance, rule, or regulation.

The proposal use is in compliance with the provisions of the Town of Perinton Code and can meet all other applicable regulations. The property will be developed per the Town of Perinton's Design and Construction Standards and the NYS Building and Fire Code. The project will also comply with all state and federal regulations concerning the stream corridor.

Upon review of the above information, it is our belief the proposal meets the standard established for a Special Use Permit for the proposed duplex residential use within a Residential B zone.

We request the Town Board to declare themselves lead agency for the purposes of conducting the NY State Environmental Quality Review (SEQR). Pursuant to 6NYCRR 617.4 and 617.5, we believe the proposed action is an Unlisted Action. We have prepared the short-form Environmental Assessment Form Part 1 as required by SEQRA.

To assist the Town in their review pursuant to SEQRA, we also provide an Engineer's Narrative to provide technical information in support of the EAF and site plan package. Also, at the request of the Town of Perinton, we have prepared and submitted a draft of the EAF parts 2 & 3 for your use.

Upon receipt and review of this application, we request the Town Board accepts this application and set a public hearing date for review of this proposal.

Upon completion of the public hearing, we would look to the Town Board to refer this application to the Conservation Board and Planning Board for review at their respective September meetings and provide a recommendation back to the Town Board to grant the Special Use Permit for the duplex residential use on the property.

If you require any additional information concerning this application, please contact our office.

Sincerely, BME ASSOCIATES

Andrew R. Spence

ARS:blr

Encl.

c: Debbie Kanner; Seal Two Partners, LLC



TOWN OF PERINTON

1350 TURK HILL ROAD. FAIRPORT, NEW YORK 14450-8796 (585) 223-0770, Fax: (585) 223-3629, <u>www.perinton.org</u>

NUMBER _____FEE \$____(verify fee with staff)

MEETING DATE_____

APPLICATION FORM – SPECIAL USE PERMIT - Town Board

See attached instructions/requirements

	ALILICAN				
	Name, Debbie Kanner (Seal Two Partners LLC)		C) Phone (415	5) 531-4411	
	Street& Number 1 Emerald Hill Circle		City_Fairpor	t, New York	Zip_14450
	Interest in Property: X	Owner	Lessee	Other_	
2.	OWNER (if other than app	licant)			
	Name		Ph	one	
	Street& Number		City		Zip
3.	ATTORNEY (If represented	ed)			
	Name		Ph	one	
	Street& Number		City		Zip
L	INTEREST: Does any offic	er or employee of	the State of New Y	ork. County o	f Monroe, or Town of Perint
ł.	INTEREST: Does any office have any interest in the owner	er or employee of r/applicant or the	the State of New Y subject property?	ork, County o	f Monroe, or Town of Perint
4.	INTEREST: Does any office have any interest in the owner Yes No X	er or employee of r/applicant or the Explain INTEI	The State of New Y subject property? REST	ork, County o	f Monroe, or Town of Perint
4.	INTEREST: Does any office have any interest in the owner YesNoX If yes, who? Name	er or employee of r/applicant or the _ Explain INTEI	The State of New Y subject property? RESTAddress_	ork, County o	f Monroe, or Town of Perint
4.	INTEREST: Does any office have any interest in the owner YesNoX If yes, who? Name LOCATION: Street Addre	er or employee of r/applicant or the _ Explain INTEI	The State of New Y subject property? RESTAddress	ork, County of	f Monroe, or Town of Perint

6. SIZE OF PARCEL: 2.64 acres

7. PRESENT USE OF PROPERTY: Two-family residential

8. ZONING DISTRICT: Res CLass B TAX ACCOUNT# 159.19-1-34

9. Describe specifically the nature of your request Request a Special Permit to allow two-family resdidential use within the Residential Class B district as allowed per

Section 208-54.

10. Describe the location, use and size of structures and other land use within 100 feet of the boundaries of the subject property The proposal includes the subdivivision of the 2.64 acre parcel into a total of three lots conforming to the Res Class B distrcit requirements. The proposed two-unit residential structures will be placed on the site and will be in character with the surrounding residential uses. Other uses in the area include both single family and two-unit reidential buildings.

11. The criteria used by the Town Board of the Town of Perinton are set forth in Section 208-54 of the Zoning Law. Special Use Permits can only be granted where the proposed is already a permitted use, but requires Town Board approval. That approval can only be given when the applicant offers proof that his proposed use will not violate any of the following factors:

A. You must show that your proposal will be in harmony with the general purpose and intent of the Zoning Ordinance of the Town of Perinton, considering the location, magnitude of the use, the nature and intensity of the operations involved in or conducted in connection with it, and the size of the subject property with respect to the streets giving access to the subject property.

Will your proposed use be detrimental to the neighborhood due to Location? No_X_Yes_____ The nature or magnitude of use? No_X_Yes_____ Inadequate access to property? No_X_Yes_____

If yes to any of above, explain how it will be detrimental. If effect can be lessened in some manner, explain how:

	end to depreciate adjacent property of alter of be detrimental to the
character of the neighborhood? No_	X Yes
If yes, explain how it will be detrimer	ntal. If effect can be lessened in some manner, explain how:
c. Will your proposed use cressignificantly alter the flow of traffic?	eate a hazard to health, or the general welfare of the neighborhood c No X Yes
If yes explain how If effect can be le	essened in some manner, evolain how
I certify that the information suppli	ed on this application is complete and accurate, and that the
I certify that the information suppliproject described, if approved, will	ed on this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques
I certify that the information suppli project described, if approved, will Signature of	ed on this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques
I certify that the information suppli project described, if approved, will Signature of Applicant:	The dot this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques $\frac{1}{2} C_{max} = \frac{1}{2} $
I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of	Ted on this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques <u>Date 9-3-24</u>
I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of Applicant	The don this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques Date 9-3-24
I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of Applicant Property Owner (If other than appli	The dom this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques $\frac{1}{2} Date 9 - 3 - 24$
I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of Applicant Property Owner (If other than appli I have read and familiarized myself wi submission and processing.	The dom this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques $Date 9-3-24$ item bit the contents of this application and do hereby consent to its
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I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of Applicant Property Owner (If other than appli I have read and familiarized myself wi submission and processing. Signature of property owner	The dot is application is complete and accurate, and that the be completed and the premises used as stipulated in this reques $Date 9-3-24$ icant) it the contents of this application and do hereby consent to its $Date$
I certify that the information suppli project described, if approved, will Signature of Applicant: Printed name of Applicant Property Owner (If other than appli I have read and familiarized myself wi submission and processing. Signature of property owner	ied on this application is complete and accurate, and that the be completed and the premises used as stipulated in this reques

3/21/19

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550 MACEDON CENTER ROAD

TOWN OF PERINTON, MONROE COUNTY, NEW YORK STATE

PREPARED FOR: SEAL TWO PARTNERS, LLC PO BOX 1260 FAIRPORT, NY 14450

FINAL - SECTION 1 SUBDIVISION PLANS 550 MACEDON CENTER ROAD

. No.	TITLE
01	COVER SHEET
02	SUBDIVISION PLAT
03	SITE PLAN
04	EXISTING CONDITIONS & DEMOLITION PLAN
05	UTILITY PLAN
06	GRADING & CONSTRUCTION EROSION CONTROL PLAN
07	NOTE AND PROFILE SHEET
08	DETAIL SHEET 01
09	DETAIL SHEET 02

SCALE: 1"=30' DRAWING NUMBER: 2951-01 DATE ISSUED: SEPTEMBER 4, 2024 LAST REVISED: NA **BME** ASSOCIATES

ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECT 10 LIFT BRIDGE LANE EAST

WWW.BMEPC.COM

PHONE 585-377-7360 FAIRPORT, NEW YORK 14450 FAX 585-377-7309

THIS MAP AND THE INFORMATION SHOWN HEREON IS NOT TO BE USED WITH AN "AFFIDAVIT OF NO CHANGE." BME ASSOCIATES ASSUMES NO LIABILITY TO THE PARTIES NOTED HEREON OR TO ANY FUTURE OWNER, TITLE COMPANY, OVERNMENTAL AGENCY, ATTORNEY OR LENDING INSTITUTION IN THE EVENT THAT THIS MAP IS USED WITH AN 'AFFIDAVIT OF NO CHANGE," OR SIMILAR INSTRUMENT. COPIES OF THIS SURVEY MAP NOT BEARING THE LAND SURVEYOR'S ORIGINAL INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY.

"UNAUTHORIZED ALTERATION OR ADDITION TO THIS SURVEY MAP IS A VIOLATION OF SECTION 7209, OF THE NEW YORK STATE EDUCATION LAW."

<u>LEGEND</u>



TWO PROPOSED DUPLEX UNITS AND ONE EXISTING DUPLEX=6 UNITS TOTAL

BOUNDARY LINE CENTERLINE CREEK PROPOSED LOT LINE ADJOINER/RIGHT-OF-WAY LINE CENTERLINE ROADWAY PROPOSED EASEMENT LINE EXISTING EASEMENT LINE PROPERTY MARKER FOUND



CENTERLINE ROADWAY

FMC 14-24

EXISTING FRAME

HOUSE

ROBERT J. & LYNN C. LITTLE

6 CAMDEN COURT

T.A. No. 153.19-01-33

M.C.C.O. L. 193 OF M., P. 53

LOT 291

REFERENCES:

28. 2008.

SUBDIVISION NOTES:

1. EXISTING ZONING: RESIDENTIAL CLASS B DISTRICT

50 FT

12 FT

15 FT

MINIMUM BUILDING SIZE: 1800 SQ FT (ONE STORY)

RIGHT-OF-WAY MONUMENTS IN THE AREA OF CONSTRUCTION.

17,600 SQ FT

1100 SQ FT (TWO STORY)

TOWN OF PERINTON AND THE APPROPRIATE AGENCIES UNLESS OTHERWISE NOTED.

INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEODETIC SURVEY MONUMENTS.

1300 SQ FT (ONE AND ONE HALF STORY)

5. THE SETBACK LINES AND NOTES RELATING TO SETBACKS SHOWN HEREON ARE INTENDED TO SHOW APPLICABLE

ZONING REQUIREMENTS OF THE TOWN OF PERINTON FOR THE TOWN ZONING DISTRICT REQUIREMENTS AS OF THE

6. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE

8. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED TO LOCAL LAW No. 6 OF 1971 REGARDING LIABILITY

100-YEAR FLOODPLAIN AND IS DESIGNATED ZONE X IN FEMA FLOODPLAIN PANEL 0342G, EFFECTIVE DATE AUGUST

9. A REVIEW OF THE FEMA MAPS INDICATES THAT NO PORTION OF THIS PROPERTY WAS RECOGNIZED TO BE IN A

10. NO MAPPED FEDERAL OR STATE WETLANDS OR ASSOCIATED BUFFERS EXIST WITHIN THE PROPERTY LIMITS.

7. CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD, AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND

DATE OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING

2. TOTAL PROJECT AREA: ±2.64 ACRES

4. APPLICABLE ZONING REQUIREMENTS:

FRONT BUILDING SETBACK:

SIDE BUILDING SETBACK:

REAR BUILDING SETBACK:

MINIMUM LOT AREA:

REQUIREMENTS.

3. PROPOSED USE: TWO-FAMILY DWELLING

- 1. A PLAN ENTITLED "SECTION 1A, WHITNEY COUNTRY, FINAL SUBDIVISION PLAN," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 183 OF MAPS, PAGE 47.
- 2. A PLAN ENTITLED "SECTION 3, WHITNEY COUNTRY SUBDIVISION," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 188 OF MAPS, PAGE 51.
- 3. A PLAN ENTITLED "WHITNEY COUNTRY SUBDIVISION, SECTION 4," PREPARED BY DOMINIC J. PARRONE & ASSOCIATES, AS FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 193 OF MAPS, PAGE 53.
- 4. AN ABSTRACT OF TITLE WAS NOT PROVIDED FOR THE COMPLETION OF THIS SURVEY.

SURVEY NOTES:

- 1. THE PROJECT BOUNDARY SURVEY WAS MADE USING PROCEDURES NECESSARY TO ACHIEVE A HORIZONTAL ACCURACY OF 1 PART IN 20,000 (1:20,000) OR BETTER PROPORTIONAL ACCURACY AND A NETWORK POSITIONAL ACCURACY AT 95% CONFIDENCE LEVEL NOT EXCEEDING 0.05
- 2. THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM OF 1983, WESTERN ZONE, TRANSVERSE MERCATOR PROJECTION, NAD 27.





NOT APPROVED This plan has not received final approval of all reviewing agencies. This plan is subject to revisions until all approvals are obtained and should not be used for construction purposes.

FIRE CHIEF

CHAIRMAN OF THE PLANNING BOARD



bwb	<u>sit</u>	E_NOTES:		\setminus	\setminus
Base.c	1.	EXISTING ZONING: RESIDENTIAL CLASS B DISTRICT		\	\backslash
ayout	2.	TOTAL PROJECT AREA: ±2.64 ACRES			
2951 L	3.	PROPOSED USE: TWO-FAMILY DWELLING TWO PROPOSED DUPLEX UNITS AND ONE	EXISTING DUPLEX=6 UNITS TOTAL		\backslash
Final \;	4.	APPLICABLE ZONING REQUIREMENTS:			\backslash
awings/		FRONT BUILDING SETBACK: 50 FT SIDE BUILDING SETBACK: 12 FT BEAD BUILDING SETBACK: 15 FT			
951\Dr		MINIMUM LOT AREA: 17,600 SQ FT			
P: \29		MINIMUM BUILDING SIZE: 1800 SQ FT (ONE STORY) 1300 SQ FT (ONE AND ONE HALF	STORY)		
	-	1100 SQ FT (TWO STORY)			
	э. 6.	THE SETBACK LINES AND NOTES RELATING TO SETBACKS SH	OWN HEREON ARE INTENDED TO SHOW APPLICABLE		
		ZONING REQUIREMENTS OF THE TOWN OF PERINTON FOR THE DATE OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY	TOWN ZONING DISTRICT REQUIREMENTS AS OF THE ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING		
	7.	ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MO	ST RECENT STANDARDS AND SPECIFICATIONS OF THE		0
	•	TOWN OF PERINTON AND THE APPROPRIATE AGENCIES UNLES	S OTHERWISE NOTED.		
	8.	RIGHT-OF-WAY MONUMENTS IN THE AREA OF CONSTRUCTION	RVE ALL SURVET CONTROL MONUMENTS AND		
	9.	THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTE INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEO	D TO LOCAL LAW No. 6 OF 1971 REGARDING LIABILITY DETIC SURVEY MONUMENTS.		
	10.	A REVIEW OF THE FEMA MAPS INDICATES THAT NO PORTION 100-YEAR FLOODPLAIN AND IS DESIGNATED ZONE X IN FEMA	OF THIS PROPERTY WAS RECOGNIZED TO BE IN A		
		28, 2008.			
	11. 12.	NO MAPPED FEDERAL OR STATE WEILANDS OR ASSOCIATED THE LDD LIMITS ARE THOSE OF THE TOWN OF PERINTON.	BUFFERS EXIST WITHIN THE PROPERTY LIMITS.		
	12.				
					N /F
					ROBERT J. & LYNI 6 CAMDEN C
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					LUI 29
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					DRIVEWAY (SEE
					N/F DINA MCGU
					5 CAMDEN C T.A. No. 153.19
					M.C.C.O. L. 193 0 LOT 292
					20' EASEMEN MCW
					DEEDS PA
					<u></u>
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					CENTERLINE ROADWA
		LEGEND			
			BOUNDARY LINE PROPOSED LOT LINE		
.			CENTERLINE		
			SETBACK LINE EXISTING EASEMENT LINE		
			PROPOSED EASEMENT LINE		
		0 A	PROPERTY MARKER FOUND		
		•	WOOD FENCE POST FOUND		
·			LLD LINE		

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	GRAP	HIC	SCALE	
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	(1 in	IN FEE' .ch = 3	Г) 0 ft.	

DEMOLITION NOTES:



2. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR UTILITY COMPANY RECORDS PLANS. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1-800-962-7962 FOR STAKE-OUT OF EXISTING UTILITIES.

3. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY COMPANY RECORD PLANS, EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA MAY NOT BE SHOWN ON THE DRAWINGS. IF UNKNOWN UTILITIES ARE ENCOUNTERED IT SHALL BE COORDINATED WITH THE ENGINEER AND OWNER.

4. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLORATION EXCAVATIONS TO LOCATE EXISTING UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET THE EXISTING CONDITIONS.

- 5. THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811 FOR STAKE-OUT OF EXISTING UTILITIES.
- 6. THE CONTRACTOR SHALL SAWCUT TO FULL DEPTH FOR REMOVAL OF EXISTING SIDEWALK, CURBING AND PAVEMENT AS DELINEATED ON THIS PLAN AND AS NECESSARY FOR CONSTRUCTION.
- 7. WHERE NEW PAVEMENT, CURBING OR SIDEWALK MEETS WITH EXISTING, THE CONTRACTOR SHALL MAKE FULL DEPTH SAWCUTS TO CREATE A SMOOTH EDGE AND MEET SURFACES FLUSH. WHERE NEW PAVEMENT MEETS EXISTING, THE EXISTING PAVEMENT SHALL BE TREATED WITH TAC COAT PER MANUFACTURES RECOMMENDATION.
- 8. ALL MATERIALS REMOVED FROM THE PROJECT SHALL BE DISPOSED OF ACCORDING TO NEW YORK STATE AND TOWN OF PERINTON REQUIREMENTS UNLESS OTHERWISE NOTED.



<u>LEGEND</u>



BOUNDARY LINE EXISTING WATERMAIN, HYDRANT, AND VALVE EXISTING STORM SEWER, MANHOLE, AND INLET EXISTING SANITARY SEWER AND MANHOLE EXISTING TREE LINE PROPERTY MARKER FOUND EXISTING CONTOUR W/ ELEVATION

EXISTING SPOT ELEVATION EXISTING GAS MAIN

EXISTING UNDERGROUND ELECTRIC/CONDUIT

LDD LINE EXISTING STRUCTURE, FULL DEPTH ASPHALT/CONCRETE PAVEMENT, AND CONCRETE

CURBING TO BE REMOVED AS SHOWN LIMITS OF EXISTING UNDERGROUND UTILITY TO BE REMOVED AS SHOWN

EXISTING TREE/BUSH TO BE REMOVED

	GRA	PHIC	: SC	ALE	
30	0	15	5 3	0	6
	1	(IN F inch =	EET) = 30 ft.		

			1)
Ţ	ITILITY NOTES:			\backslash
1	THE SETBACK LINES AND NOTES RELATING TO SETBACK SHOW REQUIREMENTS (AND APPROVALS UNDER SECTION 278 OF TOW OF THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITION REQUIREMENTS	N HEREON ARE INTENDED TO SHOW APPLICABLE ZONING IN LAW) OF THE TOWN OF PERINTON AS OF THE DATE DNAL RESTRICTIONS OTHER THAN SAID ZONING		
2	. BUILDINGS SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTA	TIONS ONLY.		
3	. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST TOWN OF PERINTON, THE APPROPRIATE AGENCIES (IE, MONROE HEALTH DEPARTMENT) UNLESS OTHERWISE NOTED.	T RECENT STANDARDS AND SPECIFICATIONS OF THE COUNTY WATER AUTHORITY, AND THE MONROE COUNTY		СВ
4	. THE CONTRACTOR SHALL LOCATE, MARK, SAFEGUARD, AND PR RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION. MONUMENTS, CALL THE MONROE COUNTY GEODETIC SURVEY OF	ESERVE ALL SURVEY CONTROL MONUMENTS AND . FOR DESCRIPTIVE AND SURVEY DATA ON THE CONTROL .FICE.		TR=483.56 INV=477.64
5	. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEOD	TO LOCAL LAW NO. 6 OF 1971 REGARDING LIABILITY ETIC SURVEY MONUMENTS.		
6	. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTE COMPANY RECORD PLANS. EXISTING UTILITIES WHETHER FUNCTI NOT BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL (FOR STAKE-OUT OF EXISTING UTILITIES.	ED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY ONAL OR ABANDONED WITHIN THE PROJECT AREA MAY CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811		SAN MH TR=484.98 INV=472.97
7	. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELE COMMENCING CONSTRUCTION. CONTRACTOR SHALL MAKE EXPLO UNDERGROUND FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCT EXISTING CONDITIONS.	EVATION OF UNDERGROUND UTILITIES BEFORE DRATION EXCAVATIONS TO LOCATE EXISTING ION TO PERMIT REVISIONS AS REQUIRED TO MEET		0-
8	. HIGHWAY DRAINAGE ALONG MACEDON CENTER ROAD IS TO BE	MAINTAINED.		
M	ATERMAIN:			
9	. WATERMAINS AND APPURTENANCES TO BE CONSTRUCTED TO T THE (WATER AUTHORITY). (SEE MCWA PUBLIC WATER SYSTEM I	HE MOST RECENT STANDARDS AND SPECIFICATIONS OF NOTES).		PROPOSED WATER SEF
1	0. ALL WATERMAINS SHALL HAVE A MINIMUM OF FIVE FEET OF CO MINIMUM OF SIX FEET OF COVER FROM FINISHED GRADE IN PA STAKES BEFORE TRENCHING TO INSURE THAT ALL INSTALLED V	OVER FROM FINISHED GRADE IN LAWN AREAS AND A VED AREAS. THE CONTRACTOR SHALL CHECK ALL CUT WATERMAINS WILL HAVE THE REQUIRED COVER.		
1	1. MINIMUM SEPARATION BETWEEN WATER SERVICES AND SEWER N OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM STORM/SANITARY SEWER MAINS TO BE 10 FEET MEASURED FR WATERMAIN SHALL BE CENTERED UNDER OR OVER THE SEWER SEWER AS POSSIBLE. WHERE A WATERMAIN CROSSES UNDER SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PRE ON AND BREAKING THE WATERMAINS.	WAINS TO BE 18" VERTICALLY MEASURED FROM THE I HORIZONTAL SEPARATION BETWEEN WATERMAINS AND OM THE OUTSIDE OF THE PIPES. ONE FULL LENGTH OF SO THAT BOTH JOINTS WILL BE AS FAR FROM THE A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED EVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING		
S	ANITARY SEWER:			N/F
1	2. ALL SANITARY LATERALS ARE IN COMPLIANCE WITH THE SPECI PERINTON.	FICATIONS AND SEWER POLICY OF THE TOWN OF		ROBERT J. & LYN 6 CAMDEN T.A. No. 153.1 M.C.C.O. L. 193 (
1	3. SANITARY SEWERS, HOUSE LATERALS AND APPURTENANCES SH PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIO	IALL BE CONSTRUCTED ACCORDING TO THE TOWN OF NS FOR LAND DEVELOPMENT.		LOT 2
1	4. SANITARY LATERAL PIPE SHALL BE 4" PVC SDR-21 OR AS NO	TED ON THE PLAN.		WATER
1	 FLOOR DRAINS TO BE CONNECTED TO THE SANITARY LATERAL. FOOTER DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GI MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND, 	FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF ROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER /OR THE MONROE COUNTY SEWER USE LAW.		
1	 NEW SEWERS ARE TO BE PLUGGED WHEN CONNECTED TO EXIS TESTED, AND READY FOR SERVICE. 	TING MANHOLES UNTIL THE NEW SEWERS ARE FLUSHED,		
S	TORM SEWER:			
1	7. STORM SEWERS, HOUSE LATERALS AND APPURTENANCES SHAL PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIO	L BE CONSTRUCTED ACCORDING TO THE TOWN OF INS FOR LAND DEVELOPMENT.	CB <u>TC=</u> 484.00 □ INV=479.45	EDGE PAVEMENT
1	B. STORM SEWER PIPE SHALL BE HIGH-DENSITY POLYETHYLENE (I	HDPE) SMOOTH INTERIOR, OR AS NOTED ON THE PLAN.		
1 2	 CHECK VALVES TO BE PROVIDED ON SUMP PUMPS. DOWNSPOUTS SHALL DISCHARGE ON SPLASH BLOCKS OR CONN IDENTIFIED ON THE UTILITY PLAN. FOUNDATION DRAINS SHALL 	IECT TO THE PROPOSED STORM SEWER SYSTEM AS DISCHARGE ON SPLASH BLOCKS VIA SUMP PUMPS	M	
L	ATERALS AND SERVICES:			
2	1. ALL LATERALS OR SERVICES SHALL BE AS NOTED BELOW UNLE	ESS OTHERWISE NOTED ON THE PLANS:		
	WATER – 1.5" INCH TYPE K COPPER FROM THE WATERMAI 1.5" INCH PE #4710 FROM THE CURB BOX TO TI SANITARY – 4" PVC SDR-21 INSTALLED AT 2.00% MIN SLOPE	n to the curb box He meter (unless noted otherwise) 		N/F
2	2. NO CURB VALVE BOXES (WATER LATERAL) ARE ALLOWED IN DI	 RIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE		DINA MCC 5 CAMDEN TA NO 1531
2	RELOCATED IF THIS CONFLICT ARISES.	e provided with a meter pit and a meter at the		M.C.C.O. L. 193 (LOT 29
2	RIGHT-OF-WAY.	YOOD EXTENDED 2-3' ABOVE CRADE AND PAINTED		
2	GREEN.	NOU, EXTENDED 2-3 ADOVE GIVADE AND FAINTED		
2	5. ANY LAUNDRY WASTEWATER SHALL BE DIRECTED TO THE SANI	TARY SEWER.		
2	THE LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL BE INSTALLED AT AL THE LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL B AT ALL BENDS 45° OR GREATER. AND AT 90 FOOT INTERVALS	E INSTALLED AT THE RIGHT-OF-WAY OR EASEMENT LINE, THEREAFTER.		CONTRACTOR
				1.5" WATER S PROPOSED ME
				WITH MCWA A
				PROPO
			M G	
			/	⁹ FMC 14-24
			□ PR(∮ SEF	oposed 1.5" type "k" copp Rvice from watermain to 1
			RIG	HT-OF-WAY. 1.5" TAP BY M SET FEE TO THE OWNER (TYP
	LEGEND			CENTERLINE ROADW
		BOUNDARY LINE		
-		PROPOSED LOT LINE		
-		CENTERLINE		
-		EXISTING EASEMENT LINE PROPOSED EASEMENT LINF		

