



VILLAGE OF WILLIAMS BAY

250 Williams Street | PO Box 580 | Williams Bay | WI | 53191 | vi.williamsbay.wi.gov

Phone: 262-245-2700

NOTICE

VILLAGE BOARD OF TRUSTEES MEETING

MONDAY, OCTOBER 6, 2025 AT 6:30 PM

Village Hall Council Room

250 Williams Street

Williams Bay, WI 53191

AGENDA

The following agenda items may be considered for Discussion, Consideration, or Action

I. Call to Order

II. Roll Call

III. Pledge of Allegiance

IV. Meeting Decorum

- A.** Meeting Decorum. *According to Robert's Rules of Order, meeting decorum means maintaining respectful and orderly behavior during a discussion, including addressing the chair to speak, staying relevant to the topic at hand, avoiding personal attacks, and generally adhering to courteous conduct while debating issues; essentially, ensuring that discussions are focused and civil, with only one person speaking at a time when recognized by the chair. Violators of meeting decorum will be excused from the meeting.*

V. Minutes

- A.** Emergency Special Village Board Meeting Minutes of August 27, 2025
- B.** Village Board Meeting Minutes of September 15, 2025

VI. Public Comments

- A.** Public Comments Responses - Responses to Public Comments from the previous Village Board Meeting are included in the Meeting Packet Materials Under this Agenda Item
- B.** *Individual public comments will be limited to two (2) minutes maximum. If your comments align with other comments before you, please consider stating that you are in agreement with those comments. The public may speak on any item that is not included on this agenda as a "Public Hearing or Forum." Anyone who wishes to comment should identify himself or herself and provide his or her local address. Board members may discuss any matter raised by the public. However, the Board will refrain from extensive dialogue and should not take action on matters raised by the public during a public comment period. Referrals to committees or staff members might be made. Members may ask the commenter to clarify his or her remarks. The Board President or the presiding officer will maintain control of the meeting.*

VII. Presentation of accounts and petitions

- A.** Payroll ending 09-19-2025 in the amount of \$55,872.49
- B.** Accounts Payable Prepays dated 09-17-2025 in the amount of \$10,050.44

- C. Accounts Payable Prepaids dated 09-24-2025 in the amount of \$1,381.82
- D. Accounts Payable Unpaids dated 10-03-2025 in the amount of \$998,806.20

VIII. President's Remarks

- A. Congratulations to Police Chief Justin Timm - First Responder of the Year Award
- B. Thanks to Tree Enhancement Committee and Volunteers

IX. Resolution and Authorization

- A. Resolution R-57-25 Final Resolution Vacating the East Half of Hanson Street and All of 16.5 Foot Alley Shown on Hanson's Addition to Williams Bay

APPLICANT: Steve Greenberg, SG Investments, LLC (Owner).

TAX KEYS: WHA00003; WHA 00002; WHA 00001; WHA00004; WHA00005; WHA00006

STREET ADDRESS: North Side of E. Geneva St, Between Willabay Drive and Potawatomi Street, Williams Bay, WI 53191

APPLICATION: Right of Way Vacation for a lot line adjustment, to decrease the number of lots on the Land from fourteen (14) to five (5) and to develop those lots for single-family homes

X. Committee Reports

A. Finance & Personnel, Chair - Trustee Wright

1. Presentation of Proposed Budget 2026 - Public Hearing Scheduled for the Village Board Meeting on November 17, 2026.

XI. Public Comments

- A. *Individual public comments will be limited to two (2) minutes maximum. If your comments align with other comments before you, please consider stating that you are in agreement with those comments. The public may speak on any item that is not included on this agenda as a "Public Hearing or Forum." Anyone who wishes to comment should identify himself or herself and provide his or her local address. Board members may discuss any matter raised by the public. However, the Board will refrain from extensive dialogue and should not take action on matters raised by the public during a public comment period. Referrals to committees or staff members might be made. Members may ask the commenter to clarify his or her remarks. The Board President or the presiding officer will maintain control of the meeting.*

XII. Adjournment

Requests from persons with disabilities, who need assistance to participate in this meeting or hearing, should be made to the Village Clerk's office in advance so the appropriate accommodations can be made.

Posted: 10/03/2025 5:00 PM



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UNOFFICIAL MINUTES EMERGENCY SPECIAL VILLAGE BOARD MEETING - 08/27/2025 MEETING

WEDNESDAY, AUGUST 27, 2025 AT 5:00 PM
VILLAGE HALL COUNCIL ROOM
250 WILLIAMS STREET
WILLIAMS BAY, WI 53191

I. Call to Order

President Jaramillo called the meeting to order at 05:00pm.

II. Roll Call

Present: President Adam Jaramillo, Trustees George Vlach, Robert Umans, Steven Russell, Mary Bartholomew, Lowell Wright (Via Phone)

Also Present: Administrator David Lothspeich, Police Chief Justin Timm, Police Lieutenant Will Kostock, Dr. William White, Public Works Director Wayne Edwards, Village Engineer Doug Snyder, Recreation Director Ryan Knop, Treasurer Jennifer Wiese, Utility Clerk Cynthia Stanek, Clerk Tina Kolls

Excused: Trustee Susan Franzen

III. Pledge of Allegiance

President Jaramillo skipped the Pledge of Allegiance.

IV. Public Comments

There were no public comments.

V. Meeting Items

A. Discussion and Possible Action on Authorizations and Funds in Support of Necessary Village Actions Regarding the Village's Public Water Supply

The motion to approve up to \$100,000 of funds in support of necessary Village Actions regarding the Village's Public Water Supply to come from Water Reserve Funds was initiated by Trustee Umans and seconded by Trustee Bartholomew. Unanimously carried.

VI. Adjournment

The motion to adjourn was initiated by Trustee Russell and seconded by Trustee Vlach at 05:40pm. Unanimously carried.

/s/ Tina Kolls, Village Clerk

These are not official Minutes until approved by the Governing Body.



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UNOFFICIAL MINUTES VILLAGE BOARD MEETING 9/15/2025 MEETING MONDAY, SEPTEMBER 15, 2025 AT 6:30 PM VILLAGE HALL COUNCIL ROOM 250 WILLIAMS STREET WILLIAMS BAY, WI 53191

I. Call to Order

President Jaramillo called the meeting to order at 06:30pm.

II. Roll Call

Present: President Adam Jaramillo, Trustees George Vlach, Lowell Wright, Robert Umans, Steven Russell, Mary Bartholomew, and Susan Franzen

Also Present: Administrator David Lothspeich, Police Chief Justin Timm, Village Engineer Doug Snyder, Public Works Director Wayne Edwards, Recreation Director Ryan Knop, Treasurer Jennifer Wiese, Clerk Tina Kolls

III. Pledge of Allegiance

The Pledge of Allegiance was recited by all.

IV. Meeting Decorum

- A. Meeting Decorum. *According to Robert's Rules of Order, meeting decorum means maintaining respectful and orderly behavior during a discussion, including addressing the chair to speak, staying relevant to the topic at hand, avoiding personal attacks, and generally adhering to courteous conduct while debating issues; essentially, ensuring that discussions are focused and civil, with only one person speaking at a time when recognized by the chair. Violators of meeting decorum will be excused from the meeting.*

V. Minutes

- A. Village Board Meeting Minutes of September 2, 2025

The motion to approve the Village Board Meeting Minutes of September 2, 2025 was initiated by Trustee Umans and seconded by Trustee Franzen. Unanimously carried.

VI. Public Comments

There were no public comments.

- A. Public Comments Responses - Responses to Public Comments from the previous Village Board Meeting are included in the Meeting Packet Materials Under this Agenda Item
- B. *Individual public comments will be limited to two (2) minutes maximum. If your comments align with other comments before you, please consider stating that you are in agreement with those comments. The public may speak on any item that is not included on this agenda as a "Public Hearing or Forum." Anyone who wishes to comment should identify himself or herself and provide his or her local address. Board members may discuss any matter raised by the public. However, the Board will refrain from extensive dialogue and should not take action on matters raised by the public during a public comment*

period. Referrals to committees or staff members might be made. Members may ask the commenter to clarify his or her remarks. The Board President or the presiding officer will maintain control of the meeting.

VII. Presentation of accounts and petitions

A. Payroll ending 09-05-2025 in the amount of \$64,561.45

The motion to approve the Payroll ending 09-05-2025 in the amount of \$64,561.45 was initiated by Trustee Wright and seconded by Trustee Umans. Unanimously carried.

B. Accounts Payable Unpays dated 09-12-2025 in the amount of \$158,314.18

The motion to approve the Accounts Payable Unpays dated 09-12-2025 in the amount of \$158,314.18 was initiated by Trustee Wright and seconded by Trustee Umans. Unanimously carried.

C. Library Accounts Unpays dated 09-11-2025 in the amount of \$3,263.84

The motion to approve the Library Accounts Unpays dated 09-11-2025 in the amount of \$3,263.84 was initiated by Trustee Wright and seconded by Trustee Umans. Unanimously carried.

D. Monthly EFT Payments for August 2025 in the amount of \$197,869.03

The motion to approve the Monthly EFT Payments for August 2025 in the amount of \$197,869.03 was initiated by Trustee Wright and seconded by Trustee Umans. Unanimously carried.

E. July 2025 Financial Statements

The motion to approve the July 2025 Financial Statements was initiated by Trustee Wright and seconded by Trustee Umans. Unanimously carried.

VIII. President's Remarks

A. Public Tap Water Update

President Jaramillo thanked everyone for all of their hard work. President Jaramillo explained that the water is clean, and the Water Department will be completing a ten-day follow-up test.

Chief Timm thanked all the volunteers. Chief Timm briefly explained how much water was distributed and who the donors were.

IX. Committee Reports

A. Finance & Personnel, Chair - Trustee Wright

1. Presentation, Discussion and Consideration of Accepting the Audited Financial Statements and Supplemental Information for Prior Year 2024

Paul Frantz of Baker Tilly gave a brief overview of the 2024 audit report. Frantz stated that 2024 received a clean bill of health overall. Frantz stated that the General Fund is in strong financial condition.

B. Protective Services, Chair - Trustee Vlach

1. Original, Renewal, or Temporary Operator License Application(s)

The motion to approve the Original, Renewal, or Temporary Operator License Application(s) was initiated by Trustee Vlach and seconded by Trustee Franzen. Unanimously carried.

2. Discussion and Possible Action on an Application for a Temporary Class "B"/"Class B" Retailers License for Mack Glass Community DBA World's Tallest Glass Tree for the World's Tallest Glass Tree Event on December 5, 6, 7, 11, 12, 13, and 14 2025

The motion to approve the Application for a Temporary Class "B"/"Class B" Retailers License for Mack Glass Community DBA World's Tallest Glass Tree for the World's Tallest Glass Tree Event on December 5, 6, 7, 11, 12, 13, and 14 2025 was initiated by Trustee Vlach and seconded by Trustee Umans. Unanimously carried.

X. Public Comments

James Cudworth, 410 Observatory Place, Spoke in favor of the proposed changes to the Short-term Rental Ordinance

changes.

Kate Lewis, 61 Congress, Spoke regarding the proposed Short-term Rental Ordinance changes, requesting more information to the residents as to the plans for the ordinance.

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XI. Adjournment

The motion to adjourn was initiated by Trustee Wright and seconded by Trustee Franzen at 06:50pm. Unanimously carried.

/s/ Tina Kolls, Village Clerk

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09/06/2025 - 09/19/2025

Pay Date:

9/26/2025

Department	Gross Regular Wages	Gross OT Wages	Payroll Taxes & Deductions	Net Wages
Crossing Guard	\$846.00	\$0.00	\$71.57	\$774.43
General Administration	\$12,268.04	\$36.59	\$5,573.69	\$6,730.94
KNC	\$3,214.34	\$0.00	\$900.74	\$2,313.60
Lakefront/Beach	\$3,468.56	\$275.28	\$651.81	\$3,092.03
Library	\$8,199.75	\$0.00	\$3,094.50	\$5,105.25
Parks	\$1,863.38	\$0.00	\$219.89	\$1,643.49
Police	\$27,230.38	\$2,030.19	\$9,732.59	\$19,527.98
Protective Services (F&R)	\$12,748.58	\$850.49	\$4,841.38	\$8,757.69
Public Works/W&S	\$4,067.90	\$0.00	\$1,218.37	\$2,849.53
Recreation Department	\$5,512.50	\$0.00	\$434.95	\$5,077.55
Village Board				\$0.00
Total Net Wages				\$55,872.49

Segment FUND	GL Account Number	Description	Amount	GL Activity Number
WILLIAMS BAY BUSINESS ASSN				
GENERAL FU	100-51965-000	2ND QTR ROOM TAX BALANCE	10,050.44	0
Total WILLIAMS BAY BUSINESS ASSN:			10,050.44	
Grand Totals:			10,050.44	

Segment FUND	GL Account Number	Description	Amount	GL Activity Number
BALSLEY PRINTING				
GENERAL FU	100-51410-161	NEWSLETTER POSTAGE	1,381.82	0
Total BALSLEY PRINTING:			1,381.82	
Grand Totals:			1,381.82	

GL Account and Title	Description	Amount	GL Period
925			
BAXTER WOODMAN			
100-51630-000 LEGAL/ENGINEER/PLANNING AR	WILLABAY MEADOWS AUG 202	11,170.00	925
Total BAXTER WOODMAN:		11,170.00	
Total 925:		11,170.00	
1025			
10-33 VEHICLE SERVICES LLC			
500-52120-140 POLICE DEPT CAPITAL OUTLAY	NEW VEHICLE UPLIFT	10,175.88	1025
Total 10-33 VEHICLE SERVICES LLC:		10,175.88	
ABT MAILCOM			
100-51410-161 GEN ADMIN POSTAGE	ESTIMATED POSTAGE 2025 TA	1,650.00	1025
Total ABT MAILCOM:		1,650.00	
ACCURATE APPRAISAL			
100-51520-000 ASSESSOR CONTRACT	ASSESSMENT SERVICES	2,500.00	1025
Total ACCURATE APPRAISAL:		2,500.00	
AFLAC			
100-21259 AFLAC PAYABLE	VOLUNTARY INSUR POLICY	481.68	1025
Total AFLAC:		481.68	
AMAZON CAPITAL SERVICES			
100-55210-275 REC DEPT PROGRAM EXPENSES	JYZCN SMART BOARD STAND	239.00	1025
100-55210-160 REC DEPT SUPPLIES/MATERIALS	OFFICE SUPPLIES	110.39	1025
100-55210-275 REC DEPT PROGRAM EXPENSES	WATERPROOF POUCH	25.77	1025
100-52120-160 POLICE SUPPLIES	POLICE SUPPLIES	452.10	1025
100-52120-190 POLICE TRAINING	POLICE TRAINING	59.40	1025
100-51730-160 VH BLDG SUPPLIES	VILLAGE HALL CLEANING SUP	10.19	1025
100-51410-160 GEN ADMIN SUPPLIES	VILLAGE HALL SUPPLIES	94.78	1025
100-51410-161 GEN ADMIN POSTAGE	POSTAGE MACHINE SUPPLIES	91.00	1025
Total AMAZON CAPITAL SERVICES:		1,082.63	
AT&T MOBILITY			
100-52320-200 FIRE DEPT TELEPHONE	FIRE CHIEF DEPT PHONE	37.09	1025
Total AT&T MOBILITY:		37.09	
AUGUST WINTERS & SONS INC			
200-57610-140 WATER FUND CAPITAL OUTLAY	WATER TREATMENT FACILITY I	633,841.50	1025
Total AUGUST WINTERS & SONS INC:		633,841.50	
BAKER TILLY VIRCHOW KRAUSE LLP			
100-51570-000 AUDIT EXPENSE	FINAL BILLING FOR 2024 FINAN	3,600.00	1025
200-57925-000 WATER AUDIT EXPENSE	FINAL BILLING FOR 2024 FINAN	1,200.00	1025
300-58972-000 SEWER AUDIT EXPENSE	FINAL BILLING FOR 2024 FINAN	1,200.00	1025
100-51570-000 AUDIT EXPENSE	TECHNOLOGY FEE	180.00	1025
200-57925-000 WATER AUDIT EXPENSE	TECHNOLOGY FEE	60.00	1025
300-58972-000 SEWER AUDIT EXPENSE	TECHNOLOGY FEE	60.00	1025

GL Account and Title	Description	Amount	GL Period
Total BAKER TILLY VIRCHOW KRAUSE LLP:		6,300.00	
BAXTER WOODMAN			
100-51630-000 LEGAL/ENGINEER/PLANNING AR	WOMENS LEADERSHIP REVIE	780.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	CANYON DEVELOPEMENT PLA	4,640.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	THE PRESERVE - WATER METE	1,785.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	PARK PL CSM AUGUST 2025	650.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	100 UPPER LOCH VISTA	585.00	1025
200-57610-140 WATER FUND CAPITAL OUTLAY	SANITARY SEWER REPLACEM	13,440.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	PATH EASEMENT ADJ TO CONS	130.00	1025
100-51630-000 LEGAL/ENGINEER/PLANNING AR	92 UPPER LOCH VISTA	555.00	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE VIOLATION ASSISTAN	7,044.00	1025
200-57921-160 WATER OFFICE SUPPLIES	WATER QUALITY INVESTIGATIO	10,090.02	1025
Total BAXTER WOODMAN:		39,699.02	
BILLER PRESS			
100-52120-160 POLICE SUPPLIES	POLICE SUPPLIES - PARKING T	500.00	1025
Total BILLER PRESS:		500.00	
BRUSHFIRE SIGNS			
500-52120-140 POLICE DEPT CAPITAL OUTLAY	POLICE VEHICLE LETTERING	772.50	1025
Total BRUSHFIRE SIGNS:		772.50	
CORE & MAIN			
200-57651-150 WATER MAINS REPAIRS/MAINT	WATER MAIN REAPIR CLAMPS	3,086.96	1025
Total CORE & MAIN:		3,086.96	
DEHAVAN NAPA AUTO PARTS			
100-52120-150 POLICE REPAIRS/MAINT	THERMOSTAT HOUSING 293	34.82	1025
100-52120-150 POLICE REPAIRS/MAINT	BATTERY REPLACEMENT 293	143.48	1025
Total DELAVAN NAPA AUTO PARTS:		178.30	
DEPARTMENT OF ADMINISTRATION			
100-51414-000 SOFTWARE LICENSE & IT SUPPORT	GSB EMAIL FILTERING	24.40	1025
Total DEPARTMENT OF ADMINISTRATION:		24.40	
ELKHORN NAPA AUTO PARTS			
100-52120-150 POLICE REPAIRS/MAINT	OIL/ COOLANT SENSOR COOLA	87.95	1025
Total ELKHORN NAPA AUTO PARTS:		87.95	
GORDON FLESCH			
100-55210-130 REC DEPT TECHNOLOGY/IT	REC DEPT COPIER USAGE	13.12	1025
100-51410-162 GEN ADMIN COPIER EXPENSE	VH COPIER USAGE	123.58	1025
Total GORDON FLESCH:		136.70	
GRAYMONT WESTERN LIME INC.			
200-57631-160 WATER TREATMENT CHEMICALS	HYDRATED LIME	4,882.92	1025

GL Account and Title	Description	Amount	GL Period
Total GRAYMONT WESTERN LIME INC.:		4,882.92	
GUNNAR OLSEN LANDSCAPING			
100-55410-115 PARKS CONTRACT LABOR	GARDEN BED WEEDING	650.00	1025
Total GUNNAR OLSEN LANDSCAPING:		650.00	
HACH COMPANY			
200-57921-160 WATER OFFICE SUPPLIES	SL1000 LAB EQUIPMENT.EMER	5,668.55	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE TESTING SUPPLIES	224.92	1025
200-57921-160 WATER OFFICE SUPPLIES	FREE CHLORINE TESTING SUP	220.80	1025
Total HACH COMPANY:		6,114.27	
HALVERSON DOOR LLC			
100-52120-150 POLICE REPAIRS/MAINT	GARAGE DOOR SERV	473.50	1025
Total HALVERSON DOOR LLC:		473.50	
HAWKINSON, WILLIAM			
100-55210-270 REC DEPT ATHLETIC PROGRAM EXP	WILLIAMS BAY VS DELAVAN GF	40.00	1025
Total HAWKINSON, WILLIAM:		40.00	
HENDERSON, LILLIAN			
001-15100 UTILITY CASH CLEARING	REFUND OVERPAYMENT ON W	200.00	1025
Total HENDERSON, LILLIAN:		200.00	
HYDRO CORP			
200-57656-150 CROSS CONNECTION INSPECTION	CROSS CONNECTION PROGRA	1,404.92	1025
200-57656-150 CROSS CONNECTION INSPECTION	CROSS CONNECTION PROGRA	427.13	1025
Total HYDRO CORP:		1,832.05	
LOTHSPEICH, DAVID			
100-51410-160 GEN ADMIN SUPPLIES	FUNERAL FLOWERS	85.00	1025
100-51410-160 GEN ADMIN SUPPLIES	DEPT HEAD MEETING SUPPLIE	29.48	1025
Total LOTH SPEICH, DAVID:		114.48	
L-R METER TESTING & REPAIR			
200-57653-151 WATER METER TESTING	LARGE WATER METER TESTIN	2,583.25	1025
Total L-R METER TESTING & REPAIR:		2,583.25	
MARTELLE WATER TREATMENT			
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY CHLORINE 820 G	3,986.00	1025
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY CHLORINE 450 G	2,210.00	1025
200-57921-160 WATER OFFICE SUPPLIES	EFMERGENCY CHLORINE 785	3,818.00	1025
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY CHLORINE EQUIP	750.50	1025
Total MARTELLE WATER TREATMENT:		10,764.50	
MID-STATE EQUIPMENT			
100-55410-150 PARKS REPAIRS/MAINT	EYE BOLT	6.64	1025

GL Account and Title	Description	Amount	GL Period
Total MID-STATE EQUIPMENT:		6.64	
MILPORT ENTERPRISES INC			
200-57631-160 WATER TREATMENT CHEMICALS	FLOURIDE & ALUM SULFATE	2,145.00	1025
Total MILPORT ENTERPRISES INC:		2,145.00	
NORTHERN LAKE SERVICE INC.			
200-57623-170 WATER TESTING	WATER QUALITY PARAMETER	401.10	1025
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY AMONIA TESTING	346.60	1025
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY ARSENIC & MANA	135.00	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE/NITRATE EMERGENCY	61.80	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE/NITRATE EMERGENCY	556.20	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE/NITRATE EMERGENCY	556.20	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE/NITRATE EMERGENCY	61.80	1025
200-57921-160 WATER OFFICE SUPPLIES	EMERGENCY AMONIA TESTING	231.10	1025
200-57921-160 WATER OFFICE SUPPLIES	NITRITE/NITRATE EMERGENCY	247.20	1025
Total NORTHERN LAKE SERVICE INC.:		2,597.00	
OLD DOMINION BRUSH			
225-54635-150 RECYCLING REPAIRS/MAINT	LEAF VAC SUCTION HOSE	1,982.14	1025
Total OLD DOMINION BRUSH:		1,982.14	
PAL STEEL COMPANY			
200-57935-150 WATER PLANT REPAIRS/MAINT	2 X 4 STEEL	33.74	1025
Total PAL STEEL COMPANY:		33.74	
PEARCE'S FARM STAND			
100-55210-275 REC DEPT PROGRAM EXPENSES	FULL STRAW BALES - BOO IN T	160.00	1025
Total PEARCE'S FARM STAND:		160.00	
PETE'S TIRE ELKHORN LLC			
100-54310-150 STREETS EQUIP REPAIRS/MAINT	FRONT TRUCK TIRE	591.36	1025
300-58967-150 SEWER VEHICLE REPAIRS & MAINT	FRONT TRUCK TIRE	591.36	1025
Total PETE'S TIRE ELKHORN LLC:		1,182.72	
PUBLIC SERVICE COMMISSION			
200-57925-100 WATER RATE STUDY EXPENSE	ASSESSMENT OF EXPENSE A	546.55	1025
200-57925-100 WATER RATE STUDY EXPENSE	2025-2026 ADVANCE ASSESSM	919.75	1025
Total PUBLIC SERVICE COMMISSION:		1,466.30	
RITeway HEATING COOLING & PLUMBING SERV			
100-51720-150 LIONS FIELD HOUSE REPAIR/MAINT	FIELDHOUSE A/C	447.96	1025
Total RITeway HEATING COOLING & PLUMBING SERV:		447.96	
ROANHAUS, EMMA			
100-55210-275 REC DEPT PROGRAM EXPENSES	SUMMER CAMP WEEK 4-6	286.00	1025
Total ROANHAUS, EMMA:		286.00	

GL Account and Title	Description	Amount	GL Period
STAAB CONSTRUCTION CORP			
300-58965-140 SEWER CAPITAL OUTLAY	LIFT STATION 3 REPLACEMENT	81,845.85	1025
Total STAAB CONSTRUCTION CORP:		81,845.85	
THE PARTS PLACE			
100-54310-150 STREETS EQUIP REPAIRS/MAINT	GREASE X 6	41.22	1025
Total THE PARTS PLACE:		41.22	
USA BLUE BOOK			
200-57641-160 WATER DISTRIBUTION SUPPLIES	DECHLOR TABLETS	427.32	1025
200-57632-160 WATER TREATMENT SUPPLIES	LAB SUPPLIES	921.77	1025
200-57632-160 WATER TREATMENT SUPPLIES	WATER TESTING SUPPLIES	699.56	1025
Total USA BLUE BOOK:		2,048.65	
VERITIV OPERATING COMPANY			
100-51410-160 GEN ADMIN SUPPLIES	COPY PAPER	375.60	1025
Total VERITIV OPERATING COMPANY:		375.60	
VILLAGE OF FONTANA			
120-52320-165 EMS IGA EXPENDITURES	JULY 2025 RESCUE SERVICES	75,737.92	1025
Total VILLAGE OF FONTANA:		75,737.92	
VON BRIESEN & ROPER, S.C.			
100-51610-000 LEGAL SERVICES	LABOR & EMPLOYMENT PROF	620.50	1025
Total VON BRIESEN & ROPER, S.C.:		620.50	
WALCOMET			
300-58980-310 WALCOMET SEWER CONNECTION FEE	88 LINCOLN IMPACT FEE BALA	130.00	1025
300-58980-300 WALCOMET SEWERAGE EXPENSES	AUGUST 2025 SEWER SERVICE	87,681.27	1025
Total WALCOMET:		87,811.27	
WALWORTH COUNTY CLERK OF COURTS			
100-45001 COURT FINE REVENUE	BRADEN CRICKMAN CITATION	73.60	1025
Total WALWORTH COUNTY CLERK OF COURTS:		73.60	
WHITING, FRANK			
100-55210-275 REC DEPT PROGRAM EXPENSES	AUGUST 7TH 6 STUDENTS @ \$	48.00	1025
100-55210-275 REC DEPT PROGRAM EXPENSES	AUGUST 14TH 10 STUDENTS @	80.00	1025
100-55210-275 REC DEPT PROGRAM EXPENSES	AUGUST 21ST 11 STUDENTS @	88.00	1025
100-55210-275 REC DEPT PROGRAM EXPENSES	AUGUST 28TH 10 STUDENTS @	80.00	1025
Total WHITING, FRANK:		296.00	
WILLIAMS BAY AUTOMOTIVE			
100-52120-150 POLICE REPAIRS/MAINT	294 OIL CHANGE	106.61	1025
Total WILLIAMS BAY AUTOMOTIVE:		106.61	
WISCONSIN DNR			
200-57930-190 WATER TRAINING EXPENSE	EDWARDS WATER CERT RENE	45.00	1025

GL Account and Title	Description	Amount	GL Period
Total WISCONSIN DNR:		45.00	
YANKE, BRANDIE			
001-15100 UTILITY CASH CLEARING	REFUND OVERPAYMENT ON W	116.90	1025
Total YANKE, BRANDIE:		116.90	
Total 1025:		987,636.20	
Grand Totals:		998,806.20	

Village Board Approval Date: _____

First Responder of the Year Award



Please nominate a first responder in your town, village, city or county for consideration as the First Responder of the Year for our Assembly district. First responders include police and sheriff officers, fire fighters, and EMS personnel (paramedics, EMTs, volunteer first responders).

You can nominate someone for a variety of reasons including a specific heroic action, a significant professional achievement, their body of work over time, or their length of service. The winner will be invited to Madison in October to participate in a special recognition ceremony.

Nomination Form

Name of person nominated: Justin Timm

Name of person/group making the nomination: Village President Adam Jaramillo, Village of Williams Bay

Nominee's position/job title: Williams Bay Police Chief

I nominate this person for First Responder of the Year because {attach additional pages if necessary}:

Police Chief Justin Timm has been with the Williams Bay Police Department since 2017, being elevated to Police Chief in 2019. At that time, he was the youngest police chief of a department with more than five people in the state of Wisconsin. During his excellent tenure, some of Chief Timm's accomplishments include, (1) development and implementation of the Village's first SRO program with the local school district in 2019; (2) garnered the support of the community of a property tax referendum necessary to add two officers to the department in 2024, and (3) has lead the Village as Emergency Management Director through multiple crises, including: (a) the Covid Pandemic, (b) a boil

Please return this nomination form by Friday, September 19, 2025

Return to: Representative Tyler August • PO BOX 8952 • Madison WI 53708 or email to: Rep.August@legis.wisconsin.gov

Chief Timm Nomination First Responder of the Year

Police Chief Justin Timm has been with the Williams Bay Police Department since 2017, being elevated to Police Chief in 2019. At that time, he was the youngest police chief of a department with more than five people in the state of Wisconsin. During his excellent tenure, some of Chief Timm's accomplishments include, (1) development and implementation of the Village's first SRO program with the local school district in 2019; (2) garnered the support of the community of a property tax referendum necessary to add two officers to the department in 2024, and (3) has lead the Village as Emergency Management Director through multiple crises, including: (a) the Covid Pandemic, (b) a boil water order following pressure loss from a water main break in 2022, (c) two tornadoes that damaged homes and infrastructure in the Village in 2024, and, (d) most recently, a Village-wide Do Not Drink Order in late summer 2025.

During this latest Do Not Drink crisis, elevated nitrite levels in the water distribution system meant that all residents and businesses were ordered to not drink the tap water by the Wisconsin Department of Natural Resources. In the course of the eight-day order, Chief Timm arranged the delivery and distribution of 18 semi-truck loads, a total of over 100 pallets of water. He ensured that all residents had access to that most vital resource, including our critical care customers of a hospital, a school and two elderly care facilities. His leadership and hard work during that time was superb and inspirational.

In addition to his outstanding work with the Village, Chief Timm has sought leadership roles in larger law enforcement organizations. He is the current President and former Vice President of the Walworth County Executive Law Enforcement Association. He has served on the Training Committee for the Wisconsin Chiefs of Police Association since 2023. Additionally, he serves on the steering committee for Walworth County Health and Human Services's Child Abduction Response Team.

For all of these reasons, I sincerely and proudly nominate Chief Justin Timm of the Village of Williams Bay Police Department as Assembly District 31's First Responder of the Year.

RESOLUTION NO. R-57-25

**FINAL RESOLUTION VACATING EAST HALF OF HANSON STREET
AND ALL OF 16.5 FOOT ALLEY SHOWN ON HANSON'S ADDITION TO WILLIAMS BAY**

WHEREAS, a petition to vacate the east half of Hanson Street and all of the 16.5 foot alley as shown on Hanson's Addition to Williams Bay having been filed with the Village of Williams Bay on April 16, 2025; and

WHEREAS, due notice of the public hearing on the adoption of the resolution vacating same has been duly given according to statute as appears more fully by the proofs of service, proof of mailing and proof of publication on file in the office of the Village Clerk; and

WHEREAS, a Lis Pendens has been filed with the office of the Register of Deeds of Walworth County, to which the petition to vacate and a copy of a map showing the location of the street and alley was attached; and

WHEREAS, the public hearing on the petition to vacate having been held before the Village Board on the 19th day of May, 2025, and it appearing that no objections in writing to said proposed vacation have been filed with the Village Board, and said matter having been discussed and it appears that the public interest requires it.