BME Associates

BOUNDARY LINE PROPOSED LOT LINE CENTERLINE EXISTING EASEMENT LINE PROPOSED EASEMENT LINE PROPOSED EASEMENT LINE PROPORTY MARKER FOUND EXISTING WATERMAIN, HYDRANT, AND VALVE PROPOSED WATERMAIN, HYDRANT, AND VALVE EXISTING STORM SEWER, MANHOLE, AND INLET PROPOSED STORM SEWER, MANHOLE, AND INLET EXISTING SANITARY SEWER AND MANHOLE PROPOSED SANITARY SEWER AND MANHOLE LDD LINE





n	UTILITY NOTES:	SANITARY SEWER:
Ū.	1. THE SETBACK LINES AND NOTES RELATING TO SETBACK SHOWN HEREON ARE INTENDED TO SHOW APPLICABLE ZONING REQUIREMENTS (AND APPROVALS UNDER SECTION 278 OF TOWN LAW) OF THE TOWN OF PERINTON AS OF THE DATE THIS MAP AND ARE NOT INTENDED TO IMPOSE ANY ADDITIONAL RESTRICTIONS OTHER THAN SAID ZONING REQUIREMEN	 ALL SANITARY LATERALS ARE IN COMPLIANCE WITH THE SPECIFICATIONS AND SEWER POLICY OF THE TOWN OF PARTY OF SANITARY SEWERS, HOUSE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN (PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT.
	2. BUILDINGS SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTATIONS ONLY.	14. SANITARY LATERAL PIPE SHALL BE 4" PVC SDR-21 OR AS NOTED ON THE PLAN.
-	5. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE MOST RECENT STANDARDS AND SPECIFICATIONS OF THE TOMOF PERINTON, THE APPROPRIATE AGENCIES (IE, MONROE COUNTY WATER AUTHORITY, AND THE MONROE COUNTY HEAL DEPARTMENT) UNLESS OTHERWISE NOTED. 4. THE CONTRACTOR SHALL LOCATE MARK SAFECHARD, AND DEESERVE ALL SUBVEY CONTROL MONIMUMENTS AND	WN LTH 15. FLOOR DRAINS TO BE CONNECTED TO THE SANITARY LATERAL. FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER M COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.
	4. THE CUNTRACTOR SHALL LUCATE, MARK, SAFEGUARD, AND PRESERVE ALL SURVEY CONTROL MONUMENTS AND RIGHT-OF-WAY MONUMENTS IN THE AREAS OF CONSTRUCTION. FOR DESCRIPTIVE AND SURVEY DATA ON THE CONTRO MONUMENTS, CALL THE MONROE COUNTY GEODETIC SURVEY OFFICE.	16. NEW SEWERS ARE TO BE PLUGGED WHEN CONNECTED TO EXISTING MANHOLES UNTIL THE NEW SEWERS ARE FLUS TESTED, AND READY FOR SERVICE.
	5. THE DEVELOPER'S AND CONTRACTOR'S ATTENTION IS DIRECTED TO LOCAL LAW NO. 6 OF 1971 REGARDING LIABILITY INCURRED THROUGH DISTURBANCES OR DESTRUCTION OF GEODETIC SURVEY MONUMENTS.	STORM SEWER:
	6. EXISTING UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM FIELD LOCATIONS AND/OR AVAILABLE UTILITY COMPANY RECORD PLANS. EXISTING UTILITIES WHETHER FUNCTIONAL OR ABANDONED WITHIN THE PROJECT AREA MAY BE SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL CALL THE UFPO HOTLINE AT 1(800)962-7962 OR 811 FOR STAKE-OUT OF EXISTING UTILITIES	 17. STORM SEWERS, HOUSE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN OF PERINTON'S DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT. 18. STORM SEWER PIPE SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) SMOOTH INTERIOR. OR AS NOTED ON THE P
	7. THE CONTRACTOR SHALL DETERMINE EXACT LOCATION AND ELEVATION OF UNDERGROUND UTILITIES BEFORE COMMENCI	ING 19. CHECK VALVES TO BE PROVIDED ON SUMP PUMPS.
	SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS AS REQUIRED TO MEET EXISTING CONDITIONS. 8. HIGHWAY DRAINAGE ALONG MACEDON CENTER ROAD IS TO BE MAINTAINED.	20. DOWNSPOUTS SHALL DISCHARGE ON SPLASH BLOCKS OR CONNECT TO THE PROPOSED STORM SEWER SYSTEM AS IDENTIFIED ON THE UTILITY PLAN. FOUNDATION DRAINS SHALL DISCHARGE ON SPLASH BLOCKS VIA SUMP PUMPS LATERALS AND SERVICES:
	WATERMAIN:	21. ALL LATERALS OR SERVICES SHALL BE AS NOTED BELOW UNLESS OTHERWISE NOTED ON THE PLANS:
	 WATERMAINS AND APPURTENANCES TO BE CONSTRUCTED TO THE MOST RECENT STANDARDS AND SPECIFICATIONS OF (WATER AUTHORITY). (SEE MCWA PUBLIC WATER SYSTEM NOTES). ALL WATERMAINS SHALL HAVE A MINIMUM OF FIVE FEET OF COVER FROM FINISHED GRADE IN LAWN AREAS AND A AUTHORITY OF AVER AVERAGE AND A AUTHORITY AND AVERAGE AND A AUTHORITY. 	THEWATER -1.5" INCH TYPE K COPPER FROM THE WATERMAIN TO THE CURB BOX 1.5" INCH PE #4710 FROM THE CURB BOX TO THE METER (UNLESS NOTED OTHERWISE)SANITARY -4" PVC SDR-21 INSTALLED AT 2.00% MIN SLOPE. 6" PVC SDR-35 INSTALLED AT 1.00% MIN SLOPE.
	MINIMUM OF SIX FEET OF COVER FROM FINISHED GRADE IN PAVED AREAS. THE CONTRACTOR SHALL CHECK ALL CUT STAKES BEFORE TRENCHING TO INSURE THAT ALL INSTALLED WATERMAINS WILL HAVE THE REQUIRED COVER.	22. NO CURB VALVE BOXES (WATER LATERAL) ARE ALLOWED IN DRIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE RE IF THIS CONFLICT ARISES.
	OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAINS AND STORM/SANITARY SEWER MAINS TO BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES. ONE FULL LENGTH OF WATERMAIN SHALL BE CENTERED LINDER OF OVER THE SEWER SO THAT ROTH JOINTS WILL DE AS EAD EDON THE SEWER SO THAT SE SEWER SO THAT	23. ANY LOTS WITH WATER SERVICE LONGER THAN 250 LF WILL BE PROVIDED WITH A METER PIT AND A METER AT 1 F RIGHT-OF-WAY. WFR
	AS POSSIBLE. WHERE A WATERMAIN CROSSES UNDER A SEWER SU THAT BUTH JUINTS WILL BE AS FAR FROM THE SEV SELECTED FILL) SHALL BE PROVIDED FOR THE SEWERS TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING	ON 25. ANY LAUNDRY WASTEWATER SHALL BE DIRECTED TO THE SANUTARY SEWED
	AND BREAKING THE WATERMAINS.	25. ANT LAUNURT WASTEWATER SHALL BE DIRECTED TO THE SANITARY SEWER. 26. CLEANOUTS FOR STORM LATERALS SHALL BE INSTALLED AT ALL HORIZONTAL BENDS AND AT 90' INTERVALS ALC
		LATERAL. CLEANOUTS FOR SANITARY LATERALS SHALL BE INSTALLED AT THE RIGHT-OF-WAY OR EASEMENT LIN ALL BENDS 45° OR GREATER, AND AT 90 FOOT INTERVALS THEREAFTER.
	CONSTRUCTION EROSION CONTROL NOTES.	
! 1	. THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONSISTS OF THE STORMWATER MANAGEMENT 17. DI	ISTURBED AREAS SHALL BE STABILIZED USING PERMANENT LAWN SEEDING MIX UPON COMPLETION OF
	REPORT, THE PROJECT PLANS, INCLUDING THE GRADING, CONSTRUCTION EROSION CONTROL PLAN AND DETAIL SHEET, AND THE TOWN OF PERINTON DESIGN CRITERIA AND CONSTRUCTION SPECIFICATION FOR LAND DEVELOPMENT. THE SWPPP FOR THIS PROJECT IS INTENDED TO CONFORM WITH THE NYSDEC GENERAL PERMIT GP-0-20-001 AND THE REQUIREMENTS OF LOCAL AND NYSDEC AUTHORITIES REGARDING THE CONTROL OF STORMWATER QUANTITY AND QUALITY.	RADING AND CONSTRUCTION: <u>LBS/ACRE % BY PURITY % GERM</u> PERENNIAL RYE GRASS 35 85 85 RED FESCUE 35 97 80
:	2. THE OWNER IS RESPONSIBLE FOR IMPLEMENTING THE REQUIRED SWPPP. THE OWNER'S CONTRACTOR, SUB-CONTRACTOR AND ALL OTHERS ASSOCIATED WITH THE IMPLEMENTATION OF THE PLAN SHALL BE FAMILIAR WITH THE PLAN AND THE CONDITIONS OF THE NYSDEC GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES	KENTUCKY BLUEGRASS 30 85 80 SEEDING RATE: 6.0 LBS PER 1,000 SQ FT. MULCH: STRAW OR WOOD FIBER MULCH USED WITH HYDROSEEDING METHOD, AT TWO TONS PER ACRE WITH TACKIFIER
	3. ANY MODIFICATIONS OR DEVIATIONS FROM THE SWPPP, INCLUDING EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT FACILITIES, SHALL BE DOCUMENTED IN THE INSPECTION REPORT AND 18. SL CONSIDERED PART OF THE SWPPP FOR THE PROJECT.	STARTING FERTILIZER: 5–10–10 AT 20 LBS PER 1,000 SQ. FT LOPES 3:1 OR GREATER SHALL BE SEEDED WITH HEAVY MULCH AND MAY REQUIRE ADDITIONAL TABILIZATION MEASURES. SLOPES SHALL BE FINE GRADED WITH A MINIMUM OF 6" TOPSOIL AND
	4. THE OWNER IS RESPONSIBLE FOR FILING THE NOTICE OF INTENT (NOI) FOR CONSTRUCTION ACTIVITY WITH NYSDEC PRIOR TO COMMENCING ANY CONSTRUCTION. A COPY OF THE NOI SHALL BE KEPT ON-SITE AND PROVIDED TO THE MUNICIPALITY.	EEDED WITH FOLLOWING SEED MIX: NATIVE STEEP SLOPE MIX WITH ANNUAL RYE GRASS — ERNMX—181
!	5. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING ON SITE INSPECTIONS BY A LICENSED PROFESSIONAL REGARDING EROSION CONTROL DURING CONSTRUCTION. INSPECTIONS ARE TO BE PROVIDED AT A MINIMUM OF TWICE A WEEK FOR DISTURBANCES OF 5 ACRES AND GREATER AND ONCF	29.0% Andropogon gerardii BIG BLUESTEM, 'SOUTHLOW'-MI ECOTYPE 20.0% Lolium multiflorum ANNUAL RYEGRASS 15.0% Sorghastrum nutans INDIANGRASS
1	A WEEK FOR DISTURBANCES LESS THAN 5 ACRES. AN INSPECTION REPORT LOG AND THE SWPPP ARE TO BE KEPT ON-SITE BY THE OWNER. 5. FOR SITES WHERE SOIL DISTURBANCE ACTIVITIES HAVE BEEN TEMPORARILY SUSPENDED (F.G. WINTER	13.4% Liymus virginicus VIRGINIA WILDRYE, MADISON-NY ECOTYPE 6.60% Elymus canadensis CANADA WILDRYE 4.80% Panicum virgatum 'Shawnee' SWITCHGRASS, 'SHAWNEE'' 4.00% Agrostis perennans AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE
	SHUTDOWN) AND TEMPORARY STABILIZATION MEASURES HAVE BEEN APPLIED TO ALL DISTURBED AREAS, THE OWNER/OPERATOR MAY REDUCE THE SELF-INSPECTION FREQUENCY, BUT SHALL MAINTAIN A MINIMUM OF MONTHLY INSPECTIONS. (30 CALENDAR DAYS)	2.80%Panicum clandestinumDEERTONGUE, TIOGA1.00%Rudbeckia hirtaBLACKEYED SUSAN0.70%Coreopsis lanceolataLANCELEAF COREOPSIS0.70%Echinacea purpureaPURPLE CONEFLOWER
-	7. THE OWNER'S CONTRACTOR/REPRESENTATIVE SHALL IDENTIFY AT LEAST ONE INDIVIDUAL TO BE TRAINED FROM THEIR COMPANY THAT WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP. THE INDIVIDUAL MUST RECEIVE (4) HOURS OF NYSDEC TRAINING EVERY (3) YEARS. THE OWNER/OPERATOR	0.70%Heliopsis helianthoidesOXEYE SUNFLOWER, PA ECOTYPE0.60%Chamaecrista fasciculataPARTRIDGE PEA, PA ECOTYPE0.20%Aster pilosusHEATH ASTER, PA ECOTYPE0.20%Monorada fistulosaWILD BERGAMONT
	SHALL ENSURE THAT AT LEAST ONE OF THE TRAINED INDIVIDUALS IS ON SITE ON A DAILY BASIS WHEN SOIL DISTURBANCE ACTIVITIES ARE BEING PERFORMED.	0.10% Apocynum cannabinum INDIANHEMP, PA ECOTYPE 0.10% Asclepias syriaca COMMON MILKWEED 0.10% Soldiago rugosa WRINKLELEAF GOLDENROD, PA ECOTYPE
ł	5. FOR DISTURBANCES OF 5 ACRES AND GREATER, IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 7 DAYS. FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED IF THE SEASON DEVENTS THE ESTABLISHMENT OF	SEEDING RATE: 60 LBS PER ACRE OR 1 LB PER 1000 SF INOCULANT: RATE AS RECOMMENDED BY THE MANUFACTURER (FOR HYDROSEEDING USE FOUR
	TEMPORARY GROUNDCOVER, THE DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL. ADDITIONAL TIME FRAMES FOR STABILIZATION ARE SUBJECT TO THE REQUIREMENTS OF A REGULATED TRADITIONAL LAND USE MS4.	IIME'S MANUFACTURER'S RECOMMENDED RATE) MULCH: STRAW OR WOOD FIBER MULCH USED WITH A HYDROSEEDING METHOD, AT TWO TONS PER ACRE WITH TACKIFIER.
9	9. FOR DISTURBANCES LESS THAN 5 ACRES, IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE	_OOD TOLERANT EROSION CONTROL SEED MIX TO BE PROVIDED AS FOLLOWS:
	INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 14 DAYS. FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY GROUNDCOVER, THE DISTURBED AREAS SHALL BE MULCHED WITH STRAW OR EQUIVALENT	PERENNIAL RYE GRASS 20 ANNUAL RYEGRASS 20 RED TOP 20
	MATERIAL. ADDITIONAL TIME FRAMES FOR STABILIZATION ARE SUBJECT TO THE REQUIREMENTS OF A REGULATED TRADITIONAL LAND USE MS4.	MULCH: STRAW OR WOOD FIBER MULCH USED WITH A HYDROSEEDING METHOD AT TWO TONS PER ACRE WITH TACKIFIER.
1	IU. IHE OWNER'S CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT, MAINTENANCE, CLEANING, REPAIR AND REPLACEMENT OF EROSION CONTROL MEASURES DURING SITE CONSTRUCTION. 20. AL 11. INFILTRATION BASIN EXCAVATION SHOLLD BE CARDIED TO MATHIN 2 FEET OF THE FINAL FUEVATION OF BE	LL SEEDED AREAS ARE TO BE MONITORED FOR GERMINATION AND EROSION. ERODED AREAS ARE TO BACKFILLED, FINE GRADED AND RE-SEEDED. AREAS THAT FAIL TO GERMINATE A MINIMUM OF 80%
1	THE BASIN FLOOR. FINAL EXCAVATION TO THE FINISHED GRADE SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS ON THE WATERSHED HAVE BEEN STABILIZED OR PROTECTED. 21. AN	HALL BE RE-SEEDED. NY EXCAVATIONS THAT MUST BE DEWATERED SHALL BE PUMPED INTO AN APPROVED FILTERING ENCE REFORE ENTERING AN ACTIVE DRAINAGE SYSTEM OF DISPERSED TO AN UNDERFIDERED ADDA
1	12. THE BIORETENTION FACILITY MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREAS HAVE BEEN STABILIZED. 22. TH	EVICE DEFORE ENTERING AN ACTIVE DRAINAGE STSTEM OR DISPERSED TO AN UNDISTURBED AREA. HE HOME BUILDER SHALL BE RESPONSIBLE FOR IMPLEMENTING INDIVIDUAL LOT EROSION CONTROL FASTIRES AS SHOWN ON THE PLAN DETAIL FOR INDIVIDUAL HOUSE CONSTRUCTION THE MEASURES
1	 ALL DISTURBED AREAS TO BE RESTORED PER TABLE 5.3 SOIL RESTORATION REQUIREMENTS FOUND IN CHAPTER 5: GREEN INFRASTRUCTURE PRACTICES OF THE NYS STORMWATER MANAGEMENT DESIGN MANUAL. 	RE TO REMAIN IN PLACE UNTIL HOUSE CONSTRUCTION IS COMPLETE AND THE LAWN IS ESTABLISHED. HE OWNER SHALL BE RESPONSIBLE FOR REMOVING EXISTING FROSION CONTROL MEASURES THAT ARE
1	14. ALL DISTURBED AREAS TO BE RECLAIMED WITH A MINIMUM OF 6" TOPSOIL.	DCATED WITHIN ESTABLISHED AREAS. MATERIALS ARE TO BE DISPOSED OF PROPERLY.
1	15. AREAS OR EMBANKMENTS REQUIRING AN EROSION CONTROL BLANKET SHALL UTILIZE ECS-1B (EASTCOAST) OR AN APPROVED EQUIVALENT.	ERMINATION (NOT) WITH NYSDEC PER THE REQUIREMENTS OF THE GENERAL PERMIT GP-0-20-001.
1	16. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE PROVIDED AS FOLLOWS: THE SURFACE TWO INCHES OF SOIL SHOULD BE LOOSENED BY DISKING, RAKING, OR BACK-BLADING	
	WITH A BULLDOZER. IMMEDIATELY FERTILIZE WITH 300 LBS PER ACRE (OR 7 LBS. PER 1000 SQ. FT.) OF 10-10-10 FERTILIZER. IMMEDIATELY SEED WITH THE FOLLOWING MIX:	
	LBS./ACRELBS./1000 SQ. FT.ANNUAL RYEGRASS401PERENNIAL RYEGRASS401OATS401WHITE CLOVER (+ INOCULANT)40.1	
	SEED SHOULD HAVE A GERMINATION RATE OF AT LEAST 85 PERCENT AND MINIMAL INERT MATERIAL.	

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BME	Associates	

LS ARE IN COMPLIANCE WITH THE SPECIFICATIONS AND SEWER POLICY OF THE TOWN OF PERINTON. USE LATERALS AND APPURTENANCES SHALL BE CONSTRUCTED ACCORDING TO THE TOWN OF RITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT.

CONNECTED TO THE SANITARY LATERAL. FLOOR DRAINS DO NOT INCLUDE FOUNDATION OF FOOTER INTERCEPT UNCONTAMINATED GROUNDWATER. ALL DISCHARGES TO THE SANITARY SEWER MUST LUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.

BE PLUGGED WHEN CONNECTED TO EXISTING MANHOLES UNTIL THE NEW SEWERS ARE FLUSHED,

(WATER LATERAL) ARE ALLOWED IN DRIVEWAYS. THE SERVICE OR DRIVEWAY WILL BE RELOCATED

MITNESS STAKES SHALL BE 2"x4" HARDWOOD, EXTENDED 2-3' ABOVE GRADE AND PAINTED GREEN. ATER SHALL BE DIRECTED TO THE SANITARY SEWER.

M LATERALS SHALL BE INSTALLED AT ALL HORIZONTAL BENDS AND AT 90' INTERVALS ALONG THE S FOR SANITARY LATERALS SHALL BE INSTALLED AT THE RIGHT-OF-WAY OR EASEMENT LINE, AT EATER, AND AT 90 FOOT INTERVALS THEREAFTER.



SCALE: HOR: 1"=30' VER: 1"=3'

NOT APPROVED

This plan has not received final approval of all reviewing agencies. This plan is subject to revisions until all approvals are obtained and should not be used for construction purposes.









Proposed Building Style

550 Macedon Center Road

Short Environmental Assessment Form Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information

Name of Action or Project:

550 Macedon Center Road

Project Location (describe, and attach a location map):

550 Macedon Center Road, Perinton NY

Brief Description of Proposed Action:

Proposed subdivision of a 2.64 acre tax parcel (# 159.19-1-34) at 550 Macedon Center Road to create 3 separate lots (Lot 1 = +/- 0.87 acres) (Lot 2 = +/- 0.75 acres) (Lot 3 = +/- 1.02 acres). Lots 2 and 3 are proposed to be developed with new residential duplex units, through a Special Use Permit application.