NOW, THEREFORE, the Village Board of the Village of Williams Bay do resolve as follows:

BE IT RESOLVED that the Village Board of the Village of Williams Bay, since the public interest requires it, vacates, abandons and discontinues the east half of Hanson Street and all of the 16.5 foot alley as shown on Hanson's Addition to Williams Bay in the Village of Williams Bay, Walworth County, Wisconsin described as follows:

THAT PART OF HANSON'S ADDITION TO WILLIAMS BAY, ACCORDING TO THE RECORDED PLAT, BEING THE EAST HALF OF HANSON STREET, AND ALL OF THE 16.5 FOOT ALLEY, AS SHOWN ON HANSON'S ADDITION TO WILLIAMS BAY, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF LOT 8 OF HANSON'S ADDITION TO WILLIAMS BAY, A SUBDIVISION; THENCE SOUTH 88°57'36" WEST (RECORDED AS WEST) ALONG THE SOUTH LINE OF HANSON STREET, 33.00 FEET TO THE CENTERLINE OF HANSON STREET; THENCE NORTH 00°54'29" WEST (RECORDED AS NORTH), ALONG SAID CENTERLINE, 286.33 FEET, TO A POINT ON THE SOUTH LINE OF BAYVIEW AVE; THENCE NORTH 88°58'13" EAST 33.00 FEET, TO THE NORTHWEST CORNER OF LOT 7; THENCE SOUTH 00°54'29" EAST, ALONG THE WEST LINE OF LOT 7 134.87 FEET (RECORDED AS 135 FEET), TO THE SOUTH WEST CORNER OF LOT 7; THENCE NORTH 88°57'59" EAST 448.01 FEET (RECORDED AS 448 FEET), TO THE SOUTH EAST CORNER OF LOT 1 AND THE EAST END OF ALLY; THENCE SOUTH 00°54'49" EAST (RECORDED AS SOUTH), 16.50 FEET, TO THE NORTHEAST CORNER OF LOT 14; THENCE SOUTH 88°57'59" WEST, 448.01 FEET (RECORDED AS 448 FEET), TO THE NORTHWEST CORNER OF LOT 8; THENCE SOUTH 00°54'29" EAST 134.89 FEET (RECORDED AS 135 FEET) TO THE SOUTHWEST CORNER OF LOT 8 AND THE POINT OF BEGINNING, ALL IN THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 6 TOWNSHIP 1 NORTH, RANGE 17 EAST OF THE FOURTH PRINCIPAL MERIDIAN, VILLAGE OF WILLIAMS BAY, WALWORTH COUNTY, WISCONSIN.

TAX ID: WHA00001-00006

BE IT FURTHER RESOLVED that the map attached to the petition to vacate and Lis Pendens be further attached to this final resolution and that all proofs of service and mailing and publication of the notice of this proceeding incorporated herein and made a part thereof.

BE IT FURTHER RESOLVED that the above-described portions of Hanson Street and the 16.5 foot alley which have been vacated, abandoned and discontinued be attached are the parcels adjoining thereto as provided by law provided that the east one-half of Hanson Street be attached to the parcels adjoining thereto to the east of said street.

BE IT FURTHER RESOLVED that the Village Clerk certify a copy of this resolution and map and cause the same be recorded in the office of the Register of Deeds for Walworth County, Wisconsin.

CERTIFICATION

I, Tina Kolls, Clerk of the Village of Williams Bay, a municipal corporation organized and existing under the laws of the State of Wisconsin, do hereby certify that the foregoing is a true and correct copy of the resolution of the Village Board of the Village of Williams Bay adopted at a duly convened meeting of said Village Board held at the Village of Williams Bay, Walworth County, Wisconsin on the 19th day of May, 2025 as taken by me from the minutes of said meeting and compared to the original said resolution reported in said minutes.

IN WITNESS WHEREOF I have set my hand this _____ day of May, 2025.

Tina Kolls, Clerk

AUTHENTICATION

Signature of Tina Kolls
Authenticated on _____, 2025.

Mark A. Schroeder, Village Attorney
State Bar Number: 1000061

This Instrument was Drafted by:

Attorney Mark A. Schroeder
State Bar Number: 1000061
Consigny Law Firm, S.C.
303 East Court Street
Janesville, WI 53545
(608) 755-5050

**PETITION TO VACATE THE EAST HALF OF HANSON STREET AND ALL OF THE
16.5-FOOT ALLEY, AS SHOWN ON HANSON'S ADDITION TO WILLIAMS BAY**

TO: Village of Williams Bay
ATTN: Village Board
250 Williams Street
Williams Bay, WI 53191

The undersigned, acting as agent for Breezy Bay LLC, the owner of all the frontage of the land abutting upon the following described right of ways, requests that the Village of Williams Bay vacate those right of ways described below and that the right of ways to be discontinued be equally divided between the abutting property owners. This request is made pursuant to Wis. Stat. § 66.1003.

The right of ways sought to be discontinued are the east half of Hanson Street and the 16.5-foot wide unimproved alley, located in the Village of Williams Bay, Walworth County, Wisconsin, described more fully as follows:

THAT PART OF HANSON'S ADDITION TO WILLIAMS BAY, ACCORDING TO THE RECORDED PLAT, BEING THE EAST HALF OF HANSON STREET, AND ALL OF THE 16.5 FOOT ALLEY, AS SHOWN ON HANSON'S ADDITION TO WILLIAMS BAY, DESCRIBED AS FOLLOWS:

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TAX ID: WHA00001-00006

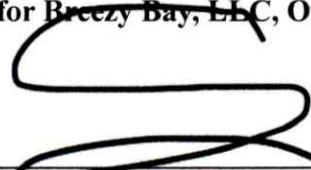
A copy of the map identifying the right of ways that are to be vacated is attached and incorporated herein as Exhibit A.

The road and alley subject to this petition, while originally platted in 1894, have never been developed or utilized as a public way. As part of the development of Hanson's Addition, the developer is providing the Village with a 50' by 35' temporary drainage and grading easement to facilitate the Geneva Street rehabilitation project and a 15' wide drainage easement on the entire length of the east side of Hanson's Addition to facilitate drainage from a wet basin to be developed by the Village on Bayview Avenue. Therefore, it is in the best interest of the Village to facilitate the development of Hanson's Addition by vacating these right of ways.

Pursuant to Wis. Stat. § 66.1003(8), notice stating when and where this petition will be acted upon and what public way and unpaved alley are proposed to be discontinued shall be published as a class three (3) notice. A copy of this petition must also be sent to the following: (1) the secretary of transportation if any of the public ways or unpaved alley that are the subject of this petition are located within one-quarter mile of a state trunk highway or connecting highway; and (2) the commissioner of railroads if there is a railroad highway crossing within the portion of the public ways that are the subject of this petition. The notices required under Wis. Stat. § 66.1003(8) shall be given prior to any action being taken by the Village Board of the Village of Williams Bay.

Dated this 15 day of April, 2025.

SG2 INVESTMENTS, LLC
as agent for ~~Breezy Bay, LLC~~, Owner

By: 
Stephen Greenberg, Its Managing Member

T:\C\Canyon Custom Builders\E. Geneva St\Off Copy\Petition to Vacate - FINAL.docx

EXHIBIT FOR LANDS TO BE VACATED

LOCATION: WILLIAMS BAY, WISCONSIN

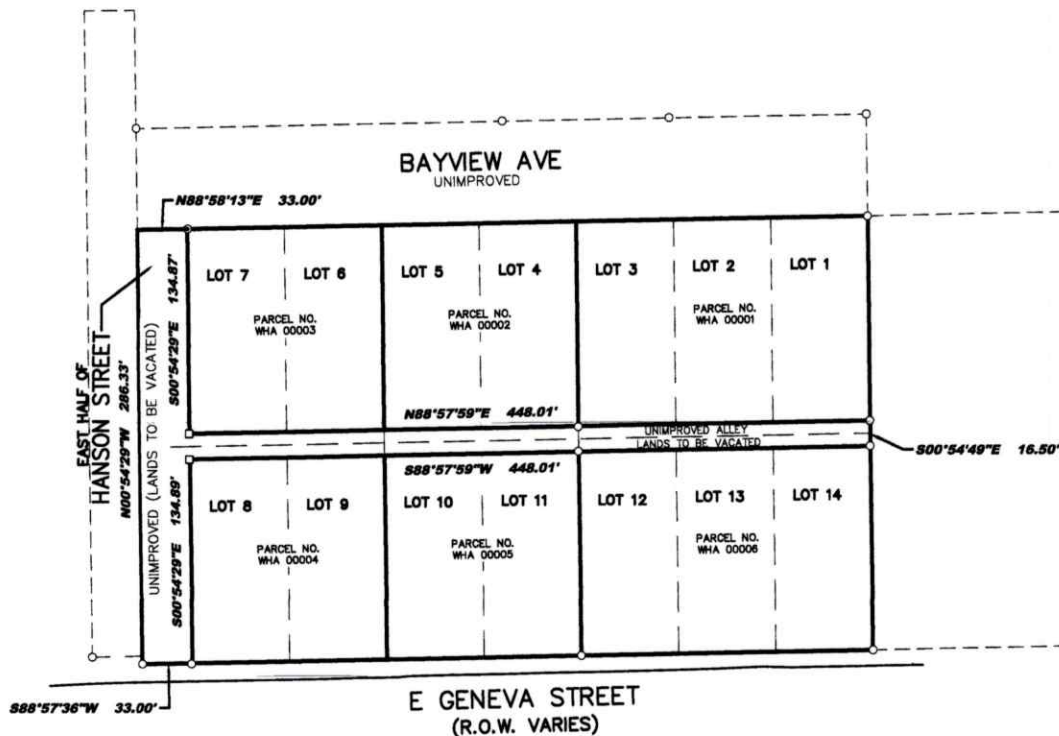
PREPARED FOR: CANYON DEVELOPMENT

TAX ID: WHA00001-00006



THAT PART OF HANSON'S ADDITION TO WILLIAMS BAY, ACCORDING TO THE RECORDED PLAT, BEING THE EAST HALF OF HANSON STREET, AND ALL OF THE 16.5 FOOT ALLEY, AS SHOWN ON HANSON'S ADDITION TO WILLIAMS BAY, DESCRIBED AS FOLLOWS:

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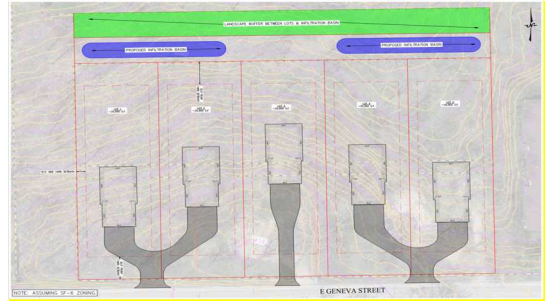


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LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC
5402 S. WESTRIDGE DRIVE
NEW BERLIN, WI 53151
440 MILWAUKEE AVENUE
BURLINGTON, WI 53105
(262) 402-5040

STORM WATER MANAGEMENT PLAN



Geneva Street Development Village of Williams Bay, Wisconsin

Project Number: 23.0023
May 2025



5482 S. WESTRIDGE DRIVE
NEW BERLIN, WI 53151

TABLE OF CONTENTS

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APPENDICES

APPENDIX 1 – MAPS

- Project Location Map.
- USDA SCS Soils Map.

APPENDIX 2 - PRE-DEVELOPMENT CONDITIONS

- Hydrology Exhibit – Pre-Development Conditions.
- Pre-Development HydroCAD Modeling.

APPENDIX 3 – POST-DEVELOPMENT CONDITIONS

- Hydrology Exhibit – Post-Development Conditions.
- Post-Development HydroCAD Modeling.

APPENDIX 4 - POST-DEVELOPMENT CONDITIONS (WATER QUALITY)

- WinSLAMM Modeling Input Data & Output Computations.

APPENDIX 5 - GEOTECHNICAL REPORT

- Geotechnical Report.

APPENDIX 6 – MAINTENANCE AGREEMENT

APPENDIX 7 – CONSTRUCTION DETAILS

Questions and comments can be directed to:

Ryan W. Kloth, P.E., CFM
Project Manager II.
Phone: 262.402.5038
rkloth@lynch-engineering.com

5482 S. Westridge Drive
New Berlin, WI 53151
www.lynch-engineering.com

INTRODUCTION

The proposed Geneva Street Development is located on the north side of East Geneva Street, specifically, it is across the road from the intersection with Johnson Terrace. Please see **Appendix 1** for a Location Map for the project. The proposed development encompasses a total of approximately 4 acres which includes:

- 5 lots, each, 0.64 acres in size.
- 3,000 square foot residential units on each lot.
- A Stormwater and Maintenance Easement.
- A proposed Utility Easement.
- A proposed Wet-Detention Basin along the north end of the property.

The following report summarizes the Stormwater Quantity calculations for Pre-Development and Post-Development Conditions, and Stormwater Quality.

DESIGN CRITERIA

Village of Williams Bay

For Post-Construction Stormwater Management, the Village of Williams Bay follows the Model Ordinance from the Wisconsin Department of Natural Resources (WDNR) Bureau of

Watershed Management Program Guidance# 3800-2015-05 with an effective date of April 2015. Specifically for Stormwater Quantity and Quality:

Stormwater Quantity: BMPs shall be employed to maintain or reduce the Post-Development 2, 10, and 100-year peak runoff discharge rates to the 2, 10, and 100-year Pre-Development peak runoff discharge rates, respectively, or to the maximum extent practicable.

Stormwater Quality: Best management practices shall be designed, installed, and maintained to control total suspended solids carried in runoff from the post-construction site as follows: For new development, by design, to reduce the maximum extent practicable, the total suspended solids load by 80%, based on an average annual rainfall, as compared to no runoff management controls.

Stormwater Infiltration: The Village does not list infiltration requirements within Section 15.09 of their ordinances, the Village uses applicable regulations and standards from the WDNR or Walworth County. One of the following Walworth County infiltration requirements must be met for this development:

- Infiltrate 60% of the Pre-Development infiltration volume; based on the annual rainfall.
- Infiltrate 25% of the Post-Development runoff volume calculated for the 2-year 24-hour design storm.
- Establish an effective infiltration area covering 2% or more of the project site.

ANALYSIS METHODS

Hydrology calculations have been performed using HydroCAD, Version 10.00-15 which uses the accepted TR-20 methodology for computing hydrographs and determining peak flow rates. Hydrologic Curve Numbers for the Pre-Development and Post-Development land use were selected using the standard values specified in TR-55 for a HSG “B” soil type. Peak flow rates have been calculated for the 2-, 10-, and 100-year storm events with a MSE3 rainfall distribution, with rainfall depths as shown in Table 1 below:

Table 1: Design Rainfall Values

Storm Recurrence Interval	24-Hour Rainfall Volume (Inches)
2-Year	2.80
10-year	3.97
100-year	6.22

WinSLAMM (Version 10.5) Source Loading and Management Model (SLAMM) as developed by Robert Pitt and John Voorhees was used to determine the removal rate of

Total Suspended Solids on the site. The WinSLAMM model input data and output can be viewed in **Appendix 4**.

PRE-DEVELOPMENT CONDITIONS

Under Pre-Development Conditions, this area contains approximately 4 acres draining to the site outfall at the north edge of the property. The area consists of woodlands. The site currently drains in a northern direction from the south. There is one drainage basin in Pre-Development Conditions. Existing soils throughout the site consist of primarily Miami Silt Loams, therefore, the Hydrologic Soil Group classification for the site has been selected as HSG B. A map of the existing soils along with their classifications, can be found in **Appendix 1**. The following is a tabular summary including peak flows for Pre-Development Conditions:

Table 2: Hydrologic Analysis of Pre-Development Conditions

Drainage Area	Area (Acres)	Runoff Curve Number	Time of Conc. (Min.)	Peak Flows (cfs)		
				2-Year	10-Year	100-year
Pre-1	3.94	55	26.9	0.20	1.32	5.59
Total	3.94			0.20	1.32	5.59

HydroCAD model input and output data for Pre-Development Conditions is in **Appendix 2**.

POST-DEVELOPMENT CONDITIONS

HydroCAD input and output data for Post-Development conditions along with an exhibit depicting Post-Development Conditions is located in **Appendix 3**. We were instructed to analyze Post-Development Conditions under two scenarios: One scenario was to model just the proposed development parcels; the second was to analyze the proposed development parcels along with the existing land to the south; this land does not currently drain to our project location, however, a culvert is proposed to be constructed underneath E. Geneva Street that would convey runoff from the south, into a proposed drainage swale that would convey the runoff along the east side of the proposed development to the north to a proposed Wet-Detention Basin which has been designed to satisfy all applicable requirements, including the offsite flow. There are approximately 2 acres of impervious area that is tributary to the Wet-Detention Basin, approximately half of this is from the offsite area to the south.