Name of Applicant or Sponsor:	Telephone:			
Seal Two Partners, LLC (Debbie Kanner)	E-Mail:			
Address:	<u>.</u>			
PO Box 1260				
City/PO: Fairport	State: NY	Zip Code: 14450		
1. Does the proposed action only involve the legislative adoption of a plan, loca	al law, ordinance,	NO	YES	
administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.				
2. Does the proposed action require a permit, approval or funding from any oth If Yes, list agency(s) name and permit or approval: Town of Perinton Planning Board;	er government Agency? ; MCWA; MCDOH; MCPW	NO	YES	
 a. Total acreage of the site of the proposed action? b. Total acreage to be physically disturbed? c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 	<u>2.64</u> acres <u>1.29</u> acres <u>2.64</u> acres			
 4. Check all land uses that occur on, are adjoining or near the proposed action: 5. Urban Rural (non-agriculture) Industrial Commerci V Forest Agriculture V Aquatic Other(Spe Parkland 	al 🔽 Residential (subur	rban)		

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?		\checkmark	
b. Consistent with the adopted comprehensive plan?			
	L	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?			\checkmark
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		NO	YES
If Yes, identify:			
		NO	VES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?			
b. Are public transportation services available at or near the site of the proposed action?			
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?			
9. Does the proposed action meet or exceed the state energy code requirements?		NO	YES
If the proposed action will exceed requirements, describe design features and technologies:			\checkmark
10. Will the proposed action connect to an existing public/private water supply?		NO	YES
If No, describe method for providing potable water:			\checkmark
11. Will the proposed action connect to existing wastewater utilities?		NO	YES
If No, describe method for providing wastewater treatment:			
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district	ct	NO	YES
which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	3		
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?		\checkmark	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?		NO	YES
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?			
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres:			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:			
Shoreline 🖌 Forest 🗌 Agricultural/grasslands 🔲 Early mid-successional			
🗌 Wetland 🔲 Urban 🖌 Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or	NO	YES	
Federal government as threatened or endangered?	\checkmark		
16. Is the project site located in the 100-year flood plan?	NO	YES	
	\checkmark		
17 Will the proposed action create storm water discharge, either from point or non-point sources?	NO	YES	
If Yes,		\checkmark	
a. Will storm water discharges flow to adjacent properties?		\checkmark	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:		\checkmark	
Stormwater runoff will flow into the existing creek within the property. The creek conveys water south below Macedon Center Road and into Thomas Creek.			
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Vac. explain the purpose and size of the impoundment:	NO	YES	
Small bio-retention practices.		\checkmark	
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	NO	YES	
If Yes, describe:	\checkmark		
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or	NO	YES	
completed) for hazardous waste? If Yes, describe:			
No remediation actions are listed for this site on the NYSDEC Remediation Database. EAF Mapper "Yes" answer may be in regard to a remediation site within +/- 3,000' of the site.		\checkmark	
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BE MY KNOWLEDGE	ST OF		
Applicant/sponsor/name: James Cretekos, P.E. BME Associates (As Agent to Applicant) Date: 8/21/24			
Signature:			

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.
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Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	Νο
Part 1 / Question 12b [Archeological Sites]	
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	

Agency Use Only [If applicable]

550 Macedon Center Road **Project:**

Date:

8/21/2024

Short Environmental Assessment Form Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

		No, or small impact may occur	Moderate to large impact may occur
1.	Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2.	Will the proposed action result in a change in the use or intensity of use of land?		
3.	Will the proposed action impair the character or quality of the existing community?		
4.	Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5.	Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6.	Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7.	Will the proposed action impact existing: a. public / private water supplies?		
	b. public / private wastewater treatment utilities?		
8.	Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	 Image: A start of the start of	
9.	Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<	
10.	Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	 Image: A start of the start of	
11.	Will the proposed action create a hazard to environmental resources or human health?	 Image: A start of the start of	

Short Environmental Assessment Form Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

Check this box if you have determined, based on the information and analysis above, ar	nd any sup	oporting	g docu	mentation,
that the proposed action may result in one or more potentially large or significant adv	verse impa	acts and	l an	
environmental impact statement is required.				8.82

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency

Date

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer James Cretekus BME Assoc. Signature of Preparer (if different from Responsible Officer)

Signature of Responsible Officer in Lead Agency

Engineer's Report for 550 Macedon Center Road

Town of Perinton, Monroe County, New York

Prepared for:

Seal Two Partners, LLC PO Box 1260 Fairport, NY 14450

Prepared by:



10 Lift Bridge Lane East Fairport, NY 14450 (585) 377-7360

September 4, 2024

Project No. 2951



Table of Contents

Figure 01 – Location Map

A)	Introduction	.1
B)	Water Supply System	.1
Ć)	Sanitary Sewer System	.2
D)	Stormwater Management Analysis	.2
,	1) Overview	.2
	2) Methodology	.2
	3) Soils	.3
	4) Existing Conditions	.3
	5) Proposed Conditions	.3
	6) Stormwater Management Facilities	.4
	7) Stormwater Quality	.6
	8) Channel Protection	.7
	9) Stormwater Quantity and Quality Analysis and Results	.7
E)	Construction Erosion Control	.8
F)	NY State Historic Preservation Office (SHPO)	.9
Ġ)	NYS Natural Heritage Program	.9
H)	Wetlands / LDD	.9
Ŋ	Traffic Assessment	.10

Appendices 1) Water

- Water Supply
 - (1) Water Service Calculations
 - (2) MCWA Flow Test and Mapping
- 2) **Background Information**
 - (1) Figure 02-Soils Map

 - (2) Rainfall Data
 (3) NYS Cultural Resource Information System (CRIS) Map
 - (4) NYSDEC EAF Mapper Summary Report & NYSDEC Environmental Resource Map
 (5) PM Vehicle Trip Generation Calculations

Storm Water Management 3)

- i) **Quantity Calculations**
 - (1) Figure 03 Existing Conditions Drainage Map
 - (2) Figure 04 - Proposed Conditions Drainage Map
 - (3) Stormwater Hydrographs
- **Quality Calculations** ii)
 - (1) Figure 05 WQv/RRv Exhibit
 - (2) Water Quality and Runoff Reduction Calculations

4) Storm Sewers

- Figure 06 Storm Sewer Drainage Areas Map (1)
- Storm Sewer Sizing Calculations (2)
- (3) Rip-Rap Outlet Protection Calculations
- Fire Truck Turning Template 5)

A. Introduction

Seal Two Partners, LLC is proposing a subdivision and site improvements located in the Town of Perinton, Monroe County at 550 Macedon Center Road (NYS RT 31F) to create 2 new lots, each with a new residential duplex unit. The existing duplex unit at the property will remain and be located within its own lot. The project site is approximately 2.64 acres and is located on the north side of Macedon Center Road, approximately 300' east of the Squirrels Heath Road intersection.

The property is zoned Residential Class B and Section 208-32A(2) of the Town Code allows for duplex units within this district by a Special Use Permit pursuant to Code Section 208-54. The proposed lots have been designed to be in conformance with the Town subdivision criteria for duplex lots within the Residential B district and each will have a fifteen-foot-wide flag connection to Macedon Center Road.

The project will be served by the existing entrance onto Macedon Center Road. The two additional lots, Lot #2 and Lot #3 will be accessed via a private driveway with a cross access and utility easement. The site has been designed to accommodate a fire truck, including a turnaround area west of the proposed buildings. A fire truck turning template exhibit has been provided as Figure 07 in Appendix 5 showing the turning movements within the project site.

The proposed water services for the development will connect to the existing public watermain along Maceon Center Road. The sanitary laterals for the buildings will connect to the existing public sanitary sewer main located along the eastern portion of the property. Stormwater drainage will be managed by collecting runoff from the developed areas and directing it to two bio-retention facilities with extended detention capacity. The bio-retention facilities will provide both water quality and quantity control before releasing runoff to the downstream areas.

The following report provides the technical data to support the proposed overall development. The report includes discussion on the water and sanitary sewer service, stormwater management, construction erosion control, environmental setting, and other site design components.

B. <u>Water Supply System</u>

Water supply will be provided by new 1.5" PE #4710 private water services for each new building which will connect to the 12" Cast Iron public watermain along Macedon Center Road. Within the right-of-way the service will be 1.5" copper. Due to the length of the services a meter in tile will be provided at the right-of-way limits.

The estimated daily water usage for the development is 880 gpd and was calculated using the New York State Design Standards for Intermediate Sized Wastewater Treatment Systems 2014, Table B-3 (110 gpd/bedroom * 4 units * 2 bedroom/unit).

The water supply calculations have been included in Appendix 1 and show adequate water pressure is available at the project site for domestic use, which has been summarized below.

Domestic Demand Lot 2= 15 gpm (2 units at 7.5 gpm per unit) Approximate Domestic Pressure at Base of Riser = 64 psi

Domestic Demand Lot 3= 15 gpm (2 units at 7.5 gpm per unit) Approximate Domestic Pressure at Base of Riser = 67 psi
C. <u>Sanitary Sewer System</u>

The proposed buildings will each be served by a new 4" PVC SDR-21 sanitary lateral and constructed with a minimum slope of 2.0%. Each lateral will be connected to the existing public 16" sewer main located on the eastern portion of the property. The sanitary laterals are proposed to be directionally drilled below the creek invert to minimize disturbances to the stream bed and banks. The sanitary laterals will connect to the existing main using insert-a-tee fittings. The estimated daily sewage generated from the site is 880 gpd (see Water Supply System for calculations).

D. <u>Stormwater Management Analysis</u>

D.1 Overview

Stormwater runoff associated with the proposed project will be treated during and after construction to meet New York State Department of Environment Conservation (NYSDEC) water quality and quantity requirements. Two permanent stormwater management areas will be constructed to capture and detain runoff from the developed areas of the property, then release the runoff to a downstream area at a controlled rate. The proposed stormwater management facilities will be constructed as filtering bio-retention practices with extended detention capabilities. The project's stormwater management plan is designed according to the current rules and regulations set in the NYSDEC Stormwater Management Design Manual (January 2015) and the Town of Perinton Design Criteria and Construction Specifications.

The NYSDEC recently released an updated version of the Stormwater Design Manual Dated July 31, 2024. The NYSDEC indicated the use of the updated standards is encouraged and is not considered deviations from the 2020 Construction General Permit. The stormwater design for this project is generally consistent with the 2015 SWDM, however, the following criteria/standards from the 2024 SWDM have been utilized.

- Channel Protection Volume Requirement may be waived if, "CPv is not required at sites where the 1-year post-development peak discharge is less than or equal to 2.0 cfs"
- Bio-Retention sizing completed per updated sizing calculation.
- Bio-Retention soil media per updated design standards.

D.2 Methodology

The NYSDEC Stormwater Management Design Manual provides specifications and sizing criteria for stormwater management practices for stormwater discharges. The proposed stormwater management for this project has been designed to meet the five key criteria outlined in the Design Manual:

- Water quality volume (WQv) to meet pollutant removal goals;
- Runoff reduction volume (RRv) by application of runoff reduction practices to replicate predevelopment flows;
- Channel protection volume (Cpv) to reduce channel erosion;
- Overbank flood protection (Qp) to prevent overbank flooding; and
- Extreme storm protection (Qf) to help control extreme floods.

The existing and proposed drainage conditions at the project site were analyzed following the methods outlined in Soil Conservation Service Technical Release No. 20 & 55. Peak runoff rates for existing and post-development conditions were modeled for the 1, 2, 5, 10, 25, 50, and 100-year design storm events

using the HydroCAD V10.20 software. Runoff rates were determined based on the hydrologic characteristics of the site (soil conditions, existing and proposed land cover, time of concentration for the contributing drainage areas) and the hydraulic characteristics of the proposed stormwater management facility (type of storage, size of facility and outlet structure features and sizing as applicable). Twenty-four (24) hour extreme storm event precipitation amounts were obtained from Northeast Regional Climate Center online web tool and have been included in Appendix 2 for reference.

Appendix 3 contains the stormwater hydrographs and subarea information. These stormwater hydrograph reports show the subarea routings, subarea data, stormwater management facility and outlet structure sizing, estimated detention times, storage volumes, peak ponding elevations, and discharge rates.

D.3 Soils

The Natural Resources Conservation Service (NRCS) indicates the project site contains soils of hydrologic class "B" and "B/D". Soils within the property are primarily composed of Appleton loam (B/D) and some Ontario loam (B). A soils map has been included as Figure 02 in Appendix 2 for reference.

Based upon field observations the site appears well drained within the proposed development area east the creek routing through the eastern portion of the property and therefore all stormwater modeling has been completed using class B soils.

D.4 Existing Conditions

The analyzed watershed for the project totals approximately 2.05 acres and under existing conditions consist of 1 drainage area and 1 analysis point (see Figure 03 in Appendix 3). Table 1 below provides a summary of the existing subareas, which are described in further detail following the table.

Subarea	Area	Curve Number (CN)	Time of Concentration (Tc)
Existing Subarea 'A'	2.05 acres	64.0	9.7 min

Table 1: SCS Hydrologic Data, Existing Conditions

Existing Subarea 'A' (2.05 acres)

This subarea contains all the development property west of the existing creek and some additional lands to the west which drain through the property before reaching it. The creek flows south within the property toward Macedon Center Road and enters an existing box culvert. The box culvert was selected as Analysis Point A for the project to allow for comparison to post developed flows.

D.5 Proposed Conditions

The drainage subareas for the post-development conditions (see Figure 04 in Appendix 3) have been delineated per the proposed grading of the site development. The analyzed drainage area includes approximately 2.05 acres, which matches the existing conditions, and is composed of 3 sub areas. Drainage under the proposed conditions will continue to drain toward the analysis point to allow for a comparison to pre-development flow rates. Table 2 below provides a summary of the proposed subareas, which are described in further detail following the table.

Table 2: SCS Hydrologic Data, Proposed Conditions

Subarea	Area	Curve Number (CN)	Time of Concentration (Tc)
Proposed Subarea 'A'	0.88 acres	66	9.7 min
Proposed Subarea 'B'	0.80 acres	73	4.4 min *
			*(6.0 min minimum per Tr -55)
Proposed Subarea 'C'	0.37 acres	75	3.6 min *
			*(6.0 min minimum per Tr -55)

Proposed Subarea 'A' (0.88 acres)

This subarea contains a portion of the existing duplex unit, parking areas at the southern portion of the property, and the areas west of the creek which are not directed to either of the proposed stormwater facilities. All runoff from this subarea will maintain existing drainage patterns and flow into the existing creek and toward Analysis Point A.

Proposed Subarea 'B' (0.80 acres)

This subarea includes the northern portion of the property that will be collected and directed to Bio-Retention Area 1 for quality and quantity controls. Runoff entering the facility will be released at controlled rates toward the existing creek, where it will ultimately flow south to Analysis Point A.

Proposed Subarea 'B' (0.37 acres)

This subarea includes the central portion of the property that will be collected and directed to Bio-Retention Area 2 for quality and quantity controls. Runoff entering the facility will be released at controlled rates toward the existing creek, where it will ultimately flow south to Analysis Point A.

D.6 Stormwater Management Facilities

Both proposed Stormwater Management Facilities will be constructed as bio-retention practices with extended detention capabilities. The facilities will include an upstream vegetated swale, stone level spreader, a bio-retention filter area, an outlet structure, and spillway.

The stormwater facilities will receive runoff from proposed drainage Subarea 'B' and Subarea 'C'. The facilities will detain and treat the post-development runoff and discharge it to the existing creek which flows to the Analysis Point. Sufficient storage volume is provided in the facilities to effectively detain the 1, 2, 5, 10, 25, 50 and 100-year storms and release them below pre-development runoff rates.

Both outlet structures are designed to control the rate at which runoff is discharged from the site, ensuring that runoff rates will remain at or below those for the existing conditions. The outlet structures are similar, and both consist of a 6" underdrain below the filter media, discharging into a 2' x 2' (ID) reinforced concrete structure. The structures will include a 24" x 24" flat grate, and a 6" main outlet pipe. The facilities also include a spillway which was set 0.5' above the 2'x2' grate elevation to maintain a maximum ponding area within the bio-retention practice in accordance with the NYSDEC 2024 SWMD.

The underdrain pipe will discharge runoff from the bottom of the filter media where it has been treated by the filter and is cooler in temperature. The analysis provided within this report has been completed assuming the bio-retention media will have a filtration rate of 0.5 inches/hour in accordance with NYSDEC design standards. Details of each outlet structure are also provided on the design plans. Table 3 and 4 below, contains the ponding elevation and outflow data for each SWMF.

Design Storm Event	Post-Dev. Inflow (cfs)	Post Deve. Outflow (cfs)	Time to Peak Outflow (hrs)	Ponding Elevation (ft)	Storage Volume Used (cf)
1-yr	0.17	0.01	12.10	469.74	346
2-yr	0.36	0.01	12.05	471.72	707
5-yr	0.66	0.01	23.01	472.56	1,338
10-yr	0.97	0.03	17.84	473.00	1,897
25-yr	1.54	0.36	12.57	473.05	1,969
50-yr	2.05	0.83	12.30	473.10	2,031
100-yr	2.72	1.68	12.17	473.19	2,169
6" Outlet Pipe Elev.	468.67		Total Availa	able	
Top of Filter Media Elev.	472.00		Storage Vol Elev = 474.	ume @ 00 (cf)	3,494 cf
2'x2' Grate Elev.	473.00				
Spillway Elev.	473.50				
Top of Berm Elev.	474.00				

Table 3: Bio-Retention 1 (North) - SWMF Summary

Table 4: Bio-Retention 2 - SWMF Summary

Design Storm Event	Post-Dev. Inflow (cfs)	Post Deve. Outflow (cfs)	Time to Peak Outflow (hrs)	Ponding Elevation (ft)	Storage Volume Used (cf)
1-yr	0.12	0.01	12.05	469.58	192
2-yr	0.21	0.01	11.95	471.18	367
5-yr	0.36	0.01	21.24	472.38	683
10-yr	0.51	0.01	22.14	472.82	1,003
25-yr	0.79	0.07	12.97	473.01	1,152
50-yr	1.04	0.34	12.39	473.05	1,187
100-yr	1.35	0.76	12.20	473.09	1,221
6" Outlet Pipe Elev.	468.67		Total Availa	able	
Top of Filter Media Elev.	472.00		Storage Vol Elev = 474.	ume @ 00 (cf)	2,105 cf
2'x2' Grate Elev.	473.00				
Spillway Elev.	473.50				
Top of Berm Elev.	474.00				

D.7 Stormwater Quality:

The August 2015 NYSDEC Stormwater Management Design Manual outlines numerous practices that can be constructed to improve the water quality and reduce the runoff volume of stormwater runoff. Reduced Runoff Volume (RRv) is the reduction of the total Water Quality Volume (WQv) by application of green infrastructure techniques and standard management practices to replicate pre-development hydrology. To meet the WQv and minimum allowable RRv requirements, the stormwater plan includes two stormwater facilities that will be constructed as bio-retention practices with extended detention.

The proposed site modifications classify as a redevelopment project per the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities, General Permit Number GP-0-20-001 (General Permit), and the 2015 New York State Stormwater Design Manual (SWDM) "Chapter 9-Redevelopment – Projects" guidelines. Given the anticipated site disturbance of over 1 acre or land area, the site development must address Water Quality Volume (WQv), Runoff Reduction (RRv) and Water Quantity per the SWDM "Chapter 9 – Redevelopment – Projects" guidelines.

The intent of the green infrastructure measures is to replicate the pre-construction infiltration, peak runoff flow and discharge volume, as well as minimization of concentrated flow by using runoff control techniques to provide treatment in a distributed manner before runoff reaches offsite discharge locations. The green infrastructure practices have been designed to comply with the NYSDEC guidelines. Calculations were completed to show that the project site can effectively meet the overall WQv and minimum allowable RRv requirements, and these calculations have been provided in Appendix 3.

Based upon field observations and initial percolations test completed at the proposed bioretention practice there is minimal infiltration capacity and therefore the bio-retention area has been designed as filtering practices with underdrains discharging to the stormwater facilities outlet pipes.

As noted previously in this report, this project proposes to use the updated sizing calculations and soil media specification for the Bio-Retention sizing from the NYSDEC July 2024 Stormwater Design Manual. Green infrastructure calculations were completed to show that the project site can effectively meet the overall WQv and minimum allowable RRv requirements have been provided in Appendix 3 for reference and summarized below. The updated soil media specification is listed on the bio-retention detail on the Site Plans.

Figure 05 in Appendix 3 shows the approximate drainage areas to each facility and the overall Water Quality limits utilized in the calculations. Detailed calculations for the site requirements and practice have been included in Appendix 3 and are summarized below.

SWMF / **Bioretention** #1 is located northeast of the proposed duplexes and receives runoff from proposed drainage area B. Runoff from this drainage area will be collected in storm sewers and swales. The swales and a stone level spreader will provide pretreatment and slow runoff down as it enters the facility, where it will be filtered and collected within an underdrain pipe which discharges into the outlet structure and ultimately toward the Analysis Point. See Stormwater Management Facility Section for additional information regarding the outlet structure for this facility.

<u>SWMF / Bioretention #1 (North)</u> WQv Provided by Bio-Retention = 85 cf RRv Provided = 910 cf **SWMF** / **Bioretention #2** is located southeast of the proposed duplexes and receives runoff from proposed drainage area B. Runoff from this drainage area will be collected in storm sewers and swales. The swales and a stone level spreader will provide pretreatment and slow runoff down as it enters the facility, where it will be filtered and collected within an underdrain pipe which discharges into the outlet structure and ultimately toward the Analysis Point. See Stormwater Management Facility Section for additional information regarding the outlet structure for this facility

<u>SWMF / Bioretention #2</u> WQv Provided by Bio-Retention = 0 cf RRv Provided = 525 cf

Stormwater Quality Summary

The proposed stormwater management facility satisfies both of the NYSDEC's Stormwater Design Manual key criteria relating to stormwater quality. The total provided WQv and RRv are summarized below;

WQv Required = $1,405$ cf	Total WQv Provided = 85 cf
Minimum allowable $RRv = 483$ cf	Total RRv Provided = 1435 cf
	Total WOv + RRv Provided = 1.520 cf

Due to preliminary percolation testing at the proposed bio-retention locations it is necessary to use filtering "Green Infrastructure" practices for the project site, however the project is still able to provide more than 100% of the runoff reduction requirements. All the proposed impervious surfaces are treated by the proposed stormwater management practice, prior to being conveyed to the Analysis Point, and therefore satisfies the NYSDEC requirements for water quality.

D.8 Channel Protection:

The stream channel protection volume (CPv) criteria is designed to protect stream channels for erosion, by providing 24-hour extended detention of the one-year, 24-hour storm event. As noted above this project proposes to use an updated standard for CPv from the NYSDEC's 2024 SWDM. This new standard allows the CPv requirement to be waived if the 1-year post-development peak discharge is less than or equal to 2.0 cfs. The proposed 1-year peak discharge from the development area at the analysis point is 0.05 CFS and therefore the CPv requirement is satisfied. For reference the 50-year peak runoff rate is only 1.78 CFS.

D.9 Stormwater Quantity and Quality Analysis and Results:

The calculations provided within the appendices show the proposed project results in a reduction of stormwater runoff rates at the Analysis Points for both the 10-year and 100-year events as required by the NYSDEC Stormwater Design Manual quantity criteria. A summary of the existing vs. proposed runoff rates at the Analysis Point has been summarized in Table 5 below. The previous sections showed that the project also satisfies the other key criteria, including WQv, RRv and CPv. These values have been summarized in Table 6 below.

Analysis Point	Design Storm	Existing Peak Runoff Rate (cfs)	Proposed Peak Runoff Rate (cfs)
	1	0.04	0.05
	2	0.13	0.10
	5	0.39	0.26
'Analysis Point'	10	0.81	0.46
	25	1.70	0.86
	50	2.57	1.78
	100	3.77	3.74

Table 5: Comparison of Existing and Proposed Peak Runoff Rates at Analysis Point

Table 6. Compliance with NYSDEC Sizing Requirements

New York Stormwater Sizing Criteria	Compliance
Water Quality Volume (WQv)	WQv Required: 1,405 cf WQv+RRv Provided: 1,520 cf > 1,405 cf OK
Runnoff Reduction Volume (RRv)	Minimum allowable RRv: 483 cf RRv Provided: 1,435 cf > 483 cf OK
Channel Protection Volume (Cpv)	Requirement Waived, 1-year peak discharge (0.05 cfs) is less than 2.0 cfs. (NYSDEC 2024 SWDM)
Overbank Flood Protection (Qp) Control peak discharge from 10-year storm to 10-year pre-development rates	Total Flows from Site (Analysis Point) 0.46 cfs (Proposed) < 0.81 cfs (Existing) <u>OK</u>
Extreme Storm Protection (Qf) Control peak discharge from 100-year storm to 100-year pre-development rates	Total Flows from Site (Analysis Point) 3.74 cfs (Proposed) < 3.77 cfs (Existing) <u>OK</u>

Based on the above information, the proposed stormwater management design for the project satisfies the key criteria of the Stormwater Management Design Manual guidelines and will require a five-day Notice of Intent review to acquire permit coverage from NYSDEC under General Permit GP-0-20-001.

E. <u>Erosion and Sediment Control</u>

The proposed stormwater management facilities and a comprehensive erosion control plan have been designed to control sediment runoff and provide water quality treatment during and after the site construction. As required by the NYSDEC, the project will include a Stormwater Pollution Prevention Plan (SWPPP) that will combine the design presented in this report and on the plans with the requirements of NYSDEC GP-0-20-001 to outline how the owner will address the construction and post construction stormwater condition. The construction erosion control plan has been designed per the New

York Standards and Specifications for Erosion and Sediment Control. The stormwater management facility's pretreatment swale and stone level spreader will provide pretreatment of runoff entering into the facility and help protect the bio-retention media and reduce maintenance.

Additional erosion control measures will be implemented during construction to control silt and minimize disturbance to the existing swales and drainage conditions. Typical practices include the installation and maintenance of silt fence, stone check dams, rip rap outlet protection, and filter fabric inlet protection. The disturbed areas will be seeded and mulched as soon as possible to control erosion. Pipe outlet control rip-rap measures are also proposed with the storm sewer system. Storm sewer and rip-rap sizing calculations have been included in Appendix 4. A stabilized construction entrance will also be installed near the right-of-way limits to access the site during construction.

The design plans include the sequence of construction notes along with specific construction erosion control notes and details. The design plans will be reviewed at the pre-construction meeting with all involved parties. They include a construction erosion control plan that outlines a sequence of construction along with erosion control measures and details. The erosion control practices proposed are shown on the design plans and detailed on the detail sheets. The details are per the New York State Standards and Specifications for Erosion and Sediment Control.

The final component of the erosion control plan will be maintenance. The contractor will be responsible for installing the erosion control features, as well as maintaining and replacing them as necessary throughout construction. An owner's representative and the Town of Perinton will review the erosion control measures to determine their efficiency, need for replacement, or need for additional measures. A SWPPP will be prepared for the project and is to be kept on-site throughout the soil disturbing activities and until groundcover is established.

F. <u>NY State Historic Preservation Office (SHPO)</u>

Per the New York State Office of Parks, Recreation & Historic Preservation (SHPO), Cultural Resource Information System (CRIS), the property is not located within an archaeological sensitive area. A copy of the CRIS mapping has been provided in Appendix 2 for reference.

G. <u>NYS Natural Heritage Program</u>

Per the NYSDEC EAF Mapper Summary Report and the NYSDEC Environmental Resource Mapper, the property does not include rare plants or animals, nor any endangered or threatened species. The EAF Mapper Summary Report and a copy of the Environmental Resource Mapper have been provided in Appendix 2 for reference.

H. <u>Wetlands / LDD</u>

BME Associates completed a review of available wetland mapping and an on-site evaluation of potential wetland areas within the project site limits. No existing regulated wetlands were identified on the site within the proposed development area.

The project site also includes Town of Perinton Limited Development Districts (LDD), as defined by Town Code 208-47.D; in particular 208-47.D.(3) areas prone to inundation by water on a recurring basis or exhibiting a high water table. This area is shown on the Town's existing LDD mapping and the limits were reviewed during a site walk with the Conservation Board members, and water determined to follow along the existing vegetation limits at elevation of approximately 468.0. The limits of this LDD are shown on the site plans. Some small disturbances within the LDD limits are proposed to allow for

connection of the sanitary sewer laterals to the existing public sewer located on the property, and for some minor grading activities. The minor grading activities within the LDD limits allow the site to be designed to reduce the excess fill that would be required to be removed from the project site by approximately 1000 CY.

K. <u>Traffic Assessment</u>

The proposed is estimated to have a PM peak hour vehicle trip generation of 4 total trips (2 entering & 2 exiting). This is below the NYSDOT's threshold for requiring a traffic study and as such the proposed development will not have any noticeable effect on the adjacent road networks.

Appendix 1

Water Supply

Water Supply Calculations

MCWA Flow Test and Mapping

BME ASSOCIATES

Project:	550 Macedon Center Road
Project No:	2951
Date:	8/22/2024
By:	DTT

CALCULATIONS			LATIONS		1	1.5	2	SIZE (INCHES)		
Loss Co	oss Coeff. from selected pipe (per 100 ft.) =		С	8.60	1.23	0.32	COPPER			
			, and a second s	,	PE	15.99	2.68	0.72	POLYETHYLENE	
					L					
	Main	House	Length of	Length of	Size/M	laterial	Size/M	aterial	Pressure @	Pressure
Lot #	Elev.	Elev.	Co. Serv.	Cust. Serv.	Co. S	ervice	Cust. S	Service	House @ 15gpm	at main
2	506.0	479.0	12	348	1.5	С	1.5	PE	64.22	62
3	506.0	478.0	12	248	1.5	С	1.5	PE	67.33	62
4									#N/A	
5									#N/A	
6									#N/A	
7									#N/A	
8									#N/A	
9									#N/A	
10									#N/A	
11									#N/A	
12									#N/A	
13									#N/A	
14									#N/A	
15									#N/A	
16									#N/A	
17									#N/A	
18									#N/A	
19									#N/A	
20									#N/A	
21									#N/A	
22									#N/A	
23									#N/A	
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25									#N/A	
26									#N/A	
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31									#N/A	
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34									#N/A	
35									#N/A	
36									#N/A	
37									#N/A	
38									#N/A	
39									#N/A	
40									#N/A	
41									#N/A	
42									#N/A	
43									#N/A	
44									#N/A	
45									#N/A	

Village/Town	Perinton	
Location	Macedon Center Rd	
Issue Date	7/24/2024	
Calculated By	BM	
Reference Test Book#/Pg#	46/42	
Flow Nozzle	2.5	
Flow Hydrant #	#723	
Static	62	psi
Pitot	42	psi
Style	A	1.00
Residual Hydrant #	#722	
Static	68	psi
Residual	61	psi
Grade Adjustment		
Static	62	psi
Residual	55	psi
Calculations		
Q Observed	1094	gpm
Q @ 20 psi	2879	gpm
System Status		
Zone	679	
Corrected Grade*	650	ft
Elev. @ Flow Hyd	506	ft
Water Main Size	12	inch

PLEASE NOTE THE FOLLOWING INFORMATION

The pressure and flow data provided herein represents the calculated values for this location in the distribution system based on typical low operating conditions. These values can vary depending on demands, operational parameters, system configurations, subsequent modifications and other related criteria. Please contact Tony Piascik, P.E. at 585-442-2001 ext 273 with any questions or concer *Corrected Grade is based on the Historical Lows for the Zone and is not the same as the Hydraulic Grade for the particular hydrant flow tes



Appendix 2

Background Information

Figure 02-Soils Map Rainfall Data NYS Cultural Resource Information System (CRIS) Map NYSDEC EAF Mapper Summary Report & NYSDEC Environmental Resource Map PM Vehicle Trip Generation Calculations

SOIL MAP FIGURE 02



USDA Natural Resources Conservation Service Web Soil Survey National Cooperative Soil Survey





Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
АрА	Appleton loam, 0 to 3 percent slopes	B/D	4.8	58.1%
HIB	Hilton loam, 3 to 8 percent slopes	B/D	0.1	1.5%
OnC	Ontario loam, 8 to 15 percent slopes	В	0.2	2.6%
OnF	Ontario loam, 25 to 60 percent slopes	В	1.7	20.7%
PgB	Palmyra gravelly loam, 3 to 8 percent slopes	A	1.4	17.1%
Totals for Area of Intere	st		8.2	100.0%

Rating Options

Aggregation Method: Dominant Condition Component Percent Cutoff: None Specified Tie-break Rule: Higher

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point				
Smoothing	Yes			
State	New York			
Location	New York, United States			
Latitude	43.095 degrees North			
Longitude	77.413 degrees West			
Elevation	140 feet			
Date/Time	Thu Aug 22 2024 12:50:48 GMT-0400 (Eastern Daylight Time)			

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.25	0.39	0.48	0.63	0.79	0.97	1yr	0.68	0.89	1.10	1.32	1.57	1.86	2.08	1yr	1.65	2.00
2yr	0.31	0.47	0.59	0.77	0.97	1.19	2yr	0.84	1.07	1.34	1.60	1.87	2.17	2.43	2yr	1.92	2.34
5yr	0.36	0.56	0.70	0.94	1.20	1.49	5yr	1.04	1.33	1.68	1.99	2.31	2.66	3.00	5yr	2.36	2.88
10yr	0.40	0.63	0.80	1.09	1.42	1.76	10yr	1.22	1.57	1.99	2.35	2.73	3.11	3.52	10yr	2.75	3.38
25yr	0.48	0.76	0.96	1.33	1.77	2.20	25yr	1.52	1.96	2.49	2.93	3.38	3.83	4.34	25yr	3.39	4.18
50yr	0.54	0.87	1.11	1.55	2.09	2.61	50yr	1.80	2.31	2.96	3.47	3.98	4.47	5.10	50yr	3.96	4.90
100yr	0.61	0.99	1.27	1.81	2.47	3.10	100yr	2.13	2.74	3.52	4.11	4.68	5.23	5.99	100yr	4.63	5.76
200yr	0.70	1.14	1.47	2.11	2.91	3.67	200yr	2.51	3.25	4.16	4.85	5.50	6.12	7.03	200yr	5.42	6.76
500yr	0.83	1.37	1.78	2.59	3.64	4.60	500yr	3.14	4.07	5.21	6.05	6.83	7.54	8.70	500yr	6.67	8.37

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.21	0.32	0.39	0.53	0.65	0.74	1yr	0.56	0.72	0.83	1.08	1.42	1.73	1.82	1yr	1.53	1.75
2yr	0.30	0.46	0.56	0.76	0.94	1.05	2yr	0.81	1.02	1.15	1.42	1.72	2.12	2.38	2yr	1.88	2.29
5yr	0.33	0.51	0.64	0.88	1.11	1.24	5yr	0.96	1.21	1.35	1.65	2.02	2.52	2.85	5yr	2.23	2.74
10yr	0.36	0.56	0.70	0.97	1.26	1.39	10yr	1.08	1.36	1.51	1.85	2.26	2.85	3.24	10yr	2.53	3.12
25yr	0.42	0.63	0.79	1.13	1.48	1.62	25yr	1.28	1.59	1.74	2.15	2.59	3.33	3.85	25yr	2.95	3.71
50yr	0.46	0.70	0.87	1.25	1.68	1.82	50yr	1.45	1.78	1.93	2.40	2.87	3.76	4.39	50yr	3.33	4.22
100yr	0.51	0.77	0.96	1.39	1.90	2.03	100yr	1.64	1.99	2.12	2.68	3.17	4.23	5.00	100yr	3.75	4.81
200yr	0.56	0.84	1.07	1.54	2.15	2.27	200yr	1.86	2.22	2.33	2.99	3.48	4.77	5.70	200yr	4.22	5.48
500yr	0.64	0.95	1.22	1.77	2.52	2.64	500yr	2.18	2.58	2.61	3.42	3.92	5.57	6.80	500yr	4.93	6.54

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day
1yr	0.28	0.43	0.52	0.70	0.86	0.99	1yr	0.75	0.97	1.10	1.35	1.69	1.98	2.23	1yr	1.75	2.14
2yr	0.32	0.49	0.60	0.82	1.01	1.14	2yr	0.87	1.12	1.25	1.52	1.86	2.25	2.49	2yr	1.99	2.39
5yr	0.39	0.60	0.75	1.02	1.30	1.50	5yr	1.12	1.46	1.64	1.95	2.34	2.82	3.17	5yr	2.50	3.05
10yr	0.46	0.71	0.88	1.22	1.58	1.85	10yr	1.37	1.81	2.03	2.38	2.82	3.39	3.80	10yr	3.00	3.65
25yr	0.58	0.89	1.10	1.58	2.07	2.46	25yr	1.79	2.41	2.69	3.10	3.63	4.33	4.84	25yr	3.84	4.65
50yr	0.69	1.05	1.31	1.88	2.53	3.05	50yr	2.19	2.98	3.36	3.81	4.41	5.20	5.82	50yr	4.60	5.59
100yr	0.83	1.25	1.57	2.27	3.11	3.79	100yr	2.68	3.70	4.19	4.65	5.37	6.28	7.00	100yr	5.56	6.73
200yr	0.99	1.49	1.88	2.72	3.80	4.72	200yr	3.28	4.61	5.25	5.71	6.53	7.56	8.41	200yr	6.69	8.09
500yr	1.26	1.87	2.41	3.50	4.98	6.32	500yr	4.30	6.18	7.09	7.55	8.51	9.70	10.75	500yr	8.58	10.33

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153.15-3-26 153.15-3-26 153.15-2-23 153.15-2-23 153.15-2-24 153.15-2-24 153.15-2-25 153.15-2-32 153.15-2-32 153.15-2-33 153.15-2-25 153.16-1-66 153.16-1-66 153.16-1-52 153.16-1-66 153.16-1-52 153.16-1-52 153.16-1-52 153.16-1-58 153.16-1-57 153.16-1-57 153.16-1-57	Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.
10 1153/15-3-33 15-2-30/153/15-2-28 153/15-164 153/16-166 153/15-3-34 153/19-1-31 153 16-163153.20-1-1153/20-1-3 153/15-3-35 153/19-1-30 153/19-1-32 153/19-1-32 153/15-3/3.20-1-2 153/15-3-35 153/19-1-30 153/19-1-32 Perinton 153/20-1-2 153/20-1-2 153/19-1-20 153/19-1-32 Perinton 153/20-1-26 153/20-1-26 153/20-1-26 153/19-1-28 153/19-1-35 153/20-1-34 153/20-1-31 153/20-1-26 153/20-1-26 153/19-1-23 153/19-1-34 153/20-1-31 153/20-1-26 153/20-1-26 153/20-1-26 153/19-1-23 153/19-1-37 153/20-1-30 153/20-1-26 153/20-1-26 153/20-1-26 153/19-1-23 153/19-1-37 153/20-1-27 153/20-1-26 153/20-1-27 153/20-1-27 153/19-1-23 153/20-1-28 153/20-1-27 153/20-1-27 153/20-1-27 153/20-1-27	Sound Barrie Kingston Montper
153,19-1-39 153,20-1-33153,20-1-34 153,19-1-38 153,19-1-38 153,19-1-38 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-35 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,20-1-33153,20-1-34 153,19-1-38 153,20-1-33153,20-1-34 153,19-1-38 153,20-1-35 153,20-1 153,2	Massachu Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P RCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri Thailand), NGCC, Ici, OpenStreetMap, contributors, and the GIS User Commonity, Esri, HERE, Garmin, MSX, USGS, NPS Pitteburgh

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	Yes

Environmental Resource Mapper

Search							
Tools							
Layers and Legend							
All Layers							
🗹 🖈 Unique Geological Features							
Waterbody Classifications for Rivers/Streams	l						
✓ ── Waterbody Classifications for Lakes							
 Waterbody Inventory/Priority Waterbodies List Lakes and Reservoirs Estuaries Rivers and Streams Shorelines 							
State Regulated Freshwater Wetlands (Outside of the Adirondack Park)	•						
Other Wetland Layers							
Reference Layers							
Tell Me More							
Need A Permit?							
Contacts							



Base Map: NYS Aerial Vising this map

Single-Family Attached Housing (215)

Vehicle Trip Ends vs: On a:	Dwelling Units Weekday, PM Peak Hour of Generator
Setting/Location:	General Urban/Suburban
Number of Studies:	34
Avg. Num. of Dwelling Units:	110
Directional Distribution:	62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.61	0.29 - 1.25	0.18

Data Plot and Equation



Trip Gen Manual, 11th Edition

• Institute of Transportation Engineers

Appendix 3

Drainage Analysis Calculations

Quantity Calculations (Qp, Qf)

Figure 03 - Existing Conditions Drainage Map Figure 04 - Proposed Conditions Drainage Map Stormwater Hydrographs

Quality Calculations (WQv, RRv, CPv)

Figure 05 – WQv/RRv Exhibit Water Quality and Runoff Reduction Calculations

Drainage Analysis Calculations Quantity Calculations

Figure 03 - Existing Conditions Drainage Map Figure 04 - Proposed Conditions Drainage Map Stormwater Hydrographs











Printed 8/22/2024 Page 2

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-yr	Macedon Center Road Rainfall 24-hr S1	1-yr	Default	24.00	1	1.86	
2	2-yr	Macedon Center Road Rainfall 24-hr S1	2-yr	Default	24.00	1	2.17	
3	5-yr	Macedon Center Road Rainfall 24-hr S1	5-yr	Default	24.00	1	2.66	
4	10-yr	Macedon Center Road Rainfall 24-hr S1	10-yr	Default	24.00	1	3.11	
5	25-yr	Macedon Center Road Rainfall 24-hr S1	25-yr	Default	24.00	1	3.83	
6	50-yr	Macedon Center Road Rainfall 24-hr S1	50-yr	Default	24.00	1	4.47	
7	100-yr	Macedon Center Road Rainfall 24-hr S1	100-yr	Default	24.00	1	5.23	

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.05 cfs @ 12.55 hrs, Volume= Routed to Reach 02 : Full Creek 0.015 af, Depth= 0.08"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

Area (a	c) CN	Descr	ription		
0.2	23 98	Paveo	d parking,	HSG B	
1.5	64 61	>75%	Grass cov	ver, Good,	HSG B
0.2	28 55	Wood	ls, Good, H	ISG B	
2.0)5 64	Weigh	nted Avera	ge	
1.8	32	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
			•		
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 5

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.08" for 1-yr event Inflow = 0.05 cfs @ 12.55 hrs, Volume= 0.015 af Outflow = 0.04 cfs @ 12.85 hrs, Volume= 0.015 af, Atten= 19%, Lag= 17.9 min Routed to Link 03 : Existing Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.57 fps, Min. Travel Time= 11.1 min

Avg. Velocity = 0.41 fps, Avg. Travel Time= 15.4 min

Peak Storage= 25 cf @ 12.66 hrs Average Depth at Peak Storage= 0.03', Surface Width= 2.01' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Are	a =	2.05 ac, 11	.22% Imper	vious,	Inflow D	epth =	0.08"	for 1-yı	event
Inflow	=	0.04 cfs @	12.85 hrs,	Volum	e=	0.015	5 af		
Primary	=	0.04 cfs @	12.85 hrs,	Volum	e=	0.015	5 af, A	tten= 0%	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Hydrograph 0.04 Inflow Primary 0.04 cfs 0.038 0.036 Inflow Area=2.05 ac 0.034 0.032 0.03 0.028 0.026 0.024 (s) 0.024 0.02-0.018-0.016 0.014 0.012 0.01 0.008 0.006 0.004 0.002 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours) 0

Link 03: Existing Point A

Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.03 cfs @ 12.52 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.008 af, Depth= 0.12"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

_ Area (a	ac) CN	l Descr	ription							
0.4	48 61	>75%	Grass co	ver, Good,	HSG B					
0.	16 98	B Paveo	d parking,	HSG B						
0.2	24 55	5 Wood	ods, Good, HSG B							
0.0	88 66	6 Weiał	nted Avera	ae						
0.	72	81.82	% Perviou	s Area						
0.	16	18.18	% Impervi	ous Area						
			•							
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow					
					Grass: Short n= 0.150 P2= 2.17"					
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods					
					Woodland Kv= 5.0 fps					
9.7	250	Total								

Hydrograph 0.036 - Runoff 0.03 cfs 0.034 0.032 Macedon Center Road Rainfall 24-hr S1 1-yr 0.03 Rainfall=1.86" Runoff Area=0.88 ac 0.028-Runoff Volume=0.008 af 0.026 Runoff Depth=0.12" 0.024 Flow Length=250' 0.022 Tc=9.7 min Flow (cfs) 0.02 CN=66 0.018 0.016 0.014 0.012 0.01 0.008 0.006 0.004 0.002 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ò Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.17 cfs @ 12.07 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.017 af, Depth= 0.26"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

_	Area (a	c) CN	Desci	ription						
	0.2	26 98	B Paveo	Paved parking, HSG B						
	0.5	64 61	>75%	>75% Grass cover, Good, HSG B						
0.80 73 Weighted Average					ge					
0.54			67.50	67.50% Pervious Area						
	0.2	26	32.50	32.50% Impervious Area						
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn				
						Grass: Short n= 0.150 P2= 2.17"				
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF				
_						Grassed Waterway Kv= 15.0 fps				
	4 4	440	Tatal L							

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area =		0.80	ac, 32	.50% Imper	rvious, Inflow Dep	oth = 0	.26" for	1-yr event
Inflow	=	0.17	cfs @	12.07 hrs,	Volume=	0.017 a	af	
Outflow	=	0.01	cfs @	12.10 hrs,	Volume=	0.017 a	af, Atten=	94%, Lag= 1.8 min
Primary	=	0.01	cfs @	12.10 hrs,	Volume=	0.017 a	af	
Routed to Reach 07 : Creek Section 1								
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000 a	af	
Routed to Reach 07 : Creek Section 1								

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 469.74' @ 17.88 hrs Surf.Area= 910 sf Storage= 346 cf

Plug-Flow detention time= 393.3 min calculated for 0.017 af (100% of inflow) Center-of-Mass det. time= 393.4 min (1,319.4 - 926.0)

Volume	Invert	Avail.	.Storage	Storage Description				
#1	468.67'		3,494 cf	Custom Stage Data (Prismatic)Listed below (Recalc)				
Elevatio (fee	on Su et)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)			
468.6	<i>,</i> 67	910	0.0	0	0			
469.5	50	910	40.0	302	302			
472.0	00	910	20.0	455	757			
472.0)1	910	100.0	9	766			
474.(00	1,831	100.0	2,727	3,494			
Device	Routing	Inv	vert Out	let Devices				
#1	Primary	468.	67' 6.0 ' L= 3	" Round 6" Culvert 35.0' CPP, square edge headwall, Ke= 0.500				
			Inle	Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900				
#2	Device 1	168	n= (67' 05 (n= 0.013 Corrugated PE, smooth Interior, Flow Area= 0.20				
#2	Device 1	473	00' 24	" x 24 0" Horiz Grate C= 0.600				
<i>"</i> ••	Device 1			Limited to weir flow at low heads				
#4	Secondary	Secondary 473.5		0' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63				