Table 3: Hydrologic Analysis of Post-Development Conditions-Project Parcels

Drainage Basin	Area (Acres)	Runoff Curve Number	Time of Conc. (Min.)	Peak Flows (cfs)		
				2-Year	10-Year	100-year
2S Onsite	3.94	72	11.8	0.13	0.23	0.37
Total	3.94			0.13	0.23	0.37

Table 4: Wet-Detention Basin Data

Wet-Detention Basin Data							
Basin	Peak Outflow 2-Year (cfs)	Peak Outflow 100-Year (cfs)	Bottom Elevation (ft.)	Peak W.S. Elev. 2-Year	Peak W.S. Elev. 100-Year	Spillway Elev.	Top of Berm Elev.
(1P)	0.13	0.37	905.00	905.30	906.45	907.50	908.00

Table 5

Comparison Between Pre-Development and Post-Development Flows					
Pre-Dev. 2-Year (cfs)	Post-Dev. 2-Year (cfs)	Pre-Dev. 10-Year (cfs)	Post-Dev. 10-Year (cfs)	Pre-Dev. 100-Year (cfs)	Post-Dev. 100-Year (cfs)
0.20	0.13	1.32	0.23	5.59	0.37

Table 6: Hydrologic Analysis of Post-Development Conditions-Project Parcels with Offsite

Drainage Basin	Area (Acres)	Runoff Curve Number	Time of Conc. (Min.)	Peak Flows (cfs)		
				2-Year	10-Year	100-year
2S Onsite	3.94	72	11.8	3.58	7.97	17.91
1S Offsite	3.00	72	12.9	2.59	5.84	13.17
Total	6.94			6.17	13.78	25.13

Table 7: Wet-Detention Basin Data

Wet-Detention Basin Data Including Offsite							
Basin	Peak Outflow 2-Year (cfs)	Peak Outflow 100-Year (cfs)	Bottom Elevation (ft.)	Peak W.S. Elev. 2-Year	Peak W.S. Elev. 100-Year	Spillway Elev.	Top of Berm Elev.
(1P)	0.20	2.80	905.00	905.52	907.08	907.50	908.00

Table 8

Comparison Between Pre-Development and Post-Development Flows					
Pre-Dev. 2-Year (cfs)	Post-Dev. 2-Year (cfs)	Pre-Dev. 10-Year (cfs)	Post-Dev. 10-Year (cfs)	Pre-Dev. 100-Year (cfs)	Post-Dev. 100-Year (cfs)
0.20	0.20	1.32	0.32	5.59	2.80

INFILTRATION

ECS Midwest, LLC, performed soil test pits for the project, and provided their report dated October 28, 2024. A summary of their work, and their report can be found in **Appendix 5**. The native soil infiltration rates ranged from 0.03 to 0.11 inches per hour. These rates were based on the textural classification of the soils encountered and the guidelines provided in the WDNR Conservation Practice Standard 1002. Based on these rates, we are claiming an exemption of the infiltration requirements.

STORMWATER QUALITY CONTROL

The proposed project will utilize Wet-Detention (Basin 1P) to achieve post-construction storm water quality control in accordance with Village of Williams Bay and WDNR requirements for suspended solids removal. The requirement for this site is 80% removal of the Total Suspended Solids (TSS) based on no controls. WinSLAMM was used to calculate the water quality impacts resulting from this project.

Table 9: Water Quality Summary-Project Parcels

Source	Area (ac)	Pounds of TSS Generated	Pounds of TSS Remaining	Percent Removal
2S Onsite	3.94	271	10	96.15%

Table 10: Water Quality Summary-Project Parcels with Offsite

Source	Area (ac)	Pounds of TSS Generated	Pounds of TSS Remaining	Percent Removal
2S Onsite, 1S Offsite	6.94	492	25	94.88%

MAINTENANCE PROGRAM

Inspection and maintenance frequencies for the proposed wet-detention basin vary depending on the task. The following is a recommended frequency for inspection items and associated maintenance:

Once, after the first year of construction:

- Check for invasive plants, if present, remove the invasive plants.

Monthly to Quarterly, or after major storms:

- Inspect orifices and pipes for clogging. Check the shoreline, inflows, and discharges, for signs of erosion, repair eroded areas, and replant bare soils. Check for and remove any floating debris.

Semiannual to Annual:

- Monitor plant composition and health. Ensure mechanical components are functional. Clean up trash and debris, remove any invasive plants, repair broken mechanical components.

Every 1 to 3 years:

- Inspect all mechanical components including pipes and risers. Monitor sediment disposition. Repair broken mechanical components and remove sediment from the basin if needed.

EROSION CONTROL

Erosion Control plans will be prepared in accordance with Village of Williams Bay and WDNR requirements. Construction erosion control practices such as a tracking pad, silt fence, ditch checks and inlet protection will be incorporated into the plans. Permanent site stabilization includes the use of erosion mats on steep slopes and rip rap at all pipe outlets.

Erosion Control measures will be installed prior to construction. Measures will remain in place until site restoration is completed, and ninety percent growth is achieved.

SOIL LOSS

Soil erosion is calculated using the USLE (Universal Soil Loss Equation). The project is required to reduce the soil losses to a maximum of 5.0 Tons/Acre and provide erosion measures to reduce any soil loss.

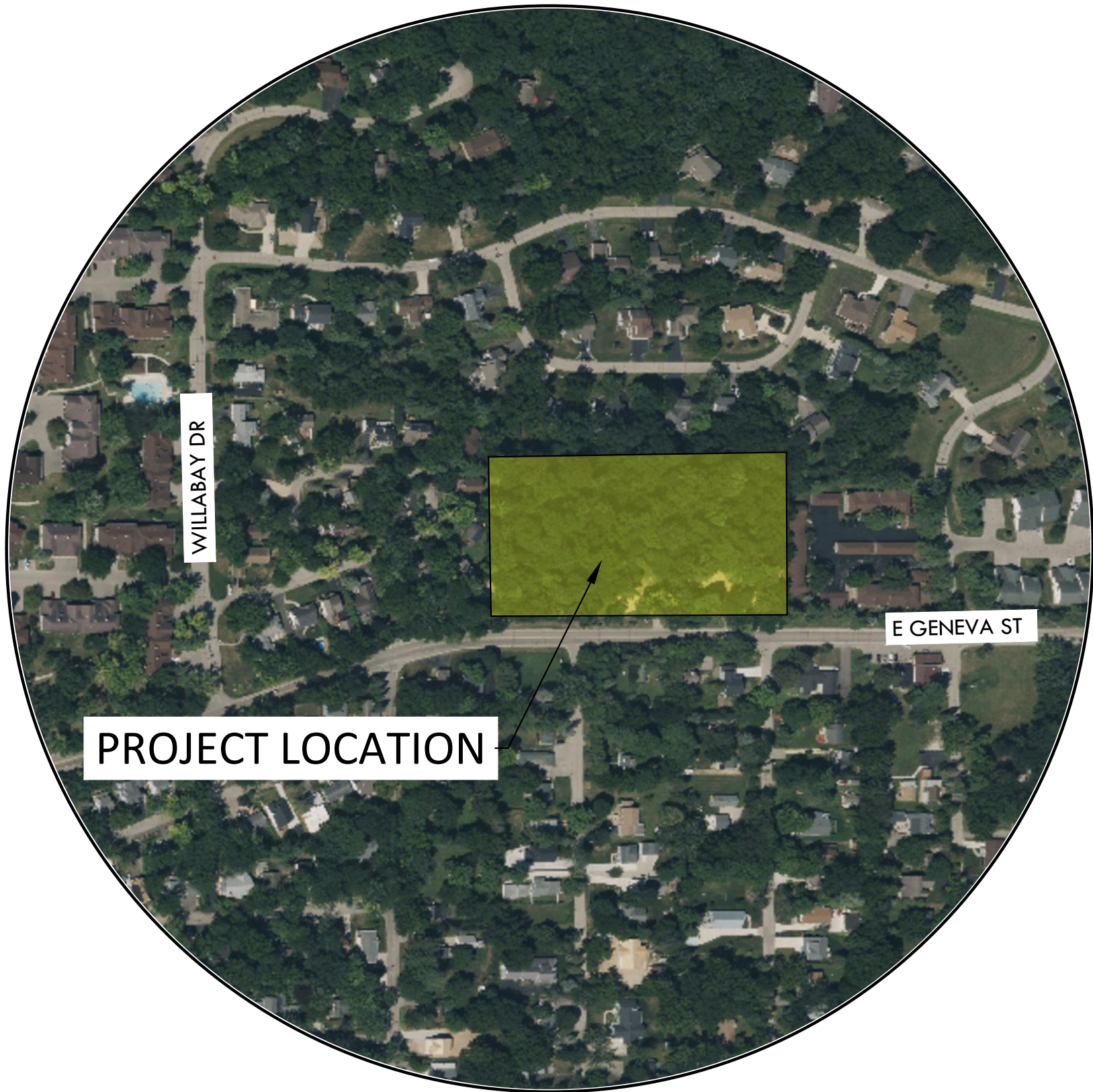
WETLANDS/WATERWAYS

No indicator soils or other typical wetlands indicators were identified on the site upon review of the WDNR Wetland Indicator Map, therefore, a wetland delineation was not completed.

CONCLUSION

The site has been evaluated for the effects of the proposed development. In conclusion, the design requirements for both stormwater quality and stormwater quantity control for this site have been met.

Appendix 1 MAPS



VICINITY MAP

SITE IMPROVEMENT PLANS
FOR
GENEVA STREET DEVELOPMENT
WILLIAMS BAY, WI

SHEET INDEX

C001	TITLE SHEET & VICINITY MAP
C002	GENERAL NOTES
C102	GRADING & EROSION CONTROL PLAN
C201	SANITARY SEWER PLAN AND PROFILE
C202	WATER MAIN PLAN AND PROFILE
C501	CONSTRUCTION DETAILS
C502	CONSTRUCTION DETAILS

BENCHMARKS

FOUND IRON PIPE	EL. 812.93	N: 214504.42	E: 2366013.53
FOUND IRON PIPE	EL. 799.21	N: 214790.56	E: 2366008.72
FOUND IRON PIPE	EL. 796.44	N: 214782.51	E: 2365561.11
FOUND IRON PIPE	EL. 817.00	N: 214495.91	E: 2365564.93

CONTACT INFORMATION

COMPANY NAME	ADDRESS	CONTACT	PHONE	EMAIL
LYNCH & ASSOCIATES	440 MILWAUKEE AVE. BURLINGTON, WI 53105	TIM LYNCH, P.E.	262.402.5034	tlynch@lynch-engineering.com
LYNCH & ASSOCIATES	440 MILWAUKEE AVE. BURLINGTON, WI 53105	DAVE VIVIAN, P.E.	262.402.5042	dvivian@lynch-engineering.com
LYNCH & ASSOCIATES	5482 S. WESTRIDGE DR. NEW BERLIN, WI 53151	RYAN KLOTH, P.E. CFM	262.402.5038	rkloth@lynch-engineering.com

REVISIONS

NO.	REVISION	DATE
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SITE IMPROVEMENT PLANS FOR
GENEVA STREET DEVELOPMENT
WILLIAMS BAY, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

ISSUED FOR
REVIEW

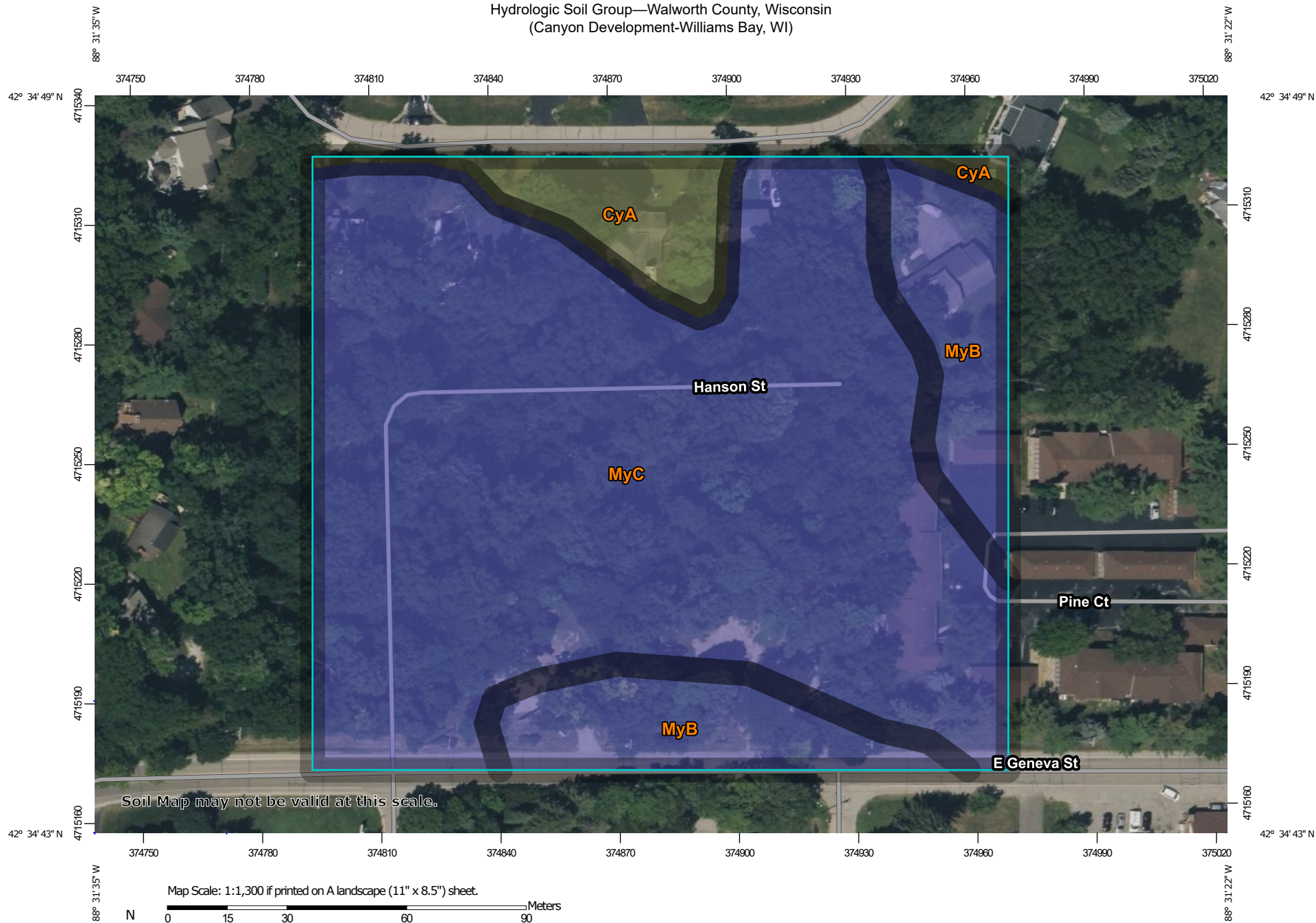
PLAN DATE 05.05.25

PROJECT NO.
23.0023

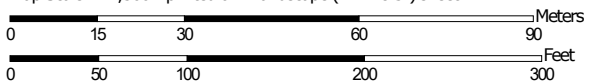
SHEET NO.