Primary OutFlow Max=0.01 cfs @ 12.10 hrs HW=468.83' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.07 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)


Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.18" for 1-yr event Inflow = 0.04 cfs @ 12.52 hrs, Volume= 0.026 af Outflow = 0.04 cfs @ 12.55 hrs, Volume= 0.026 af, Atten= 1%, Lag= 2.2 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.60 fps, Min. Travel Time= 2.0 min Avg. Velocity = 0.41 fps, Avg. Travel Time= 2.8 min Peak Storage= 5 cf @ 12.53 hrs Average Depth at Peak Storage= 0.04', Surface Width= 2.01'

Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.12 cfs @ 12.06 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.010 af, Depth= 0.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 1-yr Rainfall=1.86"

0.14 98 Paved parking, HSG B 0.23 61 >75% Grass cover, Good, HSG B 0.37 75 Weighted Average 0.23 62.16% Pervious Area 0.14 37.84% Impervious Area Tc Length Slope Velocity Capacity (min) (feet) (ft/ft) (ft/sec) (cfs) 2.6 41 0.1460 0.26 Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17" 0.6 21 0.0100 0.63 Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17" 0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF	Area (a	ac) CN	Descr	iption		
0.23 61 >75% Grass cover, Good, HSG B 0.37 75 Weighted Average 0.23 62.16% Pervious Area 0.14 37.84% Impervious Area Tc Length Slope Velocity Capacity (min) (feet) (ft/ft) (ft/sec) (cfs) 2.6 41 0.1460 0.26 Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17" 0.6 21 0.0100 0.63 Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17" 0.4 88 0.0568 3.57	0.	14 98	Paveo	d parking,	HSG B	
0.3775Weighted Average 62.16% Pervious Area0.2362.16% Pervious Area0.1437.84% Impervious AreaTcLength (ftet)Slope (ft/ft)Capacity (cfs)Description2.6410.14600.26Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17"0.6210.01000.63Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17"0.4880.05683.57Shallow Concentrated Flow, SCF Grassed Waterway	0.2	23 61	>75%	Grass cov	ver, Good,	HSG B
0.23 0.1462.16% Pervious Area 37.84% Impervious AreaTcLength (ff/ft)Slope (ft/ft)Velocity (cfs)Capacity (cfs)Description2.6410.14600.26Sheet Flow, Sheet Lawn Grass: Short n= 0.150P2= 2.17"0.6210.01000.63Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011P2= 2.17"0.4880.05683.57Shallow Concentrated Flow, SCF Grassed WaterwayKv= 15.0 fps	0.3	37 75	Weigł	nted Avera	ge	
0.1437.84% Impervious AreaTcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/sec)(cfs)2.6410.14600.26Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17"0.6210.01000.63Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17"0.4880.05683.57Shallow Concentrated Flow, SCF Grassed Waterway	0.2	23	62.16	% Perviou	s Area	
TcLength (fin)Slope (ft/ft)Velocity (ft/sec)Capacity (cfs)Description2.6410.14600.26Sheet Flow, Sheet Lawn Grass: Short n= 0.150P2= 2.17"0.6210.01000.63Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011P2= 2.17"0.4880.05683.57Shallow Concentrated Flow, SCF Grassed WaterwayKv= 15.0 fps	0.	14	37.84	% Impervi	ous Area	
TcLengthSlopeVelocityCapacityDescription(min)(feet)(ft/ft)(ft/sec)(cfs)2.6410.14600.26Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17"0.6210.01000.63Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17"0.4880.05683.57Shallow Concentrated Flow, SCF Grassed Waterway						
(min) (ffeet) (ft/ft) (ft/sec) (cfs) 2.6 41 0.1460 0.26 Sheet Flow, Sheet Lawn 0.6 21 0.0100 0.63 Sheet Flow, Sheet Pavement 0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps	Tc	Length	Slope	Velocity	Capacity	Description
2.6 41 0.1460 0.26 Sheet Flow, Sheet Lawn Grass: Short n= 0.150 P2= 2.17" 0.6 21 0.0100 0.63 Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17" 0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
0.6 21 0.0100 0.63 Grass: Short n= 0.150 P2= 2.17" 0.4 88 0.0568 3.57 Sheet Flow, Sheet Pavement Smooth surfaces n= 0.011 P2= 2.17" 0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn
0.6 21 0.0100 0.63 Sheet Flow, Sheet Pavement 0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps						Grass: Short n= 0.150 P2= 2.17"
0.4 88 0.0568 3.57 Smooth surfaces n= 0.011 P2= 2.17" Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement
0.4 88 0.0568 3.57 Shallow Concentrated Flow, SCF Grassed Waterway Kv= 15.0 fps						Smooth surfaces n= 0.011 P2= 2.17"
Grassed Waterway Kv= 15.0 fps	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF
						Grassed Waterway Kv= 15.0 fps

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area	a =	0.37 ac, 3	7.84% Impe	rvious, Inflow De	pth = 0.31	" for 1-yr event
Inflow	=	0.12 cfs @	12.06 hrs,	Volume=	0.010 af	
Outflow	=	0.01 cfs @	12.05 hrs,	Volume=	0.010 af,	Atten= 94%, Lag= 0.0 min
Primary	=	0.01 cfs @	12.05 hrs,	Volume=	0.010 af	-
Routed	to Reac	h 10 : Creel	CSection 2			
Secondary	/ =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af	
Routed	to Reac	h 10 : Creel	C Section 2			

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 469.58' @ 16.62 hrs Surf.Area= 550 sf Storage= 192 cf

Plug-Flow detention time= 358.7 min calculated for 0.010 af (100% of inflow) Center-of-Mass det. time= 358.8 min (1,271.6 - 912.8)

Volume	Invert	Avail.	.Storage	Storage Descrip	otion	
#1	468.67'		2,105 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)
Elevatio (fee	on Su	urf.Area (sɑ-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
468.6	, 67	550	0.0	0	0	
469.5	50	550	40.0	183	183	
472.0	00	550	20.0	275	458	
472.0)1	550	100.0	5	463	
474.0	00	1,100	100.0	1,642	2,105	
Device	Routing	Inv	vert Out	et Devices		
#1	Primary	468.	67' 6.0'' L= 3 Inlet n= (Round 6" Culv 35.0' CPP, squar t / Outlet Invert= 4 0.013 Corrugated	ert e edge headwall 68.67' / 468.00' PE, smooth inte	, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior, Flow Area= 0.20 sf
#2	Device 1	468.	67' 0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'
#3	Device 1	473.	00' 24.0 Limi)" x 24.0" Horiz. (ited to weir flow at	Grate C= 0.600 t low heads	
#4	Secondary	473.	50' 10.0 Hea Coe	l' long x 20.0' br d (feet) 0.20 0.4 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63
			-f- @ 10	05 hrs 1111-400 -	701 (Erron Dianha	

Primary OutFlow Max=0.01 cfs @ 12.05 hrs HW=468.79' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.04 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)

Pond 09: Bioretention (South)



Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.21" for 1-yr event Inflow = 0.05 cfs @ 12.55 hrs, Volume= 0.036 af Outflow = 0.05 cfs @ 12.66 hrs, Volume= 0.036 af, Atten= 1%, Lag= 6.1 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.62 fps, Min. Travel Time= 4.0 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.5 min Peak Storage= 12 cf @ 12.59 hrs Average Depth at Peak Storage= 0.04', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.21" for 1-yr event Inflow = 0.05 cfs @ 12.66 hrs, Volume= 0.036 af Outflow = 0.05 cfs @ 12.77 hrs, Volume= 0.036 af, Atten= 1%, Lag= 7.1 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.61 fps, Min. Travel Time= 4.3 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 6.0 min

Peak Storage= 13 cf @ 12.70 hrs Average Depth at Peak Storage= 0.04' , Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, Ir	nflow Depth	= 0.21	" for 1-yr	event
Inflow	=	0.05 cfs @	12.77 hrs,	Volume=	= 0.	036 af		
Primary	=	0.05 cfs @	12.77 hrs,	Volume=	= 0.	036 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

0.006 0.004 0.002 0-

0

Link 12: Proposed Point A Hydrograph 0.054 0.052 Inflow Primary 0.05 cfs 0.05 0.048 Inflow Area=2.05 ac 0.046 0.044 0.042 0.04 0.038 0.036 0.034 0.032 **(§)** 0.03 0.028 **8** 0.026 **1** 0.024 0.022 0.02 0.018 0.016 0.014 0.012 0.01 0.008

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours)

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.13 cfs @ 12.36 hrs, Volume= Routed to Reach 02 : Full Creek 0.028 af, Depth= 0.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_ Area (a	ac) CN	Descr	ription								
0.2	23 98	B Paveo	Paved parking, HSG B								
1.	54 61	>75%	>75% Grass cover, Good, HSG B								
0.2	28 55	Wood	ls, Good, H	ISG B							
2.0	05 64	Weial	nted Avera	ae							
1.8	82	88.78	% Perviou	s Area							
0.2	23	11.22	% Impervi	ous Area							
			•								
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 21

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.16" for 2-yr event Inflow = 0.13 cfs @ 12.36 hrs, Volume= 0.028 af Outflow = 0.13 cfs @ 12.63 hrs, Volume= 0.028 af, Atten= 2%, Lag= 15.7 min Routed to Link 03 : Existing Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.91 fps, Min. Travel Time= 6.9 min

Avg. Velocity = 0.47 fps, Avg. Travel Time= 13.4 min

Peak Storage= 55 cf @ 12.51 hrs Average Depth at Peak Storage= 0.07', Surface Width= 2.03' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Are	ea =	2.05 ac, 11	.22% Imper	vious,	Inflow D)epth =	0.16"	for 2-yr	event
Inflow	=	0.13 cfs @	12.63 hrs,	Volum	e=	0.028	8 af		
Primary	=	0.13 cfs @	12.63 hrs,	Volum	e=	0.028	8 af, A	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.09 cfs @ 12.22 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.015 af, Depth= 0.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_ Area (a	ac) CN	Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.	16 98	B Paveo	d parking,	HSG B	
0.1	24 55	Wood	ls, Good, H	ISG B	
0.	88 66	Weigl	nted Avera	ge	
0.	72	81.82	% Perviou	s Area	
0.	16	18.18	% Impervi	ous Area	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			

Hydrograph 0.1 0.095 - Runoff 0.09 cfs 0.09 Macedon Center Road Rainfall 24-hr S1 2-yr 0.085 Rainfall=2.17" 0.08 Runoff Area=0.88 ac 0.075 Runoff Volume=0.015 af 0.07 Runoff Depth=0.21" 0.065 Flow Length=250' 0.06 Tc=9.7 min **ີ** ຍິ 0.055 CN=66 0.05 0.045 0.04 0.035 0.03 0.025 0.02 0.015 0.01 0.005 0-0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.36 cfs @ 12.06 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.027 af, Depth= 0.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

_	Area (a	c) CN	I Descr	ription						
	0.2	26 98	B Paveo	d parking,	HSG B					
	0.5	54 61	>75%	Grass co	ver, Good,	HSG B				
	3.0	30 73	8 Weighted Average							
0.54 67.50% Pervious Area										
0.26 32.50% Impervious Area										
	Тс	Length	Slope	Velocity	Capacity	Description				
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn				
						Grass: Short n= 0.150 P2= 2.17"				
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF				
_						Grassed Waterway Kv= 15.0 fps				
		440	T							

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	ı =	0.80	ac, 32	.50% Imper	rvious, Inflow Dep	oth = 0.4	0" for	2-yr event
Inflow	=	0.36	cfs @	12.06 hrs,	Volume=	0.027 af		
Outflow	=	0.01	cfs @	12.05 hrs,	Volume=	0.027 af,	Atten=	97%, Lag= 0.0 min
Primary	=	0.01	cfs @	12.05 hrs,	Volume=	0.027 af		
Routed	to Reac	h 07	Creek	Section 1				
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	to Reac	h 07	Creek	Section 1				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 471.72' @ 21.20 hrs Surf.Area= 910 sf Storage= 707 cf

Plug-Flow detention time= 733.8 min calculated for 0.027 af (100% of inflow) Center-of-Mass det. time= 734.2 min (1,633.6 - 899.4)

Volume	Invert	Avail.St	orage	Storage Descrip	otion					
#1	468.67'	3,	494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)				
Elevatio	on Su	rf.Area Vo	oids	Inc.Store	Cum.Store					
468 6	37	<u>910</u>	00	(1991-91009) 0	0					
469.5	50	910 4	0.0	302	302					
472.0	00	910 2	0.0	455	757					
472.0)1	910 10	0.0	9	766					
474.0	00	1,831 10	0.0	2,727	3,494					
Device	Routing	Inver	t Outl	et Devices						
#1	Primary	468.67	' 6.0'' L= 3 Inlet n= 0	Round 6" Culv 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall 68.67' / 468.00' PE, smooth inte	, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior, Flow Area= 0.20 sf				
#2	Device 1	468.67	0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'				
#3	Device 1	473.00	24.0	" x 24.0" Horiz.	Grate C= 0.600					
#4	Secondary	473.50	Limi ' 10.0 Hea Coe	Inted to weir flow at low heads 0' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63						
Drimony	Primary OutElow Max-0.01 of $(2.05 \text{ hrs. } HW-169.01)$ (Free Discharge)									

Primary OutFlow Max=0.01 cfs @ 12.05 hrs HW=468.91' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.15 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.30" for 2-yr event Inflow = 0.10 cfs @ 12.22 hrs, Volume= 0.042 af Outflow = 0.10 cfs @ 12.27 hrs, Volume= 0.042 af, Atten= 1%, Lag= 2.9 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.81 fps, Min. Travel Time= 1.4 min Avg. Velocity = 0.42 fps, Avg. Travel Time= 2.8 min

Peak Storage= 9 cf @ 12.25 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'



Hydrograph 0.11 - Inflow 0.105 0.10 cfs Outflow 0.1 Inflow Area=1.68 ac 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 0.075 Max Vel=0.81 fps 0.07 **දු 0**.065 0.06 n=0.025 **8** 0.055 0.05 L=70.0' 0.045 S=0.0083 '/' 0.04 0.035 Capacity=22.19 cfs 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.21 cfs @ 12.06 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.014 af, Depth= 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 2-yr Rainfall=2.17"

	Area (a	c) CN	l Descr	ription			
	0.1	14 98	Paveo	d parking,	HSG B		
_	0.2	23 61	>75%	Grass cov	ver, Good,	HSG B	
	0.3	37 75	i Weigł	nted Avera	ge		_
	0.2	23	62.16	% Perviou	s Area		
	0.1	14	37.84	% Impervi	ous Area		
	Тс	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn	
						Grass: Short n= 0.150 P2= 2.17"	
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement	
						Smooth surfaces n= 0.011 P2= 2.17"	
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF	
_						Grassed Waterway Kv= 15.0 fps	

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area = 0.37 ac, 37.84% Impervious, Inflow Depth = 0.47" for 2-yr event 0.21 cfs @ 12.06 hrs, Volume= Inflow = 0.014 af Outflow = 0.01 cfs @ 11.95 hrs, Volume= 0.014 af, Atten= 97%, Lag= 0.0 min 0.01 cfs @ 11.95 hrs, Volume= Primary = 0.014 af Routed to Reach 10 : Creek Section 2 0.00 hrs. Volume= 0.00 cfs @ 0.000 af Secondary = Routed to Reach 10 : Creek Section 2

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 471.18' @ 19.03 hrs Surf.Area= 550 sf Storage= 367 cf

Plug-Flow detention time= 645.1 min calculated for 0.014 af (100% of inflow) Center-of-Mass det. time= 645.3 min (1,534.6 - 889.3)

Volume	Invert	Avail	.Storage	Storage Descrip	Storage Description					
#1	468.67'		2,105 cf	Custom Stage	Data (Prismatic	Listed below (Recalc)				
Elevatio (fee	on Su t)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)					
468.6	67 67	550	0.0	0	0					
469.5	50	550	40.0	183	183					
472.0	00	550	20.0	275	458					
472.0)1	550	100.0	5	463					
474.0	00	1,100	100.0	1,642	2,105					
Device	Routing	Inv	vert Ou	tlet Devices						
#1	Primary	468.	67' 6.0 L= Inle n=	5.0" Round 6" Culvert _= 35.0' CPP, square edge headwall, Ke= 0.500 nlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900						
#2	Device 1	468.	67' 0.5	00 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'				
#3	Device 1	473.	.00' 24. Lin	I.0" x 24.0" Horiz. Grate C= 0.600 mited to weir flow at low heads						
#4	Secondary	473.	50' 10. He Co	D' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63						

Primary OutFlow Max=0.01 cfs @ 11.95 hrs HW=468.72' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 0.01 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)





Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.33" for 2-yr event Inflow 0.11 cfs @ 12.27 hrs, Volume= 0.056 af Outflow 0.11 cfs @ 12.37 hrs, Volume= 0.056 af, Atten= 1%, Lag= 5.7 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.83 fps, Min. Travel Time= 3.0 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.5 min

Peak Storage= 19 cf @ 12.32 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.03' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'



0.115 - Inflow 0.11 cfs 0.11 Outflow 0.105 Inflow Area=2.05 ac 0.1 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 Max Vel=0.83 fps 0.075 0.07 n=0.025 ີ <u>ອີ</u> 0.065 0.06 L=147.0' 0.000 0.05 S=0.0083 '/' 0.045 0.04 Capacity=22.20 cfs 0.035 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 10: Creek Section 2

Hydrograph

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.33" for 2-yr event Inflow 0.11 cfs @ 12.37 hrs, Volume= 0.056 af Outflow 0.10 cfs @ 12.47 hrs, Volume= 0.056 af, Atten= 1%, Lag= 6.3 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 0.82 fps, Min. Travel Time= 3.2 min Avg. Velocity = 0.45 fps, Avg. Travel Time= 5.9 min

Peak Storage= 20 cf @ 12.42 hrs Average Depth at Peak Storage= 0.06', Surface Width= 2.02' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'



0.115 - Inflow 0.11 0.10 cfs Outflow 0.105 0.1 Inflow Area=2.05 ac 0.095 0.09 Avg. Flow Depth=0.06' 0.085 0.08 Max Vel=0.82 fps 0.075 0.07 n=0.025 **දි** 0.065 0.06 L=160.0' **8** 0.055 0.05 S=0.0083 '/' 0.045 0.04 Capacity=22.22 cfs 0.035 0.03 0.025 0.02 0.015 0.01 0.005 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 11: Creek Section 3

Hydrograph

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Impei	rvious,	Inflow	Depth =	0.33	" for 2-yr	event
Inflow	=	0.10 cfs @	12.47 hrs,	Volum	e=	0.056	3 af		
Primary	=	0.10 cfs @	12.47 hrs,	Volum	e=	0.056	6 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.43 cfs @ 12.17 hrs, Volume= Routed to Reach 02 : Full Creek 0.056 af, Depth= 0.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

_ Area (a	ac) CN	Descr	ription								
0.:	23 98	B Paveo	Paved parking, HSG B								
1.	54 61	>75%	Grass co	ver, Good,	HSG B						
0.3	28 55	i Wood	ls, Good, I	ISG B							
2.	05 64	Weial	nted Avera	ae							
1.	82	88.78	% Perviou	6 Pervious Area							
0.2	23	11.22	% Impervi	ous Area							
Tc	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Drai** Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 37

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.33" for 5-yr event Inflow = 0.43 cfs @ 12.17 hrs, Volume= 0.056 af Outflow = 0.39 cfs @ 12.34 hrs, Volume= 0.056 af, Atten= 9%, Lag= 10.1 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.37 fps, Min. Travel Time= 4.6 min Avg. Velocity = 0.58 fps, Avg. Travel Time= 10.8 min

Peak Storage= 109 cf @ 12.26 hrs Average Depth at Peak Storage= 0.14', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow Area	a =	2.05 ac, 11	.22% Imper	vious,	Inflow De	epth =	0.33"	for 5-yr	event
Inflow	=	0.39 cfs @	12.34 hrs,	Volum	e=	0.056	6 af		
Primary	=	0.39 cfs @	12.34 hrs,	Volum	e=	0.056	6 af, A	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.26 cfs @ 12.15 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.029 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

Area (a	ic) CN	Descr	ription								
0.4	48 61	>75%	75% Grass cover, Good, HSG B								
0.1	16 98	Paveo	d parking,	HSG B							
0.2	24 55	Wood	ls, Good, H	ISG B							
0.8	88 66	Weigh	nted Avera	qe							
0.7	72	81.82	81.82% Pervious Area								
0.1	16	18.18	% Impervi	ous Area							
			•								
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow						
					Grass: Short n= 0.150 P2= 2.17"						
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods						
					Woodland Kv= 5.0 fps						
9.7	250	Total									

Hydrograph 0.28 - Runoff 0.26 cfs 0.26 Macedon Center Road Rainfall 24-hr S1 5-yr 0.24 Rainfall=2.66" 0.22 Runoff Area=0.88 ac Runoff Volume=0.029 af 0.2 Runoff Depth=0.39" Flow Length=250' 0.18 Tc=9.7 min (\$) 0.16 0.14 0.12 CN=66 0.12 0.1 0.08 0.06 0.04 0.02 0-2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ó Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 0.66 cfs @ 12.06 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.044 af, Depth= 0.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

	Area (a	c) CN	l Descr	ription								
	0.2	26 98	B Paveo	d parking,	HSG B							
_	0.5	64 61	>75%	75% Grass cover, Good, HSG B								
	0.8	30 73	8 Weigł	Veighted Average								
	0.5	54	67.50	% Perviou								
0.26 32.50% Impervious Area												
	Тс	Length	Slope	Velocity	Capacity	Description						
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn						
						Grass: Short n= 0.150 P2= 2.17"						
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF						
_						Grassed Waterway Kv= 15.0 fps						
		440	T			To 0.0 mile						

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	ı =	0.80	ac, 32	.50% Impei	vious, Inf	flow Dep	th =	0.66'	' for	5-yr e	vent	
Inflow	=	0.66 c	fs @	12.06 hrs,	Volume=	-	0.044	af		-		
Outflow	=	0.01 c	sfs @	23.01 hrs,	Volume=		0.044	af, /	Atten=	98%,	Lag= 6	57.3 min
Primary	=	0.01 c	sfs @	23.01 hrs,	Volume=		0.044	af				
Routed	to Reac	h 07 :	Creek	Section 1								
Secondary	=	0.00 c	ofs @	0.00 hrs,	Volume=		0.000	af				
Routed	to Reac	h 07 :	Creek	Section 1								

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.56' @ 23.01 hrs Surf.Area= 1,165 sf Storage= 1,338 cf

Plug-Flow detention time= 1,134.9 min calculated for 0.044 af (100% of inflow) Center-of-Mass det. time= 1,134.6 min (2,014.3 - 879.7)

Volume	Invert	Avail.S	Storage	Storage Descrip	tion				
#1	468.67'	3	,494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)			
Elevatio (fee	on Su et)	rf.Area V (sq-ft)	/oids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
468.6	67 67	910	0.0	0	0				
469.5	50	910	40.0	302	302				
472.0)U)1	910 010 1	20.0	455	/5/ 766				
472.0)0	1,831 1	00.0	2,727	3,494				
Device	Routing	Inve	rt Outl	et Devices					
#1	Primary	468.6	7' 6.0'' L= 3 Inlet n= 0	6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.90					
#2	Device 1	468.6	7' 0.50	0 in/hr Bio-Reter	ntion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473.0	0' 24.0 Limi	.0" x 24.0" Horiz. Grate C= 0.600					
#4	Secondary	473.5	0' 10.0 Hea Coe	D' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63					
. .		0.04							