C001

Hydrologic Soil Group—Walworth County, Wisconsin (Canyon Development-Williams Bay, WI)



Map Scale: 1:1,300 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84



**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

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

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

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walworth County, Wisconsin
Survey Area Data: Version 21, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 30, 2022—Aug 18, 2022

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CyA	Conover silt loam, 1 to 3 percent slopes	C/D	0.5	6.9%
MyB	Miami silt loam, 2 to 6 percent slopes	B	1.1	16.8%
MyC	Miami silt loam, 6 to 12 percent slopes	B	5.1	76.4%
Totals for Area of Interest			6.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

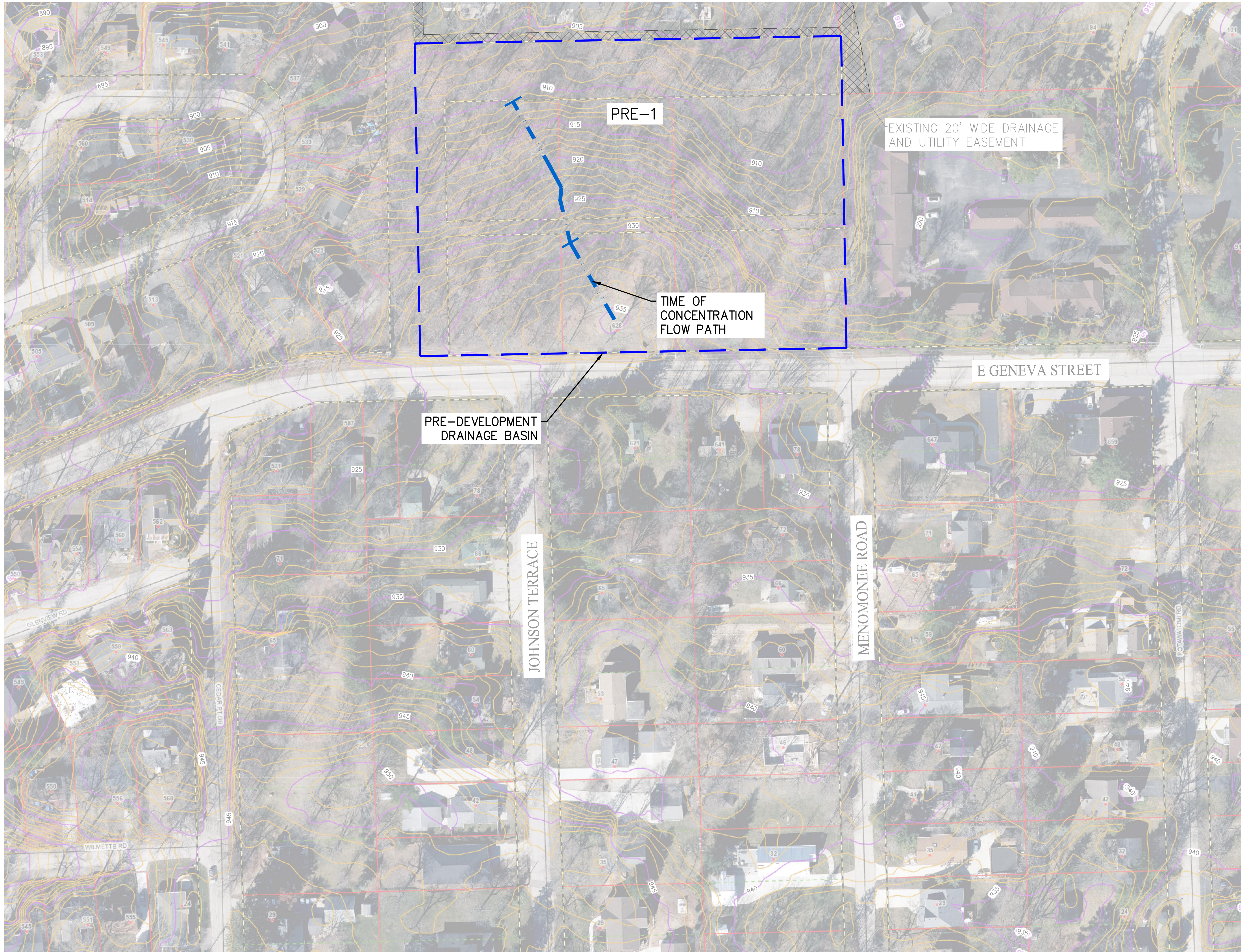
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Appendix 2 PRE-DEVELOPMENT CONDITIONS



STORM WATER MANAGEMENT PLAN
CANYON DEVELOPMENT

WILLIAMS BAY, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

PRE-DEVELOPMENT CONDITIONS

NO. REVISIONS BY DATE

ISSUED FOR REVIEW

PLAN DATE 05.05.2025

DESIGNED BY RWK

0 60'
SCALE

PROJECT NO.
23.0023

SHEET NO.

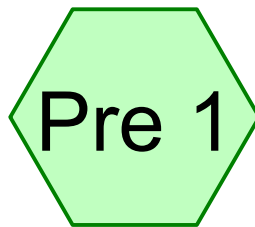
APPENDIX 2



Pre-Dev.

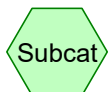


Pre-Dev



Pre 1

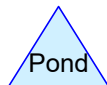
Pre 1



Subcat



Reach



Pond



Link

Routing Diagram for 23.0023 Pre-Development 5-5-25

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23.0023 Pre-Development 5-5-25

Prepared by {enter your company name here}

Printed 4/18/2025

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
3.940	55	Woods, Good, HSG B (Pre 1)
3.940	55	TOTAL AREA

23.0023 Pre-Development 5-5-25

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
3.940	HSG B	Pre 1
0.000	HSG C	
0.000	HSG D	
0.000	Other	
3.940		TOTAL AREA

23.0023 Pre-Development 5-5-25

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	3.940	0.000	0.000	0.000	3.940	Woods, Good	Pre 1
0.000	3.940	0.000	0.000	0.000	3.940	TOTAL AREA	

23.0023 Pre-Development 5-5-25

MSE 24-hr 3 2 yr Rainfall=2.80"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Pre 1: Pre 1

Runoff Area=3.940 ac 0.00% Impervious Runoff Depth>0.13"
Flow Length=276' Tc=26.9 min CN=55 Runoff=0.20 cfs 0.041 af

Link Pre-Dev.: Pre-Dev

Inflow=0.20 cfs 0.041 af
Primary=0.20 cfs 0.041 af

Total Runoff Area = 3.940 ac Runoff Volume = 0.041 af Average Runoff Depth = 0.13"
100.00% Pervious = 3.940 ac 0.00% Impervious = 0.000 ac

23.0023 Pre-Development 5-5-25

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MSE 24-hr 3 2 yr Rainfall=2.80"

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Summary for Subcatchment Pre 1: Pre 1

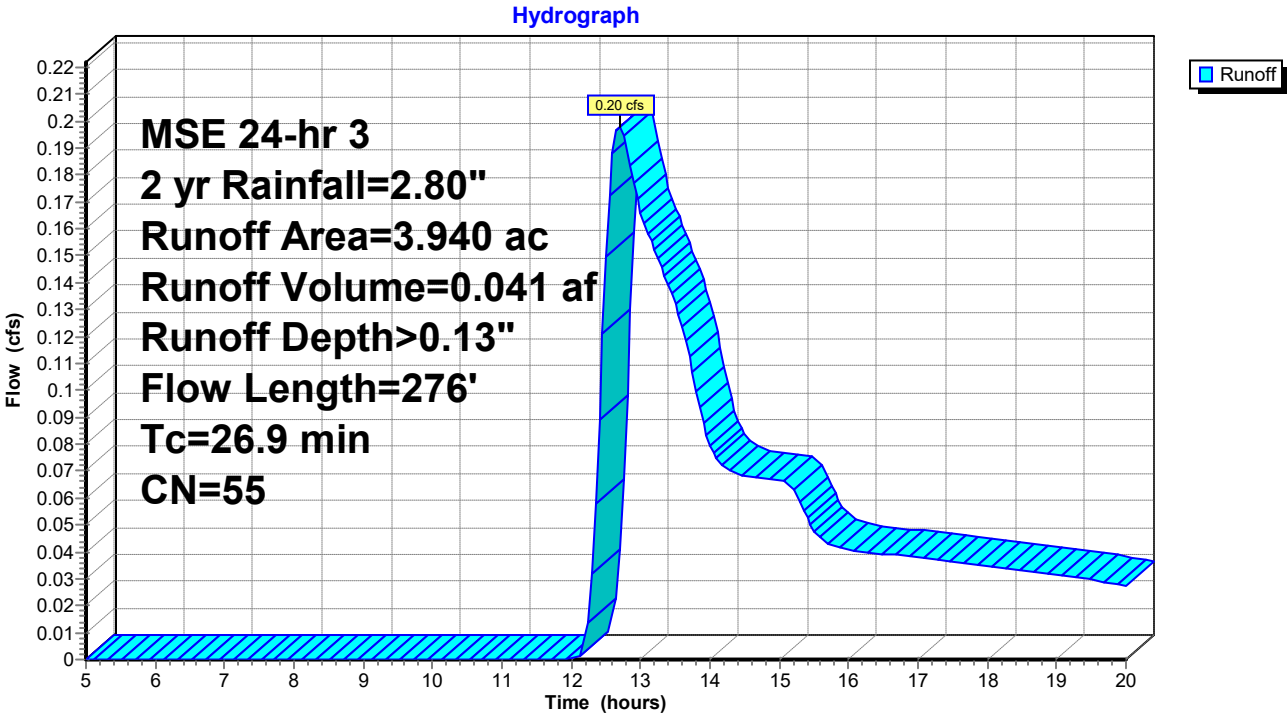
Runoff = 0.20 cfs @ 12.70 hrs, Volume= 0.041 af, Depth> 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2 yr Rainfall=2.80"

Area (ac)	CN	Description
3.940	55	Woods, Good, HSG B
3.940		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0640	0.07		Sheet Flow, Sheet Flow Woods
1.8	176	0.1028	1.60		Woods: Dense underbrush n= 0.800 P2= 2.80"
					Shallow Concentrated Flow, Shallow Conc. Flow-Woods
					Woodland Kv= 5.0 fps
26.9	276	Total			

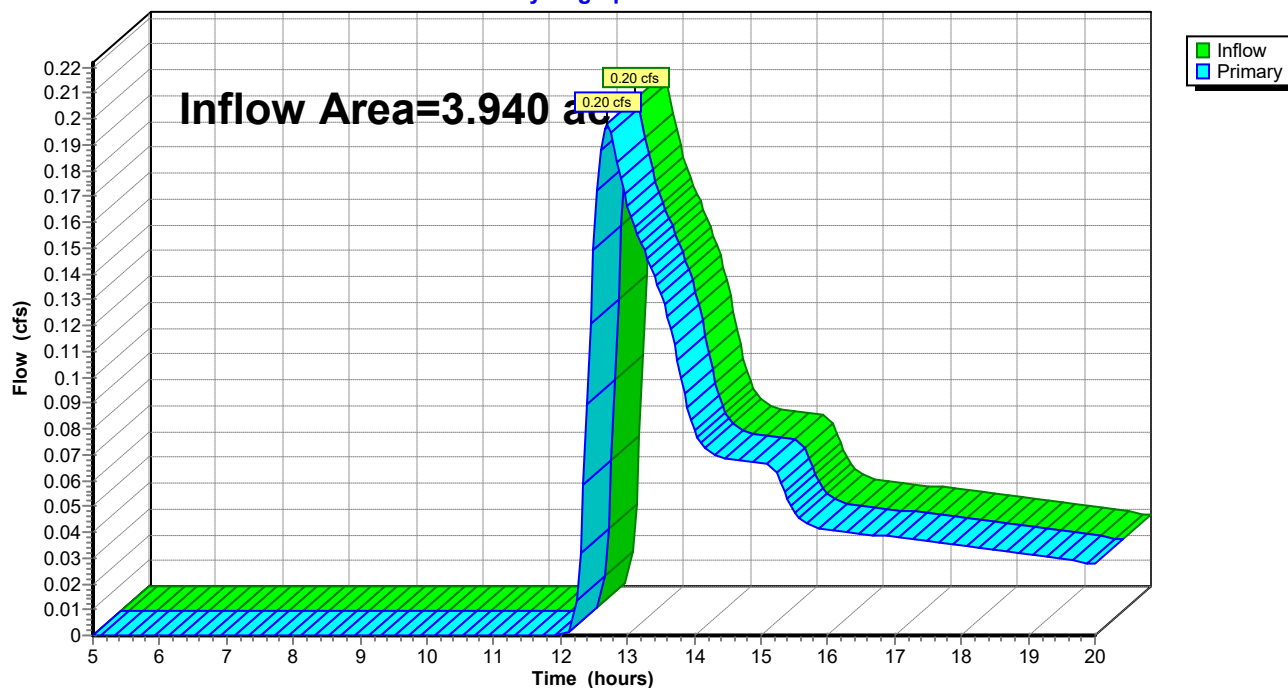
Subcatchment Pre 1: Pre 1



Summary for Link Pre-Dev.: Pre-Dev

Inflow Area = 3.940 ac, 0.00% Impervious, Inflow Depth > 0.13" for 2 yr event
Inflow = 0.20 cfs @ 12.70 hrs, Volume= 0.041 af
Primary = 0.20 cfs @ 12.70 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Pre-Dev.: Pre-Dev**Hydrograph**

23.0023 Pre-Development 5-5-25*MSE 24-hr 3 10 yr Rainfall=3.97"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Pre 1: Pre 1Runoff Area=3.940 ac 0.00% Impervious Runoff Depth>0.47"
Flow Length=276' Tc=26.9 min CN=55 Runoff=1.32 cfs 0.155 af**Link Pre-Dev.: Pre-Dev**Inflow=1.32 cfs 0.155 af
Primary=1.32 cfs 0.155 af**Total Runoff Area = 3.940 ac Runoff Volume = 0.155 af Average Runoff Depth = 0.47"**
100.00% Pervious = 3.940 ac 0.00% Impervious = 0.000 ac

23.0023 Pre-Development 5-5-25

MSE 24-hr 3 10 yr Rainfall=3.97"

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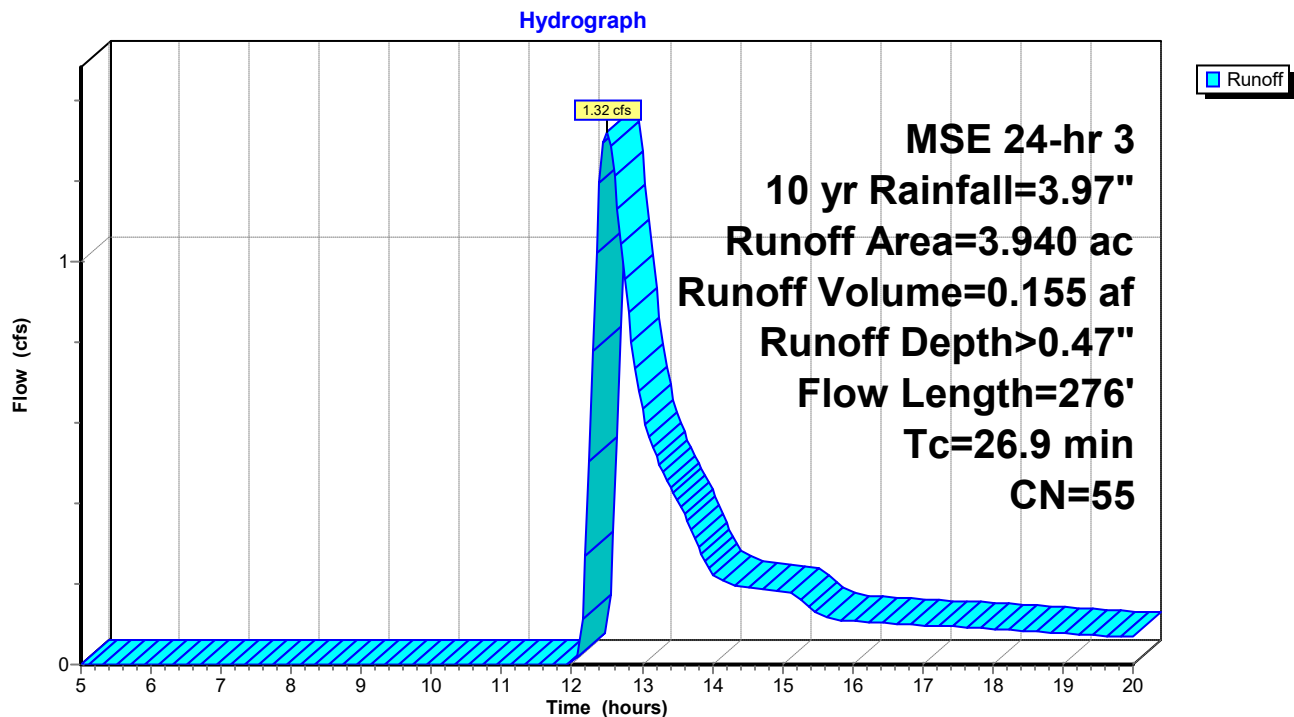
Summary for Subcatchment Pre 1: Pre 1

Runoff = 1.32 cfs @ 12.50 hrs, Volume= 0.155 af, Depth> 0.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 yr Rainfall=3.97"

Area (ac)	CN	Description
3.940	55	Woods, Good, HSG B
3.940		100.00% Pervious Area

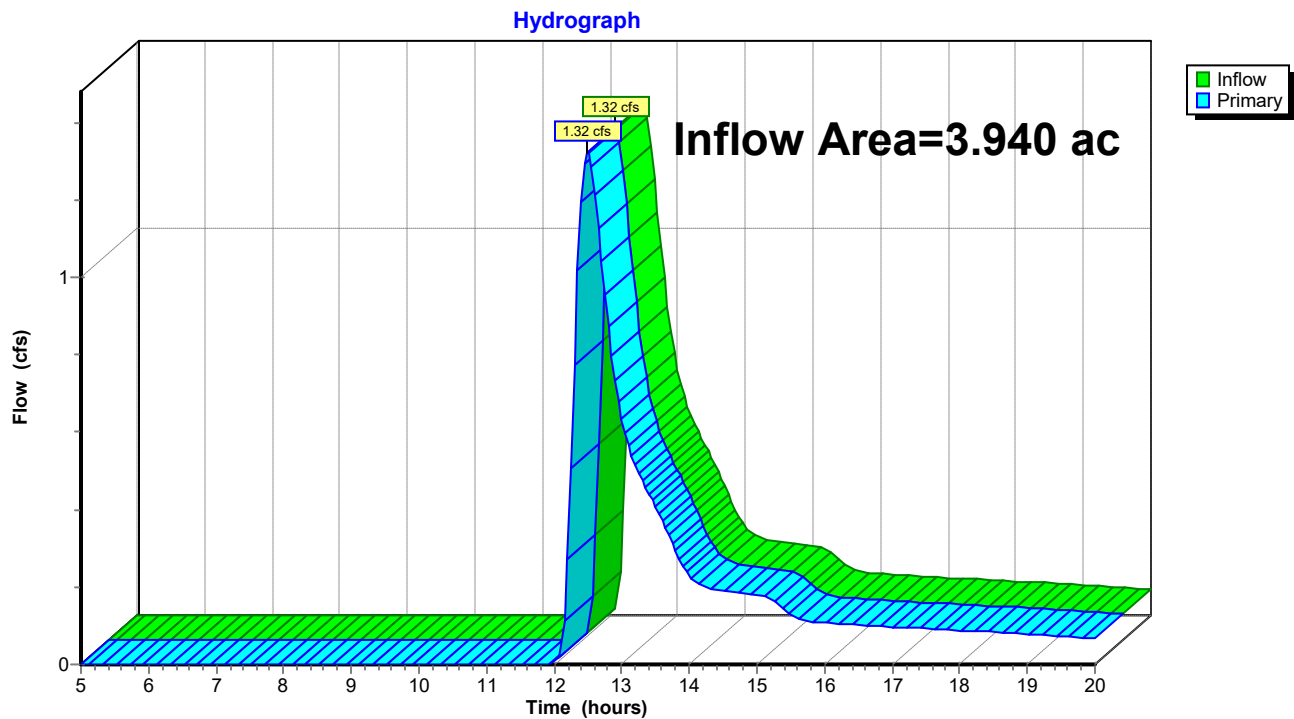
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0640	0.07		Sheet Flow, Sheet Flow Woods
					Woods: Dense underbrush n= 0.800 P2= 2.80"
1.8	176	0.1028	1.60		Shallow Concentrated Flow, Shallow Conc. Flow-Woods
					Woodland Kv= 5.0 fps
26.9	276	Total			

Subcatchment Pre 1: Pre 1

Summary for Link Pre-Dev.: Pre-Dev

Inflow Area = 3.940 ac, 0.00% Impervious, Inflow Depth > 0.47" for 10 yr event
Inflow = 1.32 cfs @ 12.50 hrs, Volume= 0.155 af
Primary = 1.32 cfs @ 12.50 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Pre-Dev.: Pre-Dev

23.0023 Pre-Development 5-5-25*MSE 24-hr 3 100 yr Rainfall=6.22"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment Pre 1: Pre 1Runoff Area=3.940 ac 0.00% Impervious Runoff Depth>1.54"
Flow Length=276' Tc=26.9 min CN=55 Runoff=5.59 cfs 0.504 af**Link Pre-Dev.: Pre-Dev**Inflow=5.59 cfs 0.504 af
Primary=5.59 cfs 0.504 af**Total Runoff Area = 3.940 ac Runoff Volume = 0.504 af Average Runoff Depth = 1.54"**
100.00% Pervious = 3.940 ac 0.00% Impervious = 0.000 ac

23.0023 Pre-Development 5-5-25

MSE 24-hr 3 100 yr Rainfall=6.22"

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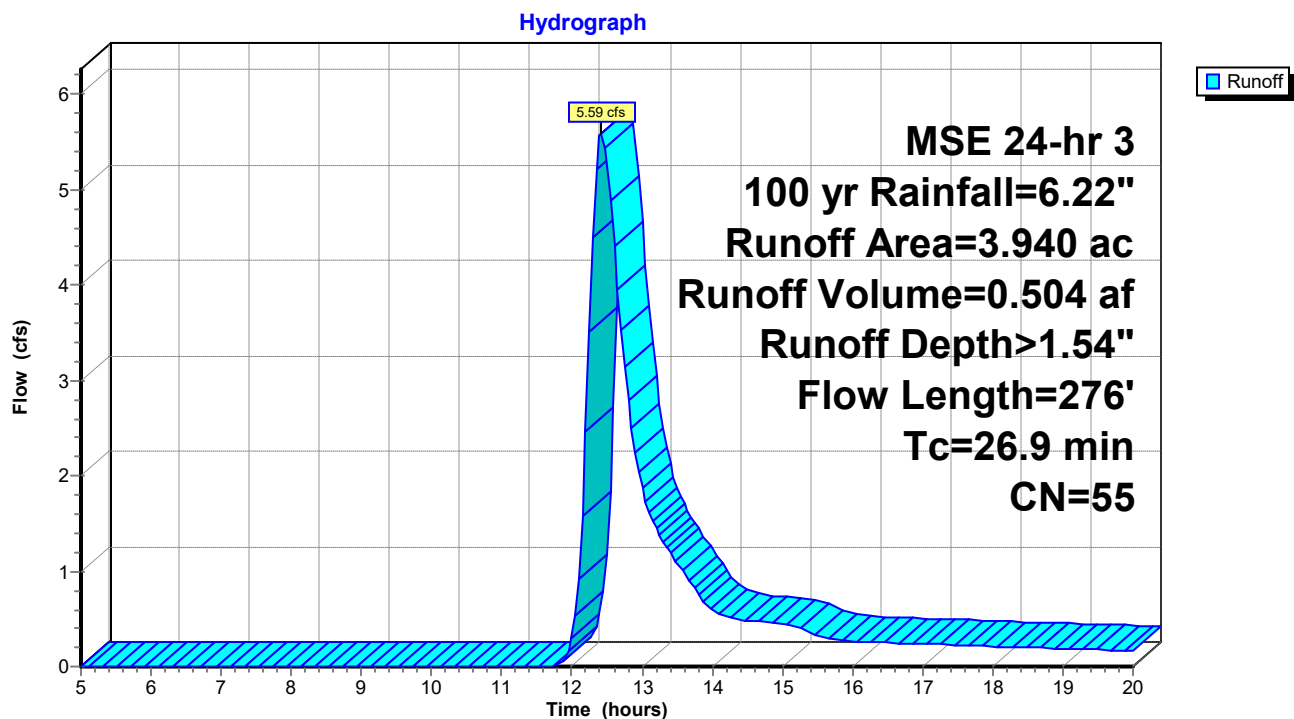
Summary for Subcatchment Pre 1: Pre 1

Runoff = 5.59 cfs @ 12.43 hrs, Volume= 0.504 af, Depth> 1.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100 yr Rainfall=6.22"

Area (ac)	CN	Description
3.940	55	Woods, Good, HSG B
3.940		100.00% Pervious Area

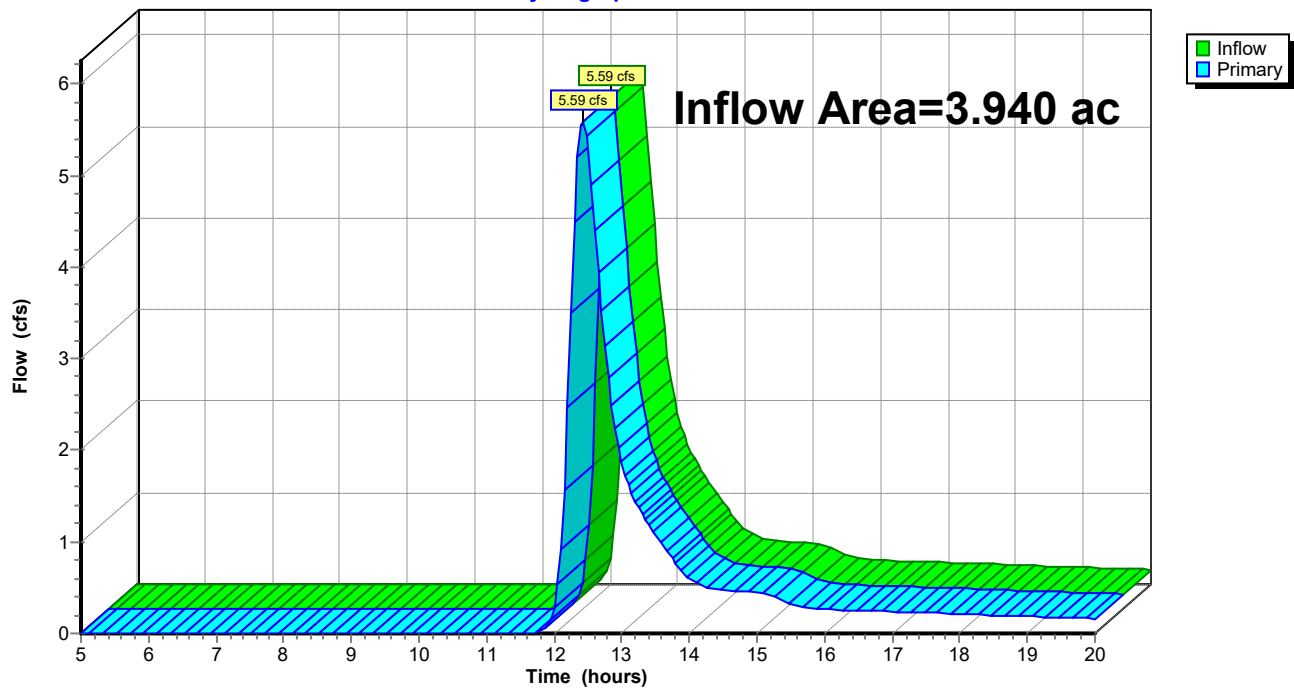
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.1	100	0.0640	0.07		Sheet Flow, Sheet Flow Woods
					Woods: Dense underbrush n= 0.800 P2= 2.80"
1.8	176	0.1028	1.60		Shallow Concentrated Flow, Shallow Conc. Flow-Woods
					Woodland Kv= 5.0 fps
26.9	276	Total			

Subcatchment Pre 1: Pre 1

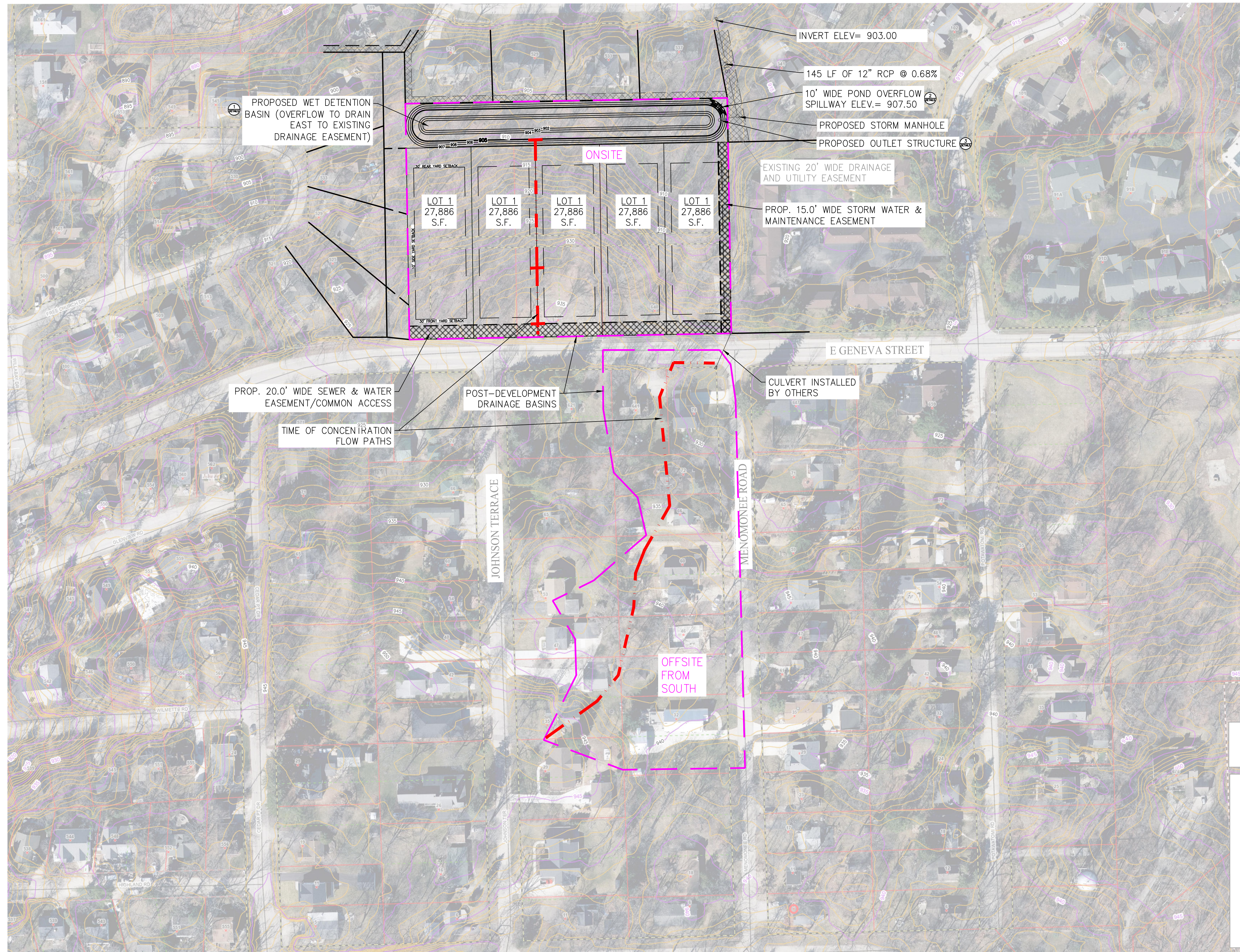
Summary for Link Pre-Dev.: Pre-Dev

Inflow Area = 3.940 ac, 0.00% Impervious, Inflow Depth > 1.54" for 100 yr event
Inflow = 5.59 cfs @ 12.43 hrs, Volume= 0.504 af
Primary = 5.59 cfs @ 12.43 hrs, Volume= 0.504 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Pre-Dev.: Pre-Dev**Hydrograph**

Appendix 3 POST DEVELOPMENT CONDITIONS



STORM WATER MANAGEMENT PLAN CANYON DEVELOPMENT

DEVEL
WILLIAMS BAY WI

WILLIAMSON DALL, NV
LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

ENGINEERING CONSULTANTS, LLC

[illegible]

ISSUED FOR
REVIEW

PLAN DATE	05.05.2025
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DESIGNED BY RWK