Primary OutFlow Max=0.01 cfs @ 23.01 hrs HW=472.56' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.54 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.52" for 5-yr event Inflow = 0.27 cfs @ 12.15 hrs, Volume= 0.072 af Outflow = 0.27 cfs @ 12.17 hrs, Volume= 0.072 af, Atten= 1%, Lag= 1.7 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.18 fps, Min. Travel Time= 1.0 min Avg. Velocity = 0.44 fps, Avg. Travel Time= 2.7 min

Peak Storage= 16 cf @ 12.16 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.36 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.023 af, Depth= 0.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 5-yr Rainfall=2.66"

_	Area (a	ic) CN	Descr	ription								
	0.1	14 98	Paveo	d parking,	HSG B							
	0.2	23 61	>75%	75% Grass cover, Good, HSG B								
	0.3	37 75	i Weigł	nted Avera	ge							
	0.2	23	62.16	% Perviou	s Area							
	0.1	14	37.84	% Impervi	ous Area							
	Тс	Length	Slope	Velocity	Capacity	Description						
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn						
						Grass: Short n= 0.150 P2= 2.17"						
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement						
						Smooth surfaces n= 0.011 P2= 2.17"						
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF						
_						Grassed Waterway Kv= 15.0 fps						

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area	ı =	0.37	ac, 37	.84% Impe	vious, Inflow [Depth =	0.75'	' for	5-yr e	vent	
Inflow	=	0.36 c	cfs @	12.05 hrs,	Volume=	0.023	3 af		-		
Outflow	=	0.01 c	cfs @	21.24 hrs,	Volume=	0.023	8 af, <i>1</i>	Atten=	98%,	Lag= 551.5	5 min
Primary	=	0.01 c	cfs @	21.24 hrs,	Volume=	0.023	3 af				
Routed	to Reac	h 10 :	Creek	Section 2							
Secondary	=	0.00 0	cfs @	0.00 hrs,	Volume=	0.000) af				
Routed	to Reac	h 10 :	Creek	Section 2							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.38' @ 21.24 hrs Surf.Area= 651 sf Storage= 683 cf

Plug-Flow detention time= 1,025.8 min calculated for 0.023 af (100% of inflow) Center-of-Mass det. time= 1,026.4 min (1,898.3 - 871.9)

Volume	Invert	Avail.	Storage	Storage Descrip	tion				
#1	468.67'	2	2,105 cf	Custom Stage	Data (Prismatic)	₋isted below (Recalc)			
Elevatio (fee	on Su et)	rf.Area \ (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
468.6	67	550	0.0	0	0				
469.5	50	550	40.0	183	183				
472.0	00	550	20.0	275	458				
472.0)1	550	100.0	5	463				
474.(00	1,100	100.0	1,642	2,105				
Device	Routing	Inve	ert Outl	et Devices					
#1	Primary	468.6	67' 6.0" L= 3 Inlet n= 0	6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= (
#2	Device 1	468.6	67' 0.50	0 in/hr Bio-Retei	ntion Media over	Surface area Phase-In= 0.01'			
#3	Device 1	473.0	00' 24.0 Limi	.0" x 24.0" Horiz. Grate C= 0.600 nited to weir flow at low heads					
#4	Secondary	473.5	50' 10.0 Hea Coe	' long x 20.0' br d (feet) 0.20 0.40 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.00 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63			
		0.04				`			

Primary OutFlow Max=0.01 cfs @ 21.24 hrs HW=472.38' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.50 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)


Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.56" for 5-yr event Inflow = 0.27 cfs @ 12.17 hrs, Volume= 0.095 af Outflow = 0.26 cfs @ 12.25 hrs, Volume= 0.095 af, Atten= 3%, Lag= 4.5 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.18 fps, Min. Travel Time= 2.1 min

Avg. Velocity = 0.46 fps, Avg. Travel Time= 5.3 min

Peak Storage= 33 cf @ 12.21 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43'. Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.56" for 5-yr event Inflow = 0.26 cfs @ 12.25 hrs, Volume= 0.095 af Outflow = 0.26 cfs @ 12.32 hrs, Volume= 0.095 af, Atten= 2%, Lag= 4.2 min Routed to Link 12 : Proposed Point A Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Max. Velocity= 1.16 fps, Min. Travel Time= 2.3 min Avg. Velocity= 0.46 fps, Avg. Travel Time= 5.8 min

Peak Storage= 36 cf @ 12.27 hrs Average Depth at Peak Storage= 0.11', Surface Width= 2.04' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, Ir	nflow Depth =	0.56	for 5-yr	event
Inflow	=	0.26 cfs @	12.32 hrs,	Volume=	= 0.09	95 af		
Primary	=	0.26 cfs @	12.32 hrs,	Volume	= 0.09	95 af,	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Hydrograph 0.26 cfs Inflow Area=2.05 ac



Link 12: Proposed Point A

Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 0.86 cfs @ 12.13 hrs, Volume= Routed to Reach 02 : Full Creek 0.088 af, Depth= 0.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_ Area (a	ac) CN	Descr	ription							
0.:	23 98	B Paveo	d parking,	HSG B						
1.	54 61	>75%	Grass co	ver, Good,	HSG B					
0.3	28 55	i Wood	ls, Good, I	ISG B						
2.	05 64	Weial	Weighted Average							
1.	82	88.78% Pervious Area								
0.2	23	11.22	% Impervi	ous Area						
Tc	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·					
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow					
					Grass: Short n= 0.150 P2= 2.17"					
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods					
					Woodland Kv= 5.0 fps					
9.7	250	Total								



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 53

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.52" for 10-yr event Inflow = 0.86 cfs @ 12.13 hrs, Volume= 0.088 af Outflow = 0.81 cfs @ 12.26 hrs, Volume= 0.088 af, Atten= 6%, Lag= 7.4 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.77 fps, Min. Travel Time= 3.6 min Avg. Velocity = 0.66 fps, Avg. Travel Time= 9.5 min

Peak Storage= 173 cf @ 12.19 hrs Average Depth at Peak Storage= 0.22', Surface Width= 2.09' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01'. Outlet Invert= 461.88'





Reach 02: Full Creek

Summary for Link 03: Existing Point A

Inflow Area	a =	2.05 ac, 11	.22% Imper	vious,	Inflow Dept	h = 0.52	2" for	10-yr eve	nt
Inflow	=	0.81 cfs @	12.26 hrs,	Volume	e= ().088 af			
Primary	=	0.81 cfs @	12.26 hrs,	Volum	e= ().088 af,	Atten=	0%, Lag=	= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.48 cfs @ 12.12 hrs, Volume= Routed to Reach 07 : Creek Section 1 0.044 af, Depth= 0.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

Area (a	ic) CN	Descr	ription					
0.4	48 61	>75%	Grass co	ver, Good,	HSG B			
0.1	16 98	B Paveo	d parking,	HSG B				
0.2	24 55	i Wood	ls, Good, H	ISG B				
0.0	0.88 66 Weighted Average							
0.7	0.72 81.82% Pervious Area							
0.1	16	18.18	% Impervi	ous Area				
			•					
Тс	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow			
					Grass: Short n= 0.150 P2= 2.17"			
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF			
					Grassed Waterway Kv= 15.0 fps			
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF			
					Grassed Waterway Kv= 15.0 fps			
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods			
					Woodland Kv= 5.0 fps			
9.7	250	Total						

Hydrograph 0.52 - Runoff 0.48 cfs 0.5 0.48 Macedon Center Road Rainfall 24-hr S1 10-yr 0.46 0.44 Rainfall=3.11" 0.42 Runoff Area=0.88 ac 0.4 Runoff Volume=0.044 af 0.38-Runoff Depth=0.60" 0.36 Flow Length=250' 0.34 Tc=9.7 min 0.32 (**5**) 0.3-0.28--CN=66 **8** 0.26 ■ 0.24 0.22-0.2 0.18 0.16 0.14-0.12 0.1 0.08 0.06 0.04 0.02 0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 Ò Time (hours)

Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

0.97 cfs @ 12.05 hrs, Volume= Runoff = Routed to Pond 06 : Bioretention (North)

0.062 af, Depth= 0.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_	Area (a	ic) CN	l Descr	ription							
	0.2	26 98	B Paveo	ved parking, HSG B							
_	0.9	54 61	>75%	5% Grass cover, Good, HSG B							
	0.0	30 73	8 Weigł	nted Avera	ge						
	0.5	54	67.50	% Perviou	s Area						
	0.2	26	32.50	% Impervi	ous Area						
	Тс	Length	Slope	Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn					
						Grass: Short n= 0.150 P2= 2.17"					
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF					
_						Grassed Waterway Kv= 15.0 fps					
		440	T () (T 00 '					

Total, Increased to minimum Tc = 6.0 min 4.4 116

Subcatchment 05: Proposed Drainage Subarea 'B'



Hydrograph

Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80	ac, 32	.50% Imper	rvious,	Inflow De	epth =	0.93	" for	10-yr	event	
Inflow	=	0.97	cfs @	12.05 hrs,	Volume	e=	0.062	af		-		
Outflow	=	0.03	cfs @	17.84 hrs,	Volume	e=	0.062	af,	Atten=	97%,	Lag= 3	347.0 min
Primary	=	0.03	cfs @	17.84 hrs,	Volume	e=	0.062	af			-	
Routed	to Reac	h 07 :	Creek	Section 1								
Secondary	=	0.00	cfs @	0.00 hrs,	Volume	e=	0.000	af				
Routed	to Reac	h 07 :	Creek	Section 1								

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.00' @ 17.84 hrs Surf.Area= 1,369 sf Storage= 1,897 cf

Plug-Flow detention time= 1,334.5 min calculated for 0.062 af (100% of inflow) Center-of-Mass det. time= 1,334.5 min (2,201.2 - 866.7)

Volume	Invert	Avail.	Storage	Storage Descrip	tion				
#1	468.67'	3	3,494 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)			
Elevatio (fee	on Su	rf.Area \ (sq-ft)	√oids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
468.6	67 67	910	0.0	0	0				
469.5	50	910	40.0	302	302				
472.0	00	910	20.0	455	757				
472.0)1	910 <i>´</i>	100.0	9	766				
474.0	00	1,831 ´	100.0	2,727	3,494				
Device	Routing	Inve	ert Outle	et Devices					
#1	Primary	468.6	67' 6.0" L= 3 Inlet n= 0	Round 6" Culve 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall, 68.67' / 468.00' PE, smooth inter	Ke= 0.500 S= 0.0191 '/' Cc= 0.900 ior. Flow Area= 0.20 sf			
#2	Device 1	468.6	67' 0.50	0 in/hr Bio-Reter	ntion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473.0	0' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600 low heads				
#4	Secondary	473.5	50' 10.0 Hea Coe	ted to well now at low heads ' long x 20.0' breadth Broad-Crested Rectangular Weir d (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 f. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63					
D			6 0 17						

Primary OutFlow Max=0.02 cfs @ 17.84 hrs HW=473.00' (Free Discharge)

-1=6" Culvert (Passes 0.02 cfs of 1.62 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.00 cfs @ 0.15 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 59



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 0.75" for 10-yr event Inflow 0.49 cfs @ 12.12 hrs, Volume= 0.106 af = 0.48 cfs @ 12.15 hrs, Volume= Outflow 0.106 af, Atten= 3%, Lag= 1.9 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.46 fps, Min. Travel Time= 0.8 min Avg. Velocity = 0.44 fps, Avg. Travel Time= 2.6 min Peak Storage= 23 cf @ 12.13 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.51 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.032 af, Depth= 1.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 10-yr Rainfall=3.11"

_	Area (a	ic) CN	l Descr	ription							
	0.	14 98	B Paveo	d parking,	HSG B		-				
_	0.2	23 61	>75%	Grass co	ver, Good,	HSG B					
	0.3	37 75	5 Weigł	nted Avera	ige						
	0.2	23	62.16	2.16% Pervious Area							
	0.	14	37.84	% Impervi	ous Area						
	Tc	Length	Slope	Velocity	Capacity	Description					
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		_				
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn					
						Grass: Short n= 0.150 P2= 2.17"					
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement					
						Smooth surfaces n= 0.011 P2= 2.17"					
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF					
_						Grassed Waterway Kv= 15.0 fps	_				

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Area	a =	0.37	'ac, 37	.84% Impe	rvious,	Inflow D	epth =	1.03	" for	10-yr	event	
Inflow	=	0.51	cfs @	12.05 hrs,	Volume	e=	0.032	af		-		
Outflow	=	0.01	cfs @	22.14 hrs,	Volume	e=	0.032	af,	Atten=	98%,	Lag= 6	05.3 min
Primary	=	0.01	cfs @	22.14 hrs,	Volume	e=	0.032	af				
Routed	to Reac	h 10 :	Creek	Section 2								
Secondary	=	0.00	cfs @	0.00 hrs,	Volume	e=	0.000	af				
Routed	to Reac	h 10 :	Creek	Section 2								

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 472.82' @ 22.14 hrs Surf.Area= 775 sf Storage= 1,003 cf

Plug-Flow detention time= 1,286.8 min calculated for 0.032 af (100% of inflow) Center-of-Mass det. time= 1,286.7 min (2,146.8 - 860.1)

Volume	Invert	Avail	.Stora	ge Storage Descr	ription	
#1	468.67'		2,105	cf Custom Stage	e Data (Prismatic	Listed below (Recalc)
Elevatio (fee	on Sui et)	rf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
468.6	468.67 550 0.0		0	0		
469.5	50	550	40.0	183	183	
472.0	00	550	20.0	275	458	
472.0)1	550	100.0	5	463	
474.(00	1,100	100.0	1,642	2,105	
Device	Routing	Inv	vert (Dutlet Devices		
#1	Primary	468.	.67' (5.0" Round 6" Cul	lvert	Ka- 0 500
			L	_= 35.0 CPP, squ nlet / Outlet Invert=	are edge neadwai	I, KE= 0.500 S= 0.0101 '/' Cc= 0.000
			r	= 0.013 Corrugate	d PF_smooth inte	S = 0.01917 $CC = 0.900$
#2	Device 1	468.	.67' (.500 in/hr Bio-Ref	tention Media over	er Surface area Phase-In= 0.01
#3	Device 1	473.	.00' 2	24.0" x 24.0" Horiz	. Grate C= 0.600)
			L	imited to weir flow	at low heads	
#4	Secondary	473.	.50' ′	0.0' long x 20.0' l	breadth Broad-Ci	rested Rectangular Weir
			ŀ	lead (feet) 0.20 0	.40 0.60 0.80 1.0	00 1.20 1.40 1.60
			(Coef. (English) 2.6	8 2.70 2.70 2.64	2.63 2.64 2.64 2.63
				~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

Primary OutFlow Max=0.01 cfs @ 22.14 hrs HW=472.82' (Free Discharge)

-1=6" Culvert (Passes 0.01 cfs of 1.59 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.80" for 10-yr event Inflow = 0.48 cfs @ 12.15 hrs, Volume= 0.137 af Outflow = 0.47 cfs @ 12.21 hrs, Volume= 0.137 af, Atten= 2%, Lag= 3.3 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.46 fps, Min. Travel Time= 1.7 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 5.1 min

Peak Storage= 48 cf @ 12.17 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 0.80" for 10-yr event Inflow 0.47 cfs @ 12.21 hrs, Volume= 0.137 af Outflow 0.46 cfs @ 12.27 hrs, Volume= 0.137 af, Atten= 2%, Lag= 3.5 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.44 fps, Min. Travel Time= 1.9 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 5.6 min

Peak Storage= 51 cf @ 12.23 hrs Average Depth at Peak Storage= 0.16', Surface Width= 2.06' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'



0.52 0.5 - Inflow 0.47 cfs 0.48 Outflow 0.46 Inflow Area=2.05 ac 0.44 0.42 Avg. Flow Depth=0.16' 0.4 0.38 0.36 Max Vel=1.44 fps 0.34 0.32 n=0.025 0.3 (S) 0.28 Flow 0.26 L=160.0' 0.24 0.22 S=0.0083 '/' 0.2 0.18 Capacity=22.22 cfs 0.16 0.14 0.12 0.1 0.08 0.06 0.04 0.02 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 0 Time (hours)

Reach 11: Creek Section 3

Hydrograph

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious, Inflo	w Depth =	0.80'	' for 10	0-yr event	
Inflow	=	0.46 cfs @	12.27 hrs,	Volume=	0.13	7 af		-	
Primary	=	0.46 cfs @	12.27 hrs,	Volume=	0.13	7 af, <i>1</i>	Atten= 0°	%, Lag= 0.0) min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 1.80 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.150 af, Depth= 0.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_ Area (a	ac) CN	Descr	ription						
0.2	23 98	B Paveo	d parking,	HSG B					
1.	54 61	>75%	Grass co	ver, Good,	HSG B				
0.2	28 55	Wood	ls, Good, H	ISG B					
2.0	05 64	Weial	nted Avera	ae					
1.8	82	88.78% Pervious Area							
0.2	23	11.22	% Impervi	ous Area					
			•						
Tc	Length	Slope	Velocity	Capacity	Description				
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)					
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow				
					Grass: Short n= 0.150 P2= 2.17"				
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF				
					Grassed Waterway Kv= 15.0 fps				
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods				
					Woodland Kv= 5.0 fps				
9.7	250	Total							



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 69

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 0.88" for 25-yr event Inflow = 1.80 cfs @ 12.11 hrs, Volume= 0.150 af Outflow = 1.70 cfs @ 12.20 hrs, Volume= 0.150 af, Atten= 5%, Lag= 5.4 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.28 fps, Min. Travel Time= 2.8 min Avg. Velocity = 0.77 fps, Avg. Travel Time= 8.2 min

Peak Storage= 283 cf @ 12.16 hrs Average Depth at Peak Storage= 0.36', Surface Width= 2.14' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow A	rea =	2.05 ac, 11	.22% Imperviou	s, Inflow Dept	h = 0.88'	" for 25-yr	event
Inflow	=	1.70 cfs @	12.20 hrs, Volu	ıme= ().150 af		
Primary	=	1.70 cfs @	12.20 hrs, Volu	ime= (0.150 af, <i>1</i>	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 0.91 cfs @ 12.11 hrs, Volume= 0 Routed to Reach 07 : Creek Section 1

0.072 af, Depth= 0.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_ Area (a	ic) CN	l Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.1	16 98	B Paveo	d parking,	HSG B	
0.2	24 55	Wood	ls, Good, H	ISG B	
0.8	88 66	Weigl	nted Avera	qe	
0.	72	81.82	% Perviou	s Area	
0.1	16	18.18	% Impervi	ous Area	
			-		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			

Subcatchment 04: Proposed Drainage Subarea 'A'



Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 1.54 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.094 af, Depth= 1.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

_	Area (a	c) CN	l Descr	ription								
	0.2	26 98	B Paveo	aved parking, HSG B								
_	0.5	54 61	>75%	75% Grass cover, Good, HSG B								
	3.0	30 73	8 Weigł	nted Avera	ge							
0.54 67.50% Pervious Area												
	0.2	26	32.50	% Impervi	ous Area							
	Тс	Length	Slope	Velocity	Capacity	Description						
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn						
						Grass: Short n= 0.150 P2= 2.17"						
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF						
_						Grassed Waterway Kv= 15.0 fps						
		110	- · · ·			T 00 :						

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80 ac, 32	2.50% Impe	rvious, Inflow	Depth = 1	1.41" for	25-yr event	
Inflow	=	1.54 cfs @	12.05 hrs,	Volume=	0.094	af		
Outflow	=	0.36 cfs @	12.57 hrs,	Volume=	0.094	af, Atten=	= 76%, Lag= 31.5 mi	n
Primary	=	0.36 cfs @	12.57 hrs,	Volume=	0.094	af		
Routed	to Reac	h 07 : Creek	Section 1					
Secondary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000	af		
Routed	to Reac	h 07 : Creek	Section 1					

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.05' @ 12.57 hrs Surf.Area= 1,393 sf Storage= 1,969 cf

Plug-Flow detention time= 901.5 min calculated for 0.094 af (100% of inflow) Center-of-Mass det. time= 901.4 min (1,753.9 - 852.5)

Volume	Invert	Avai	il.Stora	age	Storage Descript	ion				
#1	468.67'		3,49	4 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)			
Elevatior (feet	n Su	rf.Area (sɑ-ft)	Void %)	s)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)				
468.6	7	910	0.	0	0	0				
469.50	0	910	40.	0	302	302				
472.0	0	910	20.	0	455	757				
472.0	1	910	100.	0	9	766				
474.00	0	1,831	100.	0	2,727	3,494				
Device	Routing	In	vert	Outle	et Devices					
#1	Primary	468	8.67'	6.0" Round 6" Culvert L= 35.0' CPP, square edge head Inlet / Outlet Invert= 468.67' / 468.			, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior Flow Area= 0 20 sf			
#2	Device 1	468	8.67'	0.50	0 in/hr Bio-Reten	tion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473	8.00'	24.0 Limit	" x 24.0" Horiz. G ed to weir flow at	Grate C= 0.600 low heads				
#4	Secondary	473	8.50'	10.0 Head Coef	Iong x 20.0' breadth Broad-Crested Rectangular Weir d (feet) 0.20 0.40 0.60 0.80 1.00 1.40 1.60 f. (English) 2.68 2.70 2.64 2.63 2.64 2.63					
Primary		ax=0.32	cfs @) 12.5	57 hrs HW=473.0	5' (Free Discha	arge)			

-1=6" Culvert (Passes 0.32 cfs of 1.63 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.31 cfs @ 0.74 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 75



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 1.19" for 25-yr event 0.92 cfs @ 12.11 hrs, Volume= 0.89 cfs @ 12.13 hrs, Volume= Inflow = 0.166 af Outflow = 0.166 af, Atten= 4%, Lag= 1.2 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.84 fps, Min. Travel Time= 0.6 min Avg. Velocity = 0.48 fps, Avg. Travel Time= 2.4 min Peak Storage= 35 cf @ 12.12 hrs Average Depth at Peak Storage= 0.24', Surface Width= 2.10' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 0.79 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.047 af, Depth= 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 25-yr Rainfall=3.83"

Area (a	<u>c) CN</u>	Descr	ription								
0.1	14 98	Paveo	d parking,	HSG B							
0.2	23 61	>75%	>75% Grass cover, Good, HSG B								
0.3	37 75	Weigł	nted Avera	ge							
0.2	23	62.16	% Perviou	s Area							
0.1	14	37.84	% Impervi	ous Area							
Тс	Length	Slope	Velocity	Capacity	Description						
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)							
2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn						
					Grass: Short n= 0.150 P2= 2.17"						
0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement						
					Smooth surfaces n= 0.011 P2= 2.17"						
0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF						
					Grassed Waterway Kv= 15.0 fps						

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Hydrograph

Summary for Pond 09: Bioretention (South)

Inflow Area	a =	0.37 ac, 37	7.84% Impe	rvious, Inflow De	pth = 1.54"	for 25-yr	event
Inflow	=	0.79 cfs @	12.05 hrs,	Volume=	0.047 af	-	
Outflow	=	0.07 cfs @	12.97 hrs,	Volume=	0.047 af, A	Atten= 91%,	Lag= 55.1 min
Primary	=	0.07 cfs @	12.97 hrs,	Volume=	0.047 af		-
Routed	to Reac	h 10 : Creek	Section 2				
Secondary	=	0.00 cfs @	0.00 hrs,	Volume=	0.000 af		
Routed	to Reac	h 10 : Creek	Section 2				