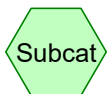
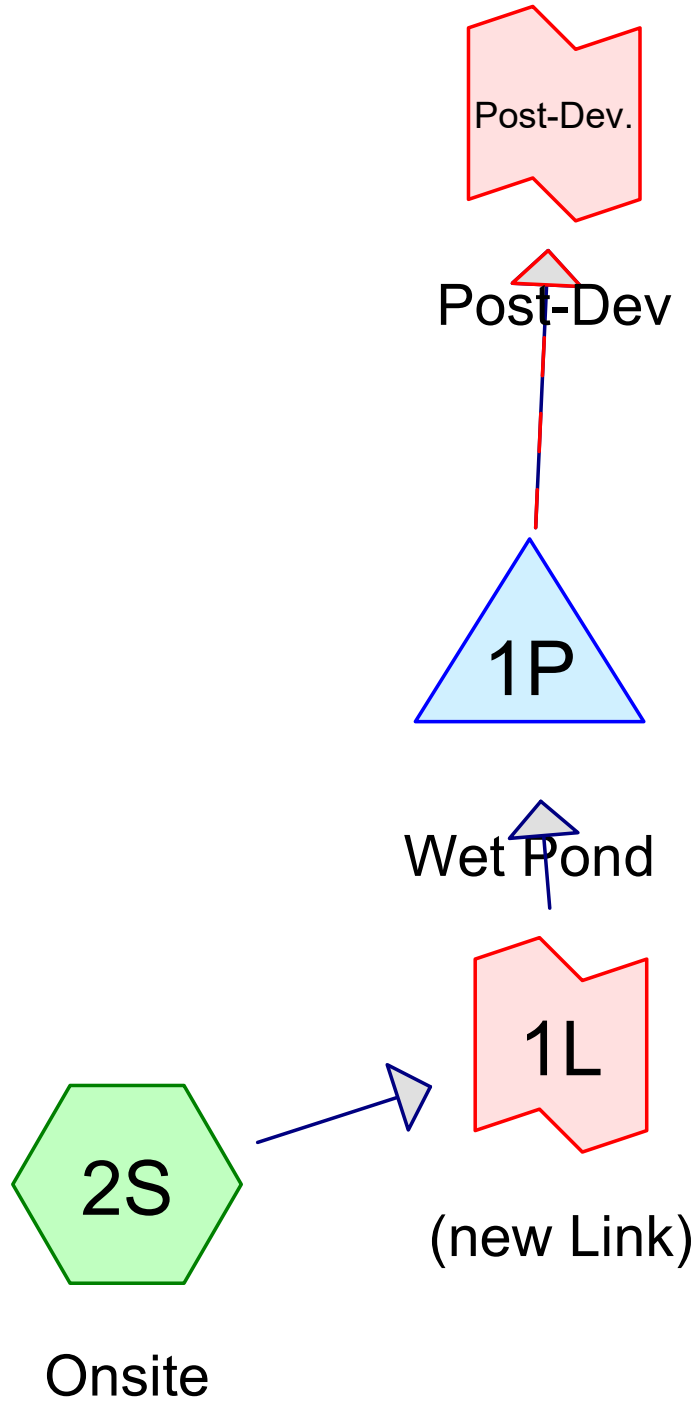
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PROJECT NO.
23.0023

SHEET NO.

APPENDIX 3

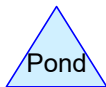
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Subcat



Reach



Pond



Link

Routing Diagram for 23.0023 Post-Development Proposed Parcels 5-5-25
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23.0023 Post-Development Proposed Parcels 5-5-25

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Printed 4/18/2025

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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
2.770	61	>75% Grass cover, Good, HSG B (2S)
0.330	98	Driveways, HSG B (2S)
0.350	98	Roofs, HSG B (2S)
0.490	98	Water Surface, HSG B (2S)
3.940	72	TOTAL AREA

23.0023 Post-Development Proposed Parcels 5-5-25

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
3.940	HSG B	2S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
3.940		TOTAL AREA

23.0023 Post-Development Proposed Parcels 5-5-25

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	2.770	0.000	0.000	0.000	2.770	>75% Grass cover, Good	2S
0.000	0.330	0.000	0.000	0.000	0.330	Driveways	2S
0.000	0.350	0.000	0.000	0.000	0.350	Roofs	2S
0.000	0.490	0.000	0.000	0.000	0.490	Water Surface	2S
0.000	3.940	0.000	0.000	0.000	3.940	TOTAL AREA	

23.0023 Post-Development Proposed Parcels 5-5-25

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Page 5

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1P	905.00	904.00	22.0	0.0455	0.011	12.0	0.0	0.0

23.0023 Post-Development Proposed Parcels 5-5-25*MSE 24-hr 3 2 yr Rainfall=2.80"*

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Printed 4/18/2025

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2S: Onsite

Runoff Area=3.940 ac 29.70% Impervious Runoff Depth>0.65"
Flow Length=293' Tc=11.8 min CN=72 Runoff=3.58 cfs 0.213 af

Pond 1P: Wet Pond

Peak Elev=905.30' Storage=0.149 af Inflow=3.58 cfs 0.213 af
Primary=0.13 cfs 0.075 af Secondary=0.00 cfs 0.000 af Outflow=0.13 cfs 0.075 af

Link 1L: (new Link)

Inflow=3.58 cfs 0.213 af
Primary=3.58 cfs 0.213 af

Link Post-Dev.: Post-Dev

Inflow=0.13 cfs 0.075 af
Primary=0.13 cfs 0.075 af

Total Runoff Area = 3.940 ac Runoff Volume = 0.213 af Average Runoff Depth = 0.65"
70.30% Pervious = 2.770 ac 29.70% Impervious = 1.170 ac

23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 2 yr Rainfall=2.80"

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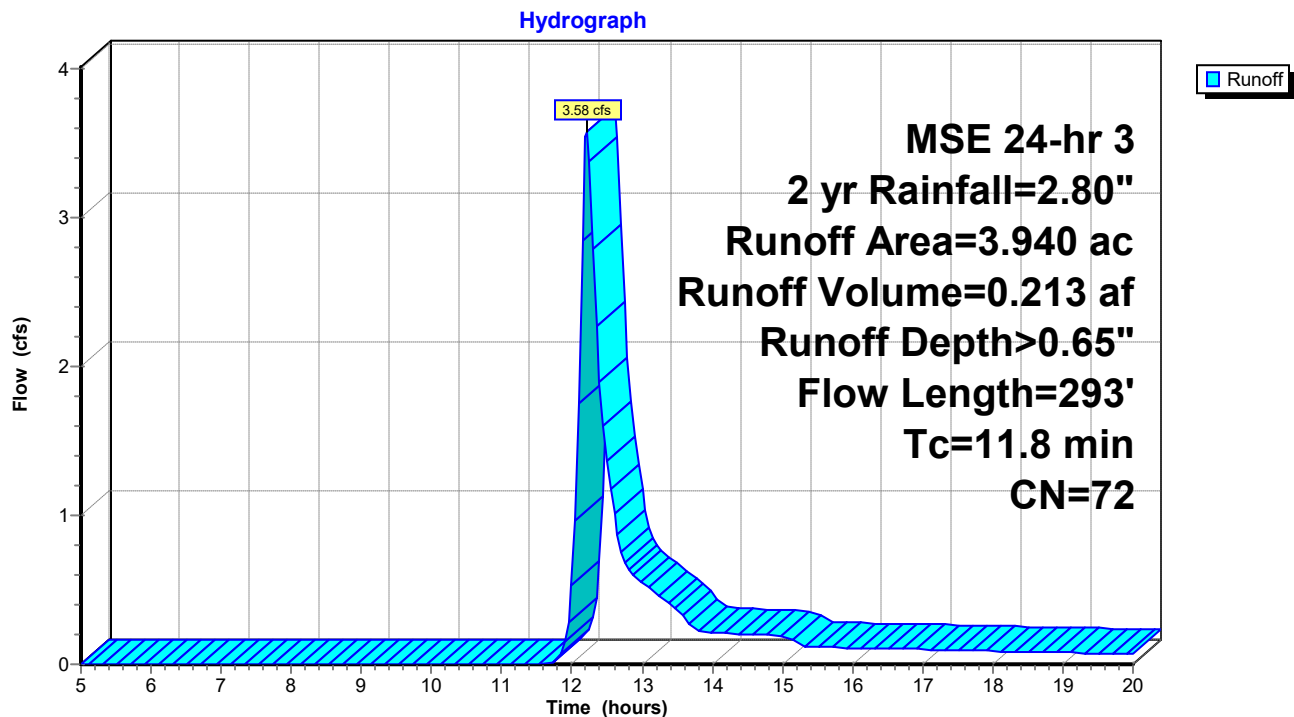
Summary for Subcatchment 2S: Onsite

Runoff = 3.58 cfs @ 12.22 hrs, Volume= 0.213 af, Depth> 0.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 2 yr Rainfall=2.80"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale Area= 20.0 sf Perim= 20.0' r= 1.00' n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite

23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 2 yr Rainfall=2.80"

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Summary for Pond 1P: Wet Pond

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 0.65" for 2 yr event
 Inflow = 3.58 cfs @ 12.22 hrs, Volume= 0.213 af
 Outflow = 0.13 cfs @ 15.28 hrs, Volume= 0.075 af, Atten= 96%, Lag= 184.1 min
 Primary = 0.13 cfs @ 15.28 hrs, Volume= 0.075 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 905.30' @ 15.28 hrs Surf.Area= 0.511 ac Storage= 0.149 af

Plug-Flow detention time= 244.3 min calculated for 0.075 af (35% of inflow)
 Center-of-Mass det. time= 161.5 min (977.0 - 815.5)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=0.13 cfs @ 15.28 hrs HW=905.30' (Free Discharge)

↑ **1=RCP_Round 12"** (Passes 0.13 cfs of 0.32 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.13 cfs @ 1.88 fps)

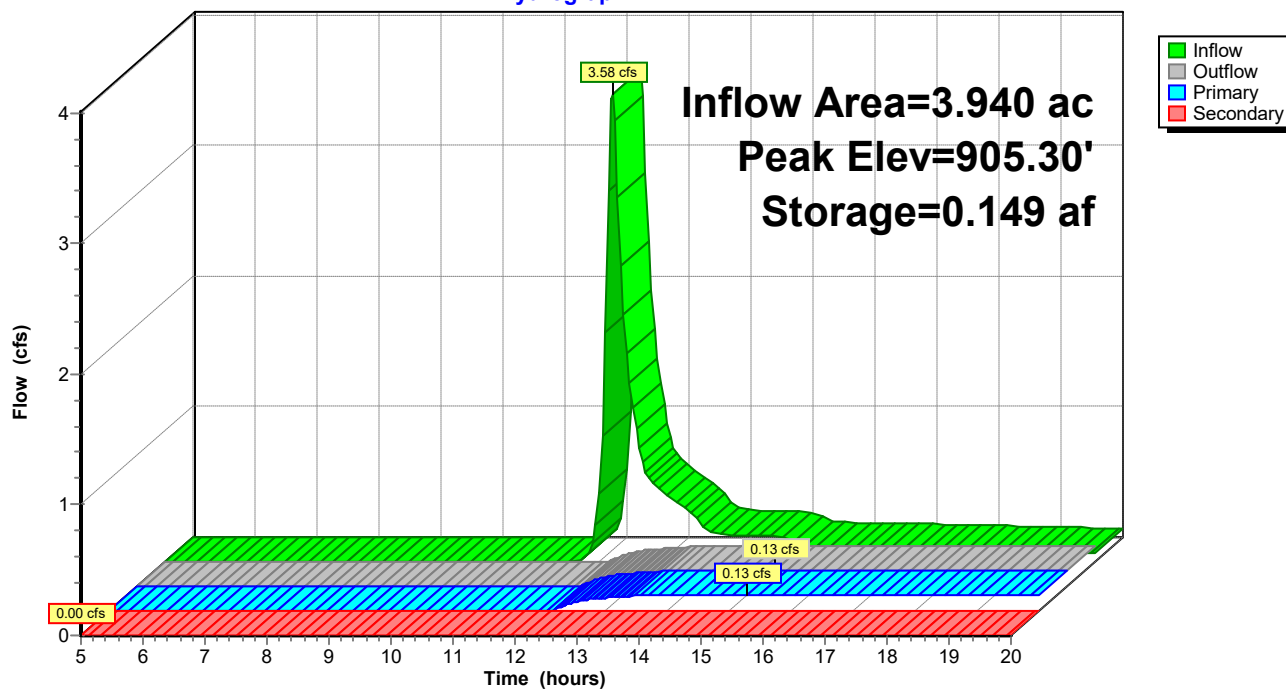
↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond

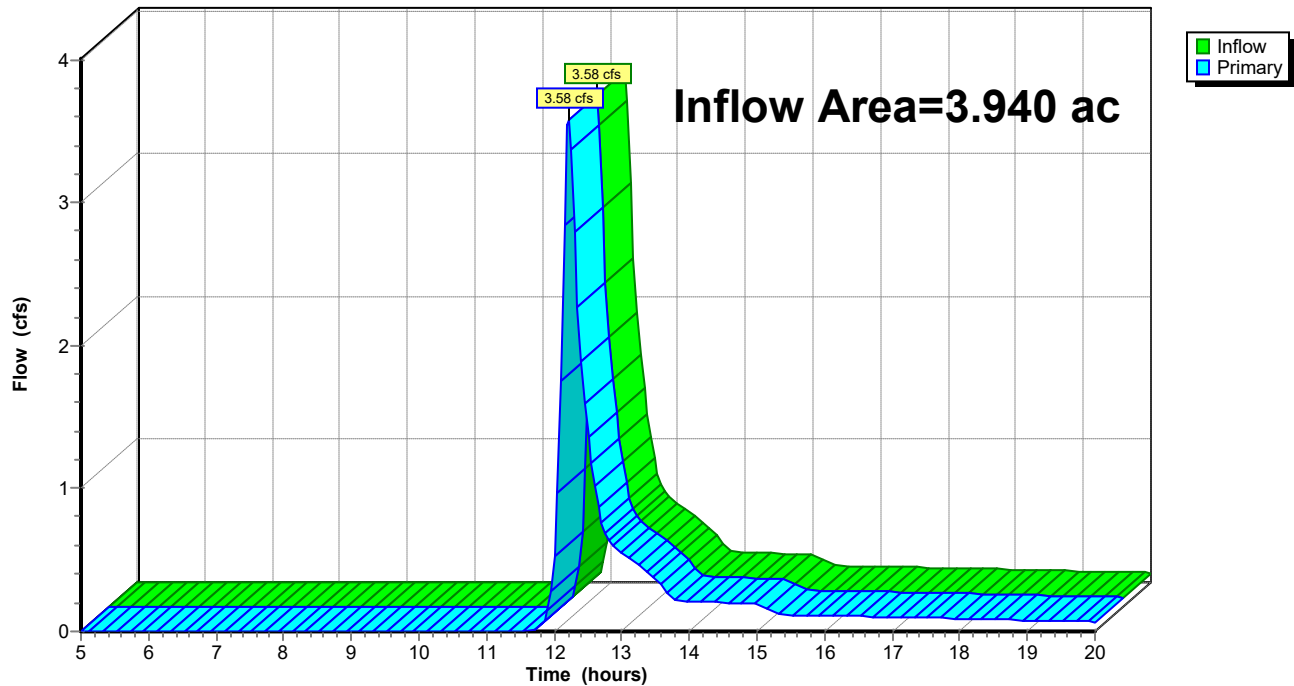
Hydrograph



Summary for Link 1L: (new Link)

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 0.65" for 2 yr event
Inflow = 3.58 cfs @ 12.22 hrs, Volume= 0.213 af
Primary = 3.58 cfs @ 12.22 hrs, Volume= 0.213 af, Atten= 0%, Lag= 0.0 min

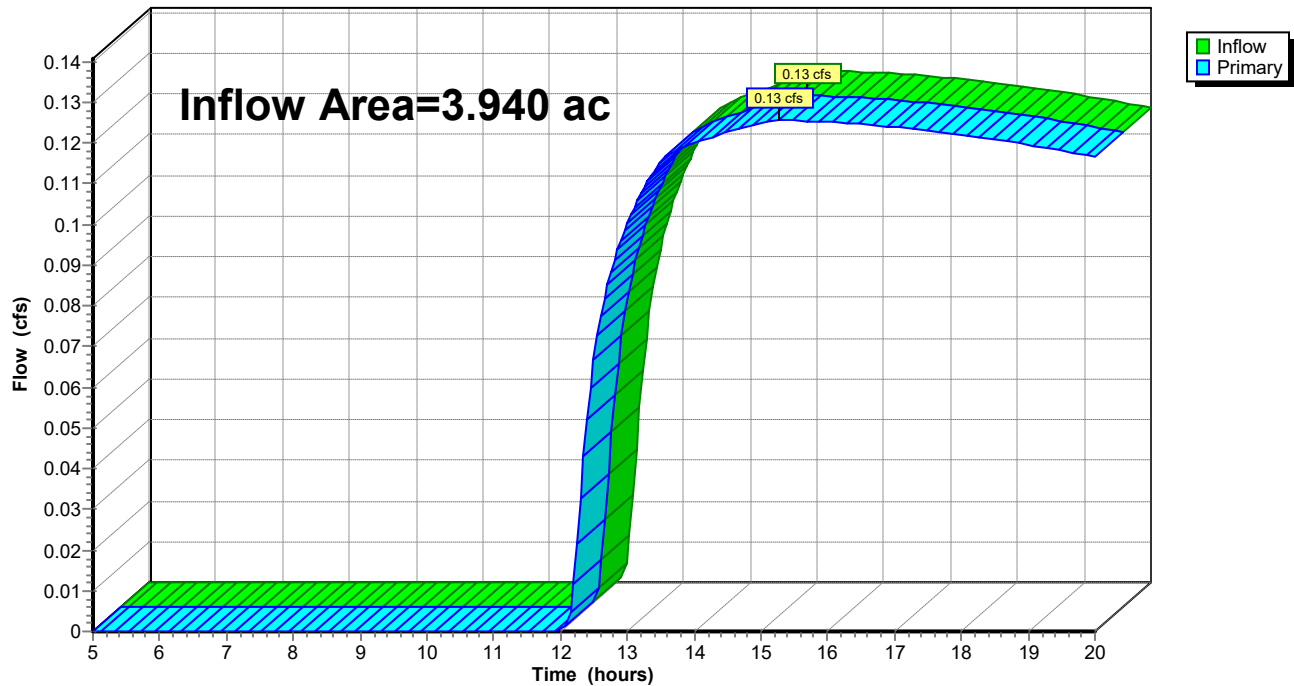
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: (new Link)**Hydrograph**

Summary for Link Post-Dev.: Post-Dev

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 0.23" for 2 yr event
Inflow = 0.13 cfs @ 15.28 hrs, Volume= 0.075 af
Primary = 0.13 cfs @ 15.28 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev**Hydrograph**

23.0023 Post-Development Proposed Parcels 5-5-25*MSE 24-hr 3 10 yr Rainfall=3.97"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2S: Onsite

Runoff Area=3.940 ac 29.70% Impervious Runoff Depth>1.36"
Flow Length=293' Tc=11.8 min CN=72 Runoff=7.97 cfs 0.447 af

Pond 1P: Wet Pond

Peak Elev=905.64' Storage=0.329 af Inflow=7.97 cfs 0.447 af
Primary=0.23 cfs 0.141 af Secondary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.141 af

Link 1L: (new Link)

Inflow=7.97 cfs 0.447 af
Primary=7.97 cfs 0.447 af

Link Post-Dev.: Post-Dev

Inflow=0.23 cfs 0.141 af
Primary=0.23 cfs 0.141 af

Total Runoff Area = 3.940 ac Runoff Volume = 0.447 af Average Runoff Depth = 1.36"
70.30% Pervious = 2.770 ac 29.70% Impervious = 1.170 ac

23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 10 yr Rainfall=3.97"

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Summary for Subcatchment 2S: Onsite

Runoff = 7.97 cfs @ 12.21 hrs, Volume= 0.447 af, Depth> 1.36"

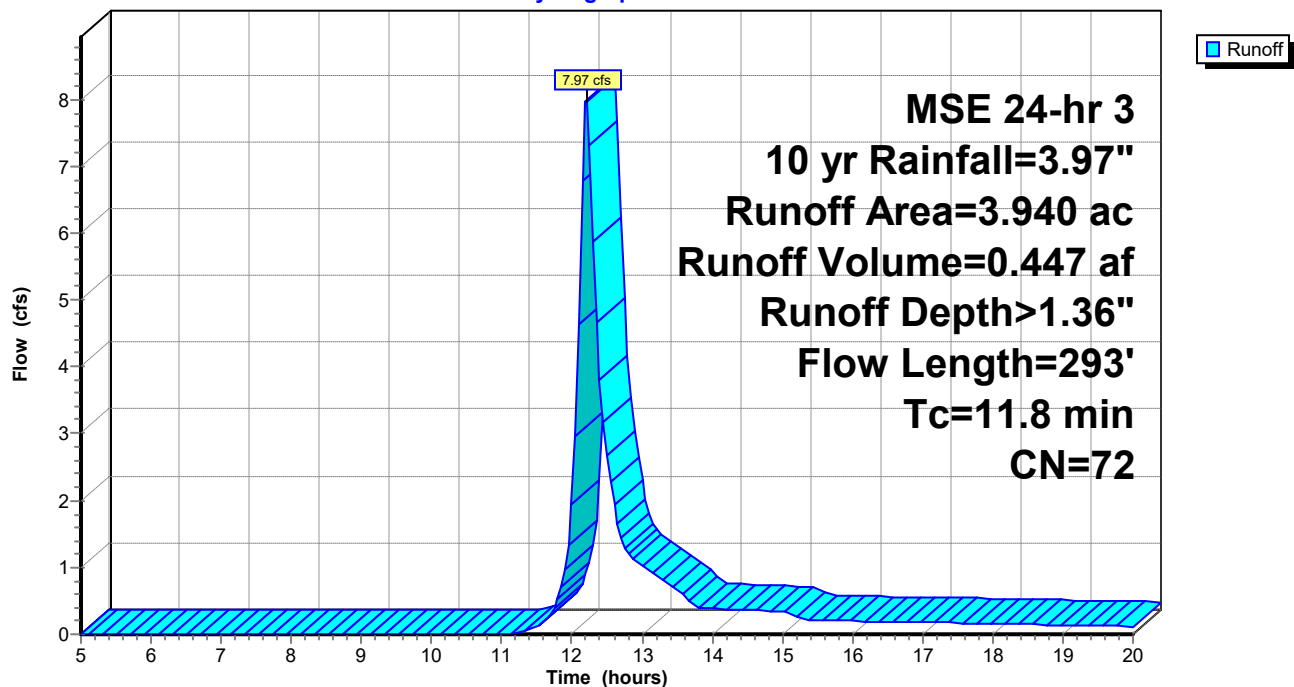
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 10 yr Rainfall=3.97"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement
					Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass
					Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale
					Area= 20.0 sf Perim= 20.0' r= 1.00'
					n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite

Hydrograph



23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 10 yr Rainfall=3.97"

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Summary for Pond 1P: Wet Pond

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 1.36" for 10 yr event
 Inflow = 7.97 cfs @ 12.21 hrs, Volume= 0.447 af
 Outflow = 0.23 cfs @ 15.28 hrs, Volume= 0.141 af, Atten= 97%, Lag= 184.2 min
 Primary = 0.23 cfs @ 15.28 hrs, Volume= 0.141 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 905.64' @ 15.28 hrs Surf.Area= 0.535 ac Storage= 0.329 af

Plug-Flow detention time= 244.8 min calculated for 0.141 af (32% of inflow)
 Center-of-Mass det. time= 168.6 min (970.8 - 802.1)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=0.23 cfs @ 15.28 hrs HW=905.64' (Free Discharge)

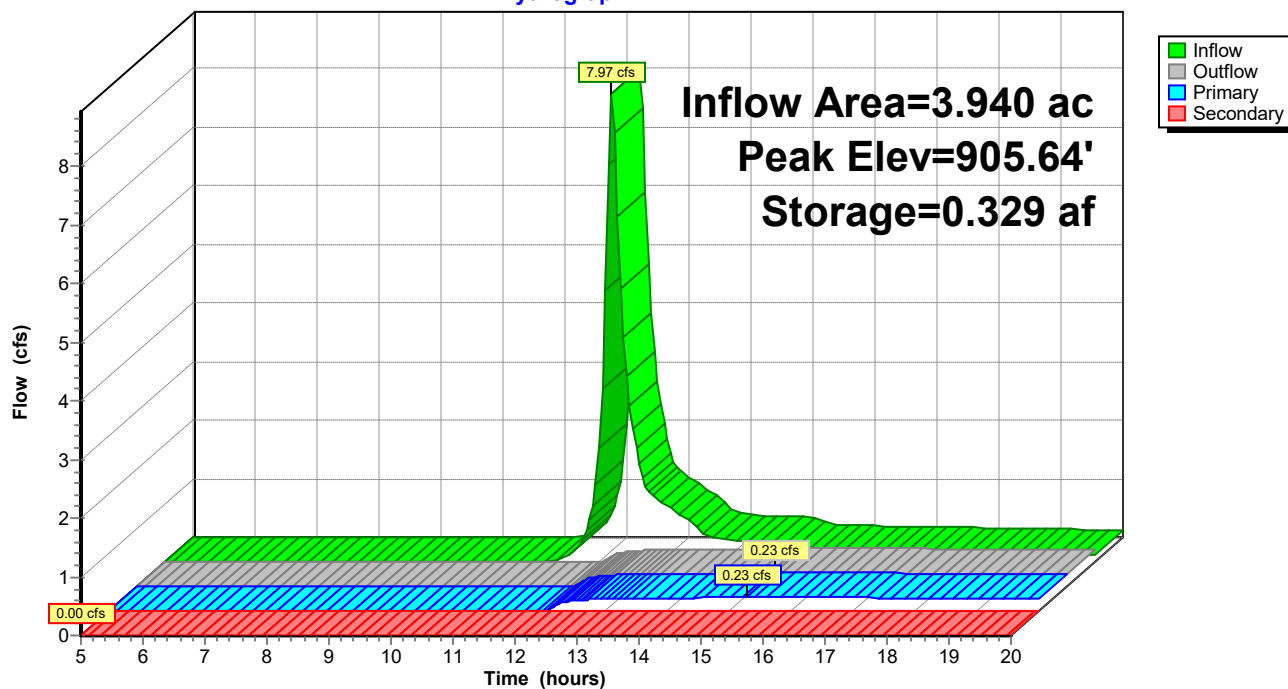
↑ **1=RCP_Round 12"** (Passes 0.23 cfs of 1.28 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.23 cfs @ 3.39 fps)

↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

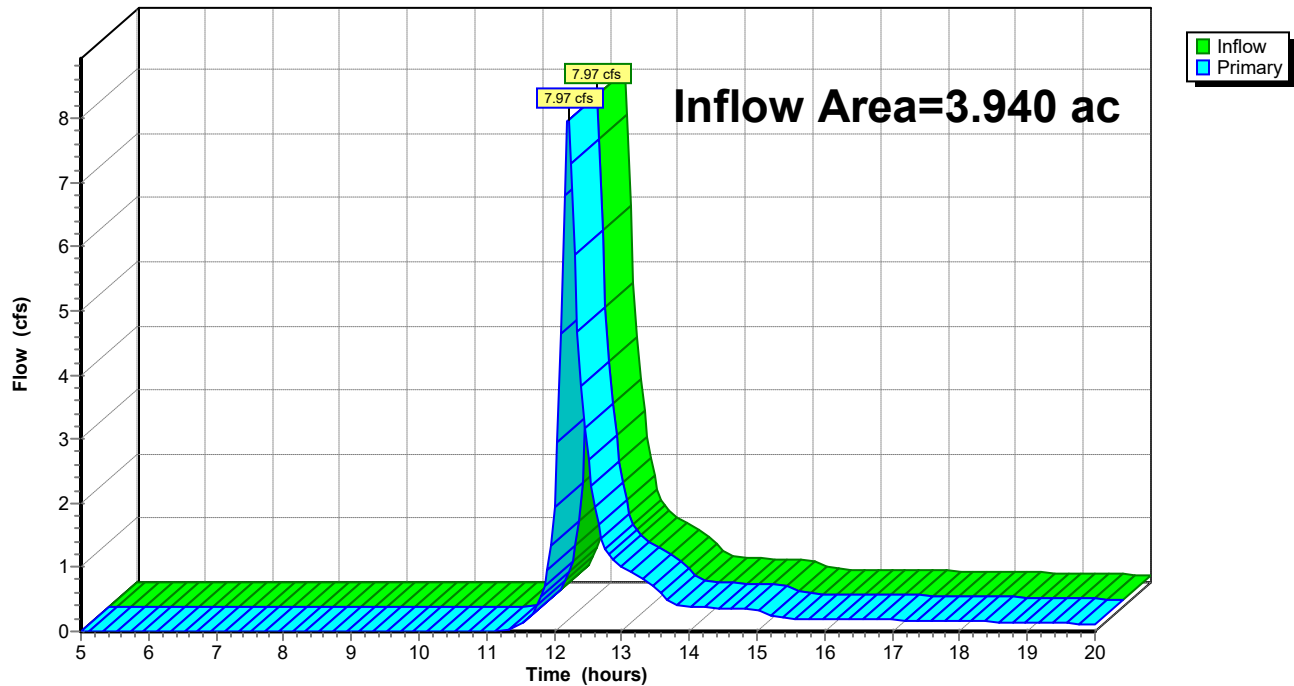
↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond**Hydrograph**

Summary for Link 1L: (new Link)

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 1.36" for 10 yr event
Inflow = 7.97 cfs @ 12.21 hrs, Volume= 0.447 af
Primary = 7.97 cfs @ 12.21 hrs, Volume= 0.447 af, Atten= 0%, Lag= 0.0 min

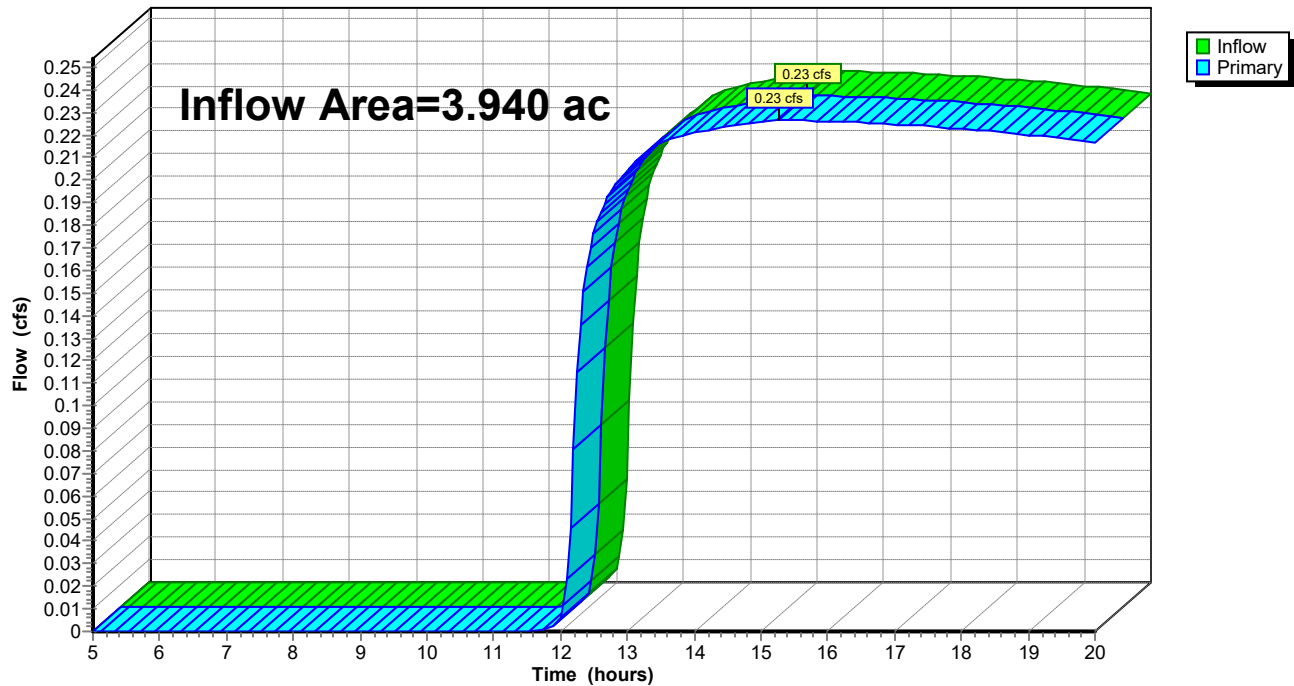
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: (new Link)**Hydrograph**

Summary for Link Post-Dev.: Post-Dev

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 0.43" for 10 yr event
Inflow