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.01' @ 12.97 hrs Surf.Area= 827 sf Storage= 1,152 cf

Plug-Flow detention time= 1,070.9 min calculated for 0.047 af (100% of inflow) Center-of-Mass det. time= 1,070.9 min (1,917.8 - 846.9)

Volume	Invert	Avail.St	orage	Storage Descrip	otion				
#1	468.67'	2,	105 cf	Custom Stage	Data (Prismatic)	Listed below (Recalc)			
Elevatio (fee	on Su	rf.Area Vo	oids (%)	Inc.Store	Cum.Store				
468.6	67 67	550	0.0	0	0				
469.5	50	550 4	0.0	183	183				
472.0)0)1	550 Z	0.0	275	458 463				
474.0	00	1,100 10	0.0	1,642	2,105				
Device	Routing	Inver	t Outl	et Devices					
#1	Primary	468.67	' 6.0'' L= 3 Inlet n= 0	Round 6" Culv 5.0' CPP, squar / Outlet Invert= 4 .013 Corrugated	ert e edge headwall, 68.67' / 468.00' PE. smooth intel	, Ke= 0.500 S= 0.0191 '/' Cc= 0.900 rior, Flow Area= 0.20 sf			
#2	Device 1	468.67	0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'			
#3	Device 1	473.00	' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600				
#4	Secondary	473.50	' 10.0 Hea Coe	' long x 20.0' br d (feet) 0.20 0.4 f. (English) 2.68	eadth Broad-Cre 0 0.60 0.80 1.0 2.70 2.70 2.64	ested Rectangular Weir 0 1.20 1.40 1.60 2.63 2.64 2.64 2.63			
Drimary	Primary OutElow Max=0.04 of $(0.12.07 \text{ brs} + 1)/(-173.01)$ (Erop Discharge)								

Primary OutFlow Max=0.04 cfs @ 12.97 hrs HW=473.01' (Free Discharge)

-1=6" Culvert (Passes 0.04 cfs of 1.62 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.03 cfs @ 0.34 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs)



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.25" for 25-yr event Inflow = 0.90 cfs @ 12.13 hrs, Volume= 0.214 af Outflow = 0.88 cfs @ 12.17 hrs, Volume= 0.214 af, Atten= 2%, Lag= 2.6 min Routed to Reach 11 : Creek Section 3 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.83 fps, Min. Travel Time= 1.3 min

Avg. Velocity = 0.52 fps, Avg. Travel Time= 4.7 min

Peak Storage= 72 cf @ 12.15 hrs Average Depth at Peak Storage= 0.24' , Surface Width= 2.10' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.25" for 25-yr event Inflow = 0.88 cfs @ 12.17 hrs, Volume= 0.214 af Outflow = 0.86 cfs @ 12.22 hrs, Volume= 0.214 af, Atten= 3%, Lag= 2.9 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 1.81 fps, Min. Travel Time= 1.5 min Avg. Velocity = 0.52 fps, Avg. Travel Time= 5.2 min

Peak Storage= 77 cf @ 12.20 hrs Average Depth at Peak Storage= 0.23', Surface Width= 2.09' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Area	a =	2.05 ac, 27	.32% Imper	vious,	Inflow	Depth =	1.25	" for 25-	yr event	
Inflow	=	0.86 cfs @	12.22 hrs,	Volume	e=	0.214	laf		-	
Primary	=	0.86 cfs @	12.22 hrs,	Volume) =	0.214	l af,	Atten= 0%	, Lag= 0.	0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A


Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 2.73 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.213 af, Depth= 1.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_ Area (a	ac) CN	Descr	ription					
0.2	23 98	B Paveo	d parking,	HSG B				
1.	54 61	>75%	Grass co	ver, Good,	HSG B			
0.2	28 55	i Wood	ls, Good, H	ISG B				
2.05 64 Weighted Average								
1.8	82	88.78	% Perviou	s Area				
0.2	23	11.22	% Impervi	ous Area				
			•					
Tc	Length	Slope	Velocity	Capacity	Description			
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)				
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow			
					Grass: Short n= 0.150 P2= 2.17"			
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF			
					Grassed Waterway Kv= 15.0 fps			
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF			
					Grassed Waterway Kv= 15.0 fps			
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods			
					Woodland Kv= 5.0 fps			
9.7	250	Total						



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 85

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 1.25" for 50-yr event Inflow = 2.73 cfs @ 12.11 hrs, Volume= 0.213 af Outflow = 2.57 cfs @ 12.19 hrs, Volume= 0.213 af, Atten= 6%, Lag= 4.7 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.62 fps, Min. Travel Time= 2.4 min Avg. Velocity = 0.85 fps, Avg. Travel Time= 7.4 min

Peak Storage= 376 cf @ 12.15 hrs Average Depth at Peak Storage= 0.48', Surface Width= 2.19' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Summary for Link 03: Existing Point A

Inflow A	rea =	2.05 ac, 11	.22% Impervious,	Inflow Depth =	1.25"	for 50-yr	r event
Inflow	=	2.57 cfs @	12.19 hrs, Volun	ne= 0.21	3 af		
Primary	=	2.57 cfs @	12.19 hrs, Volun	ne= 0.21:	3 af, Att	ten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 1.33 cfs @ 12.11 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.101 af, Depth= 1.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

Area (a	ic) CN	Descr	ription							
0.4	48 61	>75%	Grass co	ver, Good,	HSG B					
0.1	16 98	B Paveo	d parking,	HSG B						
0.2	24 55	i Wood	ls, Good, H	ISG B						
.0	88 66	Weigl	nted Avera	qe						
0.7	72	81.82	% Perviou	s Area						
0.1	16	18.18	18.18% Impervious Area							
			•							
Тс	Length	Slope	Velocity	Capacity	Description					
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)						
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow					
					Grass: Short n= 0.150 P2= 2.17"					
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF					
					Grassed Waterway Kv= 15.0 fps					
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods					
					Woodland Kv= 5.0 fps					
9.7	250	Total								

Subcatchment 04: Proposed Drainage Subarea 'A'



Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 2.05 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.125 af, Depth= 1.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_	Area (ad	c) CN	Descr	ription			
	0.2	6 98	Paveo	d parking,	HSG B		
_	0.5	4 61	>75%	Grass co	ver, Good,	HSG B	
0.80 73 Weighted Average							
	0.5	4	67.50	% Perviou	s Area		
0.26 32.50% Impervious Area							
	Тс	Length	Slope	Velocity	Capacity	Description	
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)		
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn	
						Grass: Short n= 0.150 P2= 2.17"	
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF	
_						Grassed Waterway Kv= 15.0 fps	
		440	- · · ·			T 0.0 i	

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Are	a =	0.80 ac, 32	.50% Impe	rvious, Inflow	Depth = 1.87"	for 50-yr event			
Inflow	=	2.05 cfs @	12.05 hrs,	Volume=	0.125 af				
Outflow	=	0.83 cfs @	12.30 hrs,	Volume=	0.125 af, A	tten= 60%, Lag= 15	5.1 min		
Primary	=	0.83 cfs @	12.30 hrs,	Volume=	0.125 af				
Routed	l to Read	h 07 : Creek	Section 1						
Secondary	/ =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af				
Routed to Reach 07 : Creek Section 1									

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.10' @ 12.30 hrs Surf.Area= 1,414 sf Storage= 2,031 cf

Plug-Flow detention time= 681.0 min calculated for 0.125 af (100% of inflow) Center-of-Mass det. time= 680.9 min (1,523.9 - 843.0)

Volume	Invert	Avail	l.Stora	ge Storage Descr	Storage Description						
#1	468.67'		3,494	cf Custom Stage	e Data (Prismatio	Listed below (Recalc)					
Elevatio (fee	on Su	urf.Area (sq-ft)	Voids	Inc.Store	Cum.Store						
468.6	67	910	0.0	0	0						
469.5	50	910	40.0	302	302						
472.0	00	910	20.0	455	757						
472.0 474.0)0	910 1,831	100.0	9 2,727	3,494						
Device	Routing	Inv	vert	Outlet Devices							
#1	Primary	468	.67' (6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.9							
#2	Device 1	468	.67' (0.500 in/hr Bio-Ref	tention Media ove	er Surface area Phase-In= 0.01'					
#3	Device 1	473	.00' 2	24.0" x 24.0" Horiz imited to weir flow	 Grate C= 0.600 at low heads)					
#4	Secondary	473	.50'	10.0' long x 20.0' l Head (feet) 0.20 0 Coef. (English) 2.6)' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63						
Drimary	rimany OutFlow Max=0.82 of α 12.30 bro HW=473.10' (Free Discharge)										

Primary OutFlow Max=0.82 cfs @ 12.30 hrs HW=473.10' (Free Discharge)

-1=6" Culvert (Passes 0.82 cfs of 1.64 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.02 cfs)

-3=Grate (Weir Controls 0.81 cfs @ 1.03 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 91



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 1.61" for 50-yr event 1.69 cfs @ 12.27 hrs, Volume= 1.65 cfs @ 12.30 hrs, Volume= 0.226 af Inflow = Outflow = 0.226 af, Atten= 3%, Lag= 1.7 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.26 fps, Min. Travel Time= 0.5 min Avg. Velocity = 0.50 fps, Avg. Travel Time= 2.4 min Peak Storage= 52 cf @ 12.29 hrs Average Depth at Peak Storage= 0.36', Surface Width= 2.14' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 1.04 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.062 af, Depth= 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47"

_	Area (a	c) CN	Descr	ription		
	0.1	14 98	Paveo	d parking,	HSG B	
	0.2	23 61	>75%	Grass co	ver, Good,	HSG B
	0.3	37 75	Weigh	nted Avera	ge	
	0.2	23	62.16	% Perviou	s Area	
	0.1	14	37.84	% Impervi	ous Area	
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement
						Smooth surfaces n= 0.011 P2= 2.17"
	0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
	~ ~					

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Summary for Pond 09: Bioretention (South)

Inflow Are	a =	0.37 ac, 37	.84% Impe	rvious, Inflow	Depth = 2.03"	for 50-yr ev	ent				
Inflow	=	1.04 cfs @	12.05 hrs,	Volume=	0.062 af	-					
Outflow	=	0.34 cfs @	12.39 hrs,	Volume=	0.062 af, A	tten= 67%, La	ag= 20.8 min				
Primary	=	0.34 cfs @	12.39 hrs,	Volume=	0.062 af		-				
Routed	I to Rea	ach 10 : Creek	Section 2								
Secondary	y =	0.00 cfs @	0.00 hrs,	Volume=	0.000 af						
Routed	Routed to Reach 10 : Creek Section 2										

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.05' @ 12.39 hrs Surf.Area= 838 sf Storage= 1,187 cf

Plug-Flow detention time= 817.6 min calculated for 0.062 af (100% of inflow) Center-of-Mass det. time= 818.9 min (1,656.8 - 837.9)

Volume	Invert	Avail.	.Storage	Storage Description						
#1	468.67'		2,105 cf	Custom Stage	Data (Prismatic)	_isted below (Recalc)				
Elevatio (fee	on Su t)	urf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)					
468.6	<u>,</u> 67	550	0.0	0	0					
469.5	50	550	40.0	183	183					
472.0	00	550	20.0	275	458					
472.0)1	550	100.0	5	463					
474.0	00	1,100	100.0	1,642	2,105					
Device	Routing	Inv	vert Out	et Devices						
#1	Primary	468.	67' 6.0'' L= 3 Inlet n= (6.0" Round 6" Culvert L= 35.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 468.67' / 468.00' S= 0.0191 '/' Cc= 0.900						
#2	Device 1	468.	67' 0.50	0 in/hr Bio-Rete	ntion Media ove	r Surface area Phase-In= 0.01'				
#3	Device 1	473.	00' 24.0 Limi	" x 24.0" Horiz. (ted to weir flow at	Grate C= 0.600 t low heads					
#4	Secondary	473.	50' 10.0 Hea Coe	0' long x 20.0' breadth Broad-Crested Rectangular Weir ad (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 ef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63						
Drimary	rimary OutFlow May-0.32 of $(0.12.30 \text{ brg} H)W=473.05'$ (Free Discharge)									

Primary OutFlow Max=0.32 cfs @ 12.39 hrs HW=473.05' (Free Discharge)

-1=6" Culvert (Passes 0.32 cfs of 1.63 cfs potential flow)

2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.31 cfs @ 0.75 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir(Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dra**Macedon Center Road Rainfall 24-hr S1 50-yr Rainfall=4.47" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 95



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 1.69" for 50-yr event Inflow = 1.82 cfs @ 12.35 hrs, Volume= 0.288 af Outflow = 1.79 cfs @ 12.38 hrs, Volume= 0.288 af, Atten= 1%, Lag= 1.8 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.33 fps, Min. Travel Time= 1.1 min Avg. Velocity = 0.54 fps, Avg. Travel Time= 4.6 min

Peak Storage= 114 cf @ 12.36 hrs Average Depth at Peak Storage= 0.38', Surface Width= 2.15' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Summary for Reach 11: Creek Section 3

 Inflow Area =
 2.05 ac, 27.32% Impervious, Inflow Depth =
 1.69" for 50-yr event

 Inflow =
 1.79 cfs @
 12.38 hrs, Volume=
 0.288 af

 Outflow =
 1.78 cfs @
 12.41 hrs, Volume=
 0.288 af, Atten= 1%, Lag= 2.3 min

 Routed to Link 12 : Proposed Point A
 0.288 af, Atten= 1%, Lag= 2.3 min
 0.288 af, Atten= 1%, Lag= 2.3 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.32 fps, Min. Travel Time= 1.2 min Avg. Velocity = 0.54 fps, Avg. Travel Time= 5.0 min

Peak Storage= 123 cf @ 12.39 hrs Average Depth at Peak Storage= 0.37', Surface Width= 2.15' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Summary for Link 12: Proposed Point A

Inflow Are	a =	2.05 ac, 27	.32% Imper	vious, I	Inflow D	epth = [·]	1.69"	for 50-y	r event
Inflow	=	1.78 cfs @	12.41 hrs,	Volume	;=	0.288	af		
Primary	=	1.78 cfs @	12.41 hrs,	Volume	;=	0.288	af, A	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Summary for Subcatchment 01: Existing Drainage Subarea 'A'

Runoff = 3.95 cfs @ 12.11 hrs, Volume= Routed to Reach 02 : Full Creek 0.296 af, Depth= 1.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

Area (a	c) CN	Descr	ription		
0.2	23 98	Paveo	d parking,	HSG B	
1.5	54 61	>75%	Grass cov	ver, Good,	HSG B
0.2	28 55	Wood	ls, Good, H	ISG B	
2.0)5 64	Weigh	nted Avera	ge	
1.8	32	88.78	% Perviou	s Area	
0.2	23	11.22	% Impervi	ous Area	
			·		
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 01: Existing Drainage Subarea 'A'

550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dr***Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23*" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 101

Summary for Reach 02: Full Creek

Inflow Area = 2.05 ac, 11.22% Impervious, Inflow Depth = 1.73" for 100-yr event Inflow = 3.95 cfs @ 12.11 hrs, Volume= 0.296 af Outflow = 3.77 cfs @ 12.17 hrs, Volume= 0.296 af, Atten= 5%, Lag= 4.0 min Routed to Link 03 : Existing Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.93 fps, Min. Travel Time= 2.1 min Avg. Velocity = 0.92 fps, Avg. Travel Time= 6.8 min

Peak Storage= 488 cf @ 12.14 hrs Average Depth at Peak Storage= 0.61', Surface Width= 2.24' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.21 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 377.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 461.88'





Reach 02: Full Creek

Summary for Link 03: Existing Point A

Inflow Ar	rea =	2.05 ac, 11	.22% Impervio	ous, Inflow	Depth = 1.73"	for 100-y	r event
Inflow	=	3.77 cfs @	12.17 hrs, Vo	olume=	0.296 af		
Primary	=	3.77 cfs @	12.17 hrs, Vo	olume=	0.296 af, <i>A</i>	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 03: Existing Point A



Summary for Subcatchment 04: Proposed Drainage Subarea 'A'

Runoff = 1.88 cfs @ 12.10 hrs, Volume= Routed to Reach 07 : Creek Section 1

0.138 af, Depth= 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

Area (a	c) CN	Descr	ription		
0.4	48 61	>75%	Grass co	ver, Good,	HSG B
0.1	16 98	Paveo	d parking,	HSG B	
0.2	24 55	Wood	ls, Good, H	ISG B	
0.8	38 66	Weiał	nted Avera	ae	
0.7	72	81.82	% Perviou	s Area	
0.1	16	18.18	% Impervi	ous Area	
Тс	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
9.0	100	0.0400	0.18		Sheet Flow, Grass Sheet Flow
					Grass: Short n= 0.150 P2= 2.17"
0.4	63	0.0317	2.67		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.2	71	0.1410	5.63		Shallow Concentrated Flow, SCF
					Grassed Waterway Kv= 15.0 fps
0.1	16	0.1410	1.88		Shallow Concentrated Flow, SCF Woods
					Woodland Kv= 5.0 fps
9.7	250	Total			



Subcatchment 04: Proposed Drainage Subarea 'A'

Summary for Subcatchment 05: Proposed Drainage Subarea 'B'

Runoff = 2.72 cfs @ 12.05 hrs, Volume= Routed to Pond 06 : Bioretention (North) 0.164 af, Depth= 2.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

_	Area (a	c) CN	l Descr	ription		
	0.2	26 98	B Paveo	d parking,	HSG B	
_	0.5	54 61	>75%	Grass cov	ver, Good,	HSG B
	3.0	30 73	8 Weigł	nted Avera	ge	
	0.5	54	67.50	% Perviou	s Area	
	0.2	26	32.50	% Impervi	ous Area	
	Тс	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	4.0	41	0.0500	0.17		Sheet Flow, Sheet Lawn
						Grass: Short n= 0.150 P2= 2.17"
	0.4	75	0.0400	3.00		Shallow Concentrated Flow, SCF
_						Grassed Waterway Kv= 15.0 fps
		440	— · · ·			T oo i

4.4 116 Total, Increased to minimum Tc = 6.0 min

Subcatchment 05: Proposed Drainage Subarea 'B'



Summary for Pond 06: Bioretention (North)

Inflow Area	a =	0.80	ac, 32	.50% Impe	rvious, Inflow De	epth = 🛛	2.46"	for	100-yr	⁻ event	
Inflow	=	2.72	cfs @	12.05 hrs,	Volume=	0.164	af				
Outflow	=	1.69	cfs @	12.17 hrs,	Volume=	0.164	af, Atte	en=	38%,	Lag= 7.6	min
Primary	=	1.69	cfs @	12.17 hrs,	Volume=	0.164	af				
Routed	to Reac	h 07 :	Creek	Section 1							
Secondary	=	0.00	cfs @	0.00 hrs,	Volume=	0.000	af				
Routed	to Reac	h 07 :	Creek	Section 1							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.19' @ 12.17 hrs Surf.Area= 1,458 sf Storage= 2,169 cf

Plug-Flow detention time= 521.0 min calculated for 0.164 af (100% of inflow) Center-of-Mass det. time= 520.9 min (1,355.3 - 834.4)

Volume	Invert	Avail.	.Storage	Storage Descript	tion	
#1	468.67'		3,494 cf	Custom Stage I	Data (Prismatic)Li	isted below (Recalc)
Elevatio	on Su	rf.Area	Voids	Inc.Store	Cum.Store	
(fee	et)	(sq-ft)	(%)	(cubic-feet)	(cubic-feet)	
468.6	67	910	0.0	0	0	
469.5	50	910	40.0	302	302	
472.0	00	910	20.0	455	757	
472.0)1	910	100.0	9	766	
474.0	00	1,831	100.0	2,727	3,494	
Device	Routing	Inv	vert Out	let Devices		
#1	Primary	468.	67' 6.0	Round 6" Culve	ert e edge headwall	Ke= 0 500
			Inle	t / Outlet Invert= 4	68.67' / 468.00' S	S = 0.0191 '/' Cc = 0.900
#2	Device 1	468.	67' 0.5	00 in/hr Bio-Reter	ntion Media over	Surface area Phase-In= 0.01
#3	Device 1	473.	00' 24 .	0" x 24.0" Horiz. (Grate C= 0.600	
			Lim	ited to weir flow at	low heads	
#4	Secondary	473.	50' 10 .	0' long x 20.0' bre	eadth Broad-Cres	sted Rectangular Weir
	-		Hea	ad (feet) 0.20 0.40	0.60 0.80 1.00	1.20 1.40 1.60
			Co	ef. (English) 2.68	2.70 2.70 2.64 2	2.63 2.64 2.64 2.63
Primary	OutFlow Ma Culvert (Bar	ax=1.65 o rrel Contr	cfs @ 12 rols 1 65	.17 hrs HW=473.1 cfs @ 8 41 fps)	8' (Free Dischar	ge)

2=Bio-Retention Media (Passes < 0.02 cfs potential flow)

-3=Grate (Passes < 2.05 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs)



Pond 06: Bioretention (North)

Summary for Reach 07: Creek Section 1

Inflow Area = 1.68 ac, 25.00% Impervious, Inflow Depth = 2.16" for 100-yr event Inflow = 3.33 cfs @ 12.16 hrs, Volume= 0.302 af Outflow = 3.30 cfs @ 12.17 hrs, Volume= 0.302 af, Atten= 1%, Lag= 0.6 min Routed to Reach 10 : Creek Section 2 Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.82 fps, Min. Travel Time= 0.4 min Avg. Velocity = 0.51 fps, Avg. Travel Time= 2.3 min Peak Storage= 83 cf @ 12.16 hrs

Average Depth at Peak Storage= 0.56', Surface Width= 2.23' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.19 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 70.0' Slope= 0.0083 '/' Inlet Invert= 465.01', Outlet Invert= 464.43'





Reach 07: Creek Section 1

Summary for Subcatchment 08: Proposed Drainage Subarea 'C'

Runoff = 1.35 cfs @ 12.05 hrs, Volume= Routed to Pond 09 : Bioretention (South) 0.081 af, Depth= 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23"

_ Area (a	ac) CN	l Desci	ription		
0.	14 98	B Pave	d parking,	HSG B	
0.	23 61	>75%	Grass cov	ver, Good,	HSG B
0.	37 75	5 Weigl	nted Avera	ge	
0.	23	62.16	% Perviou	s Area	
0.	14	37.84	% Impervi	ous Area	
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6	41	0.1460	0.26		Sheet Flow, Sheet Lawn
					Grass: Short n= 0.150 P2= 2.17"
0.6	21	0.0100	0.63		Sheet Flow, Sheet Pavement
<u> </u>			o		Smooth surfaces n= 0.011 P2= 2.17"
0.4	88	0.0568	3.57		Shallow Concentrated Flow, SCF
					Grassed vvalerway Kv= 15.0 fps

3.6 150 Total, Increased to minimum Tc = 6.0 min

Subcatchment 08: Proposed Drainage Subarea 'C'



Hydrograph

Summary for Pond 09: Bioretention (South)

Inflow Are	a =	0.37 ac, 37	.84% Impe	rvious, Inflow D	Depth =	2.64"	for	100-y	r event	
Inflow	=	1.35 cfs @	12.05 hrs,	Volume=	0.081	af		-		
Outflow	=	0.76 cfs @	12.20 hrs,	Volume=	0.081	af, At	tten=	44%,	Lag= 9.3 r	min
Primary	=	0.76 cfs @	12.20 hrs,	Volume=	0.081	af			-	
Routed	to Read	ch 10 : Creek	Section 2							
Secondary	y =	0.00 cfs @	0.00 hrs,	Volume=	0.000	af				
Routed	to Read	ch 10 : Creek	Section 2							

Routing by Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Peak Elev= 473.09' @ 12.20 hrs Surf.Area= 849 sf Storage= 1,221 cf

Plug-Flow detention time= 631.2 min calculated for 0.081 af (100% of inflow) Center-of-Mass det. time= 632.6 min (1,462.3 - 829.7)

Volume	Invert	Avail	.Storage	e Storage Descrip	otion	
#1	468.67'		2,105 c	f Custom Stage	Data (Prismatic)∟	isted below (Recalc)
Elevatio (fee	on Su	rf.Area (sg-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	
468.6	67	550	0.0	0	0	
469.5	50	550	40.0	183	183	
472.0	00	550	20.0	275	458	
472.0)1	550	100.0	5	463	
474.0	00	1,100	100.0	1,642	2,105	
Device	Routing	Inv	vert Ou	utlet Devices		
#1	Primary	468.	67' 6 .	0" Round 6" Culv	ert	
	-		L=	35.0' CPP, squar	e edge headwall,	Ke= 0.500
			Inl	et / Outlet Invert= 4	68.67' / 468.00'	S= 0.0191 '/' Cc= 0.900
			n=	0.013 Corrugated	PE, smooth interio	or, Flow Area= 0.20 sf
#2	Device 1	468.	67' 0.	500 in/hr Bio-Rete	ntion Media over	Surface area Phase-In= 0.01'
#3	Device 1	473.	00' 24	.0" x 24.0" Horiz.	Grate C= 0.600	
	_		Lir	nited to weir flow a	t low heads	
#4	Secondary	473.	50' 10	.0' long x 20.0' br	eadth Broad-Cres	sted Rectangular Weir
			He	ead (feet) 0.20 0.4	0 0.60 0.80 1.00	1.20 1.40 1.60
			Co	pef. (English) 2.68	2.70 2.70 2.64 2	2.63 2.64 2.64 2.63
Primary	OutFlow Ma	ax=0.75	cfs @ 1	2.20 hrs HW=473.0	09' (Free Dischar	ge)

1=6" Culvert (Passes 0.75 cfs of 1.63 cfs potential flow)

—2=Bio-Retention Media (Exfiltration Controls 0.01 cfs)

-3=Grate (Weir Controls 0.74 cfs @ 1.00 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=468.67' (Free Discharge) 4=Broad-Crested Rectangular Weir (Controls 0.00 cfs) 550 Macedon Center Road 2024-08-22 **2951 - Macedon Center Road Dr***Macedon Center Road Rainfall 24-hr S1 100-yr Rainfall=5.23*" Prepared by BME Associates HydroCAD® 10.20-5b s/n 09860 © 2023 HydroCAD Software Solutions LLC Page 111



Pond 09: Bioretention (South)

Summary for Reach 10: Creek Section 2

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 2.25" for 100-yr event Inflow = 3.91 cfs @ 12.18 hrs, Volume= 0.384 af Outflow = 3.89 cfs @ 12.21 hrs, Volume= 0.384 af, Atten= 1%, Lag= 2.1 min Routed to Reach 11 : Creek Section 3

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.98 fps, Min. Travel Time= 0.8 min Avg. Velocity = 0.56 fps, Avg. Travel Time= 4.4 min

Peak Storage= 197 cf @ 12.20 hrs Average Depth at Peak Storage= 0.63', Surface Width= 2.25' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.20 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 147.0' Slope= 0.0083 '/' Inlet Invert= 464.43', Outlet Invert= 463.21'





Reach 10: Creek Section 2

Summary for Reach 11: Creek Section 3

Inflow Area = 2.05 ac, 27.32% Impervious, Inflow Depth = 2.25" for 100-yr event Inflow = 3.89 cfs @ 12.21 hrs, Volume= 0.384 af Outflow = 3.74 cfs @ 12.24 hrs, Volume= 0.384 af, Atten= 4%, Lag= 2.0 min Routed to Link 12 : Proposed Point A

Routing by Stor-Ind+Trans method, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs Max. Velocity= 2.93 fps, Min. Travel Time= 0.9 min Avg. Velocity = 0.56 fps, Avg. Travel Time= 4.8 min

Peak Storage= 210 cf @ 12.22 hrs Average Depth at Peak Storage= 0.62', Surface Width= 2.25' Bank-Full Depth= 2.00' Flow Area= 4.8 sf, Capacity= 22.22 cfs

2.00' x 2.00' deep channel, n= 0.025 Earth, clean & winding Side Slope Z-value= 0.2 '/' Top Width= 2.80' Length= 160.0' Slope= 0.0083 '/' Inlet Invert= 463.21', Outlet Invert= 461.88'





Reach 11: Creek Section 3

Summary for Link 12: Proposed Point A

Inflow Are	ea =	2.05 ac, 27	.32% Imper	vious, Infl	low Depth =	2.25	" for 100-	yr event
Inflow	=	3.74 cfs @	12.24 hrs,	Volume=	0.384	1 af		
Primary	=	3.74 cfs @	12.24 hrs,	Volume=	0.384	4 af, .	Atten= 0%,	Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-72.00 hrs, dt= 0.05 hrs

Link 12: Proposed Point A



Drainage Analysis Calculations Quality Calculations

Figure 05 – WQv/RRv Exhibit Water Quality and Runoff Reduction Calculations





			Project No.:	2951
SMF Associates	<u>CALCU</u>	<u>JLATIONS</u> :	Date:	8/22/2024
GINEERS • SURVEYORS • LANDSCAPE ARCHITECTS	Project:	550 Macedon Center Road	Ву:	JGC
		Overall WQv/RRv Calculations	Sheet	1 of 2
Subarea A 90% Rainfall Event Water Quality Area (Dis Imp. Area within Disturb I = % Impervious = Weighted S Value =	turbed Area ed Area	P = 1 inches A = 1.29 acres Total Imp = 0.42 acres 32.6 % 0.40	Reconstructed Imp. = New Imp.=	0.07 acres 0.35 acres
<u>Hydrologic Soil Group (</u>	HSG) Speci	fic Reduction Factor "S" (within new	impervious areas) =	
Soil Classification A Soils B Soils C Soils D Soils	Area (ac) 1.29	S Factor Weighted # 0.5 0 0.4 0.516 0.3 0 0.2 0		
Total Area = Total Weighted # =	1.29 0.516	acres		
Weighted S Value =	0.40	<u> </u>		
Rv = 0.05 + 0.009(I) <u>Rv = 0.3430233</u> Required WQv for Reconst	evelopmer ructed Area	- nt using SMP to treat reconstructe a + 100% WQv for New Impervious	ed impervious area. s Area	
Required WQv = Req. WQv = 0.032	P * A *Rv AC-FT	$\frac{\left(100\% * \frac{\text{New Imp.}}{\text{Total Imp.}}\right) + \left(25\% * \frac{\text{New Imp.}}{\text{Total Imp.}}\right)}{12}$	tal Imp.	
Req WQv = 1405	CF	1		
Padaualanmant	$P_{P_1} = P_2$	New Impervious Area *0.95		
	\ <i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	12		
Redevelopment RRv = Redevelopment RRv =	0.0277083 1207	3 AC-F I 7 CF		
Minimum Allowable Ri Minimum Allowa	Rv for Rede	evelopment is calculated for new i $=\frac{P * S * 0.95 * New Imp.}{12}$	impervious only	
Min. Allowable RRv =	0.0110833	AC-FT		
Min Allowable RRv =	483	6 CF		

	CALC		Project	t No.: 295'
		ULAHONS:	Date:	8/22/2024
	Project:	550 Macedon Center Road	By:	JGC
		WQv and RRv Summary	Sheet	2 of 2
Overall Required WQv	/ =		1405 cf	
Minimum RRv Reg =			483 cf	
•				
WQv Total	-			
Bio-Retention North			85 cf	
Bio-Retention South			0 cf	
		Total WQv Provided =	85 cf	
		Total WQv Provided =	85 cf	
RRv Total		Total WQv Provided =	85 cf	
RRv Total		<u>Total WQv Provided =</u>	85 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u>	85 cf 910 cf 525 cf	
RRv Total Bio-Retention North Bio-Retention South		<u>Total WQv Provided =</u> <u>Total RRv Provided =</u>	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South	-	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u>	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South	- ward overa	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u> Il WQv Requirement	85 cf 910 cf 525 cf 1435 cf	
RRv Total Bio-Retention North Bio-Retention South *RRv is also counted to Total WQv = RRv + W0	ward overa	<u>Total WQv Provided =</u> <u>Total RRv Provided =</u> Il WQv Requirement 1520 cf	85 cf 910 cf 525 cf 1435 cf	
	CAL	THE ATIONS .	Project No.: 2951	
--	------------------------------------	---	----------------------------	
ASSOC	IATES <u>CALC</u>	<u>ULATIONS</u> :	Date: 8/8/2024	
• SURVEYORS • LANDSCAPE	ARCHITECTS Project:	550 Macedon Center Road	By: JGC	
		Filtering Bio-Retention Calculation	Sheet 1 of 1	
Drainage Area	a to Pratice (NOR)	H BIORETENTION)		
	ii Evenii) –			
Impervious Are	a =	0.26 acres		
I = % Impervio	us =	32.5 %		
Rv = 0.05 + 0.0	009(I)	0.34		
WQv = P * Are	a * Rv / 12	995 cf		
Calculate the	Minimum Filter A	rea		
Af = Area of Fi	lter (sf)			
WQv = Water (Quality Volume (cf)		$Af = \frac{WQv * df}{df}$	
df = Depth of F	ilter (ft)		k (hf+df)*tf	
k = Permeabilit	ly flow rate of filter	$\frac{1}{1} \left(0.5 \text{ ft max} \right)$		
tf = Maximum I	Filter bed drain time	(0.5 (IIIIAX.))		
		(ddys)		
df =	2.5 ft	(Use 2.5-4.0 ft)		
k =	1.0 ft/day	(Use 1 ft/day for Bio-Retention)		
hf =	0.5 ft/day	(Use 0.5 ft max.)		
u =	2.0 days	(Use 2 days for bio-retention)		
Required Filte	er Area (Af) =	414 sf		
Determine Ac	tual Bio-Retentior	<u>n Area</u>		
Filter Width (ft)	=	1 tt 725 ft		
Filter Area (sf)	- -	725 cf		
Filler Area (SI)	-	723 51		
Actual Volume	Provided (cf) =	1740 sf		
Determine Ru	noff Reduction			
<u>Determine Ru</u> RRv Calculated	noff Reduction	910 cf		
<u>Determine Ru</u> RRv Calculated RRv Applied (noff Reduction d cf)	910 cf 910 cf		
<u>Determine Ru</u> RRv Calculated RRv Applied (WQv Applied	noff Reduction d cf) (cf)	910 cf 910 cf 85 CF		
<u>Determine Ru</u> RRv Calculated RRv Applied (WQv Applied	noff Reduction d cf) (cf)	910 cf 910 cf 85 CF		

$\frac{\mathbf{Drainage Area}}{\mathbf{Drainage Area}}$ P (90% Rainfall Area = Impervious Area I = % Imperviou Rv = 0.05 + 0.00 WQv = P * Area $\frac{\mathbf{Drainage Area}}{\mathbf{Drainage Area}}$	ATES ACHITECTS CALC Project: to Pratice (SOUT Event) = a = b = b = c = c = c = c = c = c = c = c =	ULATIONS : 550 Macedon Center Road Filtering Bio-Retention Calculation H BIORETENTION) 1 inches 0.37 acres 0.14 acres 37.8 % 0.39 525 cf	Date: 8/8/2024 By: JGC Sheet 1 of 1
• SURVEYORS • LANDSCAPE A • SURVEYORS • LANDSCAPE A P (90% Rainfall Area = Impervious Area I = % Imperviou Rv = 0.05 + 0.00 WQv = P * Area Calculate the M	to Project: to Pratice (SOUT Event) = a = s = D9(I) * Rv / 12	550 Macedon Center Road Filtering Bio-Retention Calculation H BIORETENTION) 1 inches 0.37 acres 0.14 acres 37.8 % 0.39 525 cf	By: JGC Sheet 1 of 1
Drainage Area P (90% Rainfall Area = Impervious Area I = % Imperviou Rv = 0.05 + 0.00 WQv = P * Area	<u>to Pratice (SOUT</u> Event) = a = s = D9(I) * Rv / 12	Filtering Bio-Retention Calculation H BIORETENTION) 1 inches 0.37 acres 0.14 acres 37.8 % 0.39 525 cf	Sheet 1 of 1
Drainage Area P (90% Rainfall Area = Impervious Area I = % Imperviou Rv = 0.05 + 0.00 WQv = P * Area	<u>to Pratice (SOUT</u> Event) = a = s = D9(I) * Rv / 12	H BIORETENTION) 1 inches 0.37 acres 0.14 acres 37.8 % 0.39 525 cf	
Calculate the M			
Af = Area of Filt WQv = Water Q df = Depth of Fil k = Permeability hf = Average He tf = Maximum F	linimum Filter Ar er (sf) uality Volume (cf) ter (ft) flow rate of filter r eight of Ponding (fi lter bed drain time	<u>ea</u> media (ft/day) :) (0.5 ft max.) ⊧ (days)	$Af = \frac{WQv * df}{k \ (hf + df) * tf}$
df = k = hf = tf =	2.5 ft 1.0 ft/day 0.5 ft/day 2.0 days	(Use 2.5-4.0 ft) (Use 1 ft/day for Bio-Retention) (Use 0.5 ft max.)	
Required Filter	Area (Af) =	219 sf	
<u>Determine Acto</u> Filter Width (ft) Filter Length (ft) Filter Area (sf) = Actual Volume I	u <mark>al Bio-Retention</mark> = = Provided (cf) =	<u>Area</u> 1 ft 550 ft 550 sf 1320 sf	
Determine Run	off Reduction		
RRv Calculated		528 cf	
RRv Applied (c	f)	525 cf	
WQv Applied (cf)	0 CF	

Appendix 4

Storm Sewers

Figure 06 – Storm Sewer Drainage Areas Map Storm Sewer Sizing Calculations Rip-Rap Outlet Protection Calculations





Project:550 Macedon Center RoadProject No:2951Date:08/21/24By:DTT

By: Sheet 1 of 1

	Draii Struo	nage cture		Lo	ocal		Up cor	ostreai htributi	m on		olling				Pipe		h of t.)	e	NV/	ity	of to pipe	ۍ.	ne	Next F	Point
	From	То	Тс	с	A	cA	From	Тс	cA	Total cA	Contre To	I	Q (cfs)	DIA (in)	MATL	n	Length pipe (f	% slop	Diff. In	Capac (cfs)	Ratio (liquid t dia of	velocit (fps)	flow tir (min)	То	Тс
MH	D-1.2	D-1.1	10.0	0.5	0.18	0.09				0.00	10.0	1 12	0.20	0		0.012	117	1 45	1 70	1 50	0.22	2 60	0.5		10.5
INV	474.70	473.00								0.09	10.0	4.43	0.39	0	NUPE	0.012	117	1.45	1.70	1.00	0.33	3.09	0.5	0-1.1	10.5
MH	D-1.1	D-1	10.0	0.5	0.17	0.09	D-1.2	10.5	0.09	0.40	10.5	4.00	0.70	0		0.040	00		0.54	4 50	0.50	4.47	0.4		40.7
INV	473.00	472.49								0.18	10.5	4.36	0.78	8	HDPE	0.012	36	1.41	0.51	1.56	0.50	4.47	0.1	D-1	10.7
MH	D-2	D-1	10.0	0.7	0.06	0.04				0.04	40.0	1.10	0.40			0.040		0.05	0.54	0.04	0.40	0.70			40.4
INV	475.00	472.49								0.04	10.0	4.43	0.18	8	HDPE	0.012	88	2.85	2.51	2.21	0.19	3.78	0.4	D-1	10.4
MH	D-1	D	10.0	0.7	0.03	0.02	D-2	10.4	0.04	0.04	40.7			10		0.040	54	0.07	0.40	0.04		4.00			10.0
INV	472.49	472.00					D-1.1	10.7	0.18	0.24	10.7	4.34	1.04	12	HDPE	0.012	51	0.97	0.49	3.81	0.34	4.06	0.2		10.9

BME ASSOCIATES ENGINEERS • SURVEYORS • LANDSCAPE ARCHITECTS	CALCULATIONS: Project: 550 Macedon Center Road	Project No.: 29 Date: 8/22/20 By: D Sheet	51 24 TT 1
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	D 12 in 3.8 cfs Do 0.3 ft 8.0 ft 9.0 ft 5 sy 8 in 50 lbs	3	9.0
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	DA 6 in 0.8 cfs Do 0.3 ft 8.0 ft 8.5 ft 5 sy 1 IESS 8 in 50 lbs 50 lbs	1.5	8.5
DESIGNATION Do-DIA. OF PIPE DISCHARGE d50 RIP-RAP SIZE La-LENGTH OF APRO W=Do+La SY OF RIP RAP MIN BLANKET THICKN AVE WEIGHT NOTES:	DB 6 in 1.7 cfs Do 0.3 ft 0.3 ft 8.0 ft 8.5 ft 5 sy 8 in 50 lbs 50 lbs	1.5	8.5

Appendix 5

Fire Truck Turning Template







TOWN OF PERINTON

1350 TURK HILL ROAD. FAIRPORT, NEW YORK 14450-8796 (585) 223-0770, Fax: (585) 223-3629, www.perinton.org

Owner Authorization to Make Application

I, Debbie Kanner (Seal Two Partners, LLC) , authorize (print owner name legibly)

Andrew Spencer / BME Associates

(applicant/engineer name & company name)

to act as my agent to make application(s) to the Town of Perinton for the purpose of

Site Plan/ Subdivision/ Special Use Permit

(site plan/subdivision/change of use, etc.)

for the property that I own located at _____550 Macedon Center Road

Signature

Date

form date - 3/29/12

MONROE COUNTY CLERK'S OFFICE

<u>Return To:</u>

RICHAF	D C	COUCH	
3000-H	DZ 7	NVILLE	BOULEVARD
SUITE	532	2	
ALAMO	CA	94507	

Index	DEEDS					
Book	10565	Page	0066			
No. Pages 0005						
Instrument DEED						
Date : 1/02/2008						
Time : 12:26:00						
Control # 200801020382						

COUCH RICHARD COUCH JULIE SEAL TWO PARTNERS LLC

TT# TT 0000 010224 Employee ID BZ40

MORTGAGE TAX

TRANS TAX	\$.00	MORTGAGE AMOUNT	\$.00
FILE FEE-S	\$ 66.00		
FILE FEE-C	\$ 9.00	BASIC MORTGAGE TAX	\$.00
FILE FEE-S	\$ 19.00		
FILE FEE-C	\$ 8.00	SPEC ADDIT MTG TAX	\$.00
REC FEE	\$ 15.00		
MISC FEE-C	\$ 5.00	ADDITIONAL MTG TAX	\$.00
	\$.00		
	\$.00	Total	\$.00
Total:	\$ 122.00		

STATE OF NEW YORK MONROE COUNTY CLERK'S OFFICE

TRANSFER AMT

WARNING - THIS SHEET CONSTITUTES	THE CLERKS	TRANSFER AMT \$.00
ENDORSEMENT, REQUIRED BY SECTION	317-a(5) &		
SECTION 319 OF THE REAL PROPERTY	LAW OF THE		
STATE OF NEW YORK. DO NOT DETACH	OR REMOVE.	TRANSFER TAX \$.00

Cheryl Dinolfo Monroe County Clerk



WARRANTY DEED WITH LIEN COVENANT

THIS INDENTURE, made the 28th day of <u>Decomber</u>, 2007.

2300 J.N -2 PM 12: 26

n Barra a tan katar katar kanalar

Between Richard G. Couch, residing at 3000-F Danville Boulevard, Suite 532, Alamo, CA 94507, and Julie Couch, residing at 112 Garden Creek Place, Danville, CA 94526 Grantors, and

Seal Two Partners, LLC, with offices located at 3000-F Danville Boulevard #532, Alamo, CA 94507, Grantee,

WITNESSETH that the Grantors, in consideration of ONE DOLLAR (\$1.00) lawful money of the United States, and other valuable consideration paid by the Grantee, do hereby grant and release unto the Grantee, its heirs or successors, and assigns forever,

ALL THAT TRACT OR PARCEL OF LAND, siutate in the Town of Perinton, County of Monroe and State of New York, being part of Town Lot 29, Township 12, Range 4, and more particularly bounded and described as follows:

Commencing at Section Corner which point is the southeast corner of said Town Lot 29 in center of highway, thence North 5 1/2 degrees East 433 feet to a point, thence westerly on a line parallel with the center line of the Macedon Center Road 293 feet to a point, thence southerly along the line parallel with the first described course 322 feet to the center of the Macedon Center Road, thence easterly along the center of said road 293 feet to the place of beginning.

Subject to all covenants, easements and restrictions of record, if any, affecting said premises.

Being and intending to convey the same premises conveyed to Grantors herein by deed dated July 22, 2002 and recorded on July 23, 2002 in the Monroe County Clerk's Office in Liber 09651 of Deeds, page 0548.

Tax Account Number:	153.19-1-34
Property Address:	550 Macedon Center Road, Fairport, NY 14450
Tax Mailing Address:	3000-F Danville Blvd #532, Alamo, CA 94507

TOGETHER with the appurtenances and all the estate and rights of the Grantors in and to said premises,

TO HAVE AND TO HOLD the premises herein granted unto the Grantee, its heirs or successor and assigns forever.

AND said Grantors covenant as follows:

FIRST, that the Grantee shall quietly enjoy the said premises;

SECOND, that said Grantors will forever WARRANT the title to said premises.

THIRD, That, in Compliance with Sec. 13 of the Lien Law, the Grantors will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

WHENEVER the sense of this instrument so requires, the words "Grantor" and "Grantee" shall be construed in their plural forms.

IN WITNESS WHEREOF, the Grantors have executed this Deed on the day and year first above written.

yund G. Comh

Richard Couch

Uie Nome Couch

STATE OF NEW YORK) COUNTY OF WAYNE) ss.:

On the ______ day of February in the year 2007, before me, the undersigned, a notary public in and for said State, personally appeared Richard Couch, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s) or the person on behalf of which the individual(s) acted, executed the instrument.

Notary Public

STATE OF NEW YORK) COUNTY OF WAYNE) ss.:

On the _____ day of February in the year 2006, before me, the undersigned, a notary public in and for said State, personally appeared Julie Couch, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s) or the person on behalf of which the individual(s) acted, executed the instrument.

Sec otherway

(See a Hacked)

Notary Public

ACKNOWLEDGMENT

STATE OF CALIFORNIA)	
COLINITY OF GANTA CLADA)	SS
COUNTY OF SANTA CLARA)	

On March 22, 2007, before me R.A. Robertson, Notary Public, personally appeared Richard G. Couch, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal

am

R.A. Robertson, Notary Public



STATE OF CALIFORNIA	} ss:	
COUNTY OF CONTRA COSTA	, se.	
On <u>December 28, 2007</u>	before me,S. Fairbanks	
a Notary Public personally appeared	Julie Couch	
a notary rabitly personally appeared _		
On <u>December 28, 2007</u> a Notary Public, personally appeared _	before me, <u>_S. Fairbanks</u> Julie Couch	

personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose names is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

uart

Signature of Notary Public S. Fairbanks

¥ - 4



(This area for official notarial seal)

Record + Return to Richard Couch 3000-F Dawiels Blud Sto 532 alamo, CA 94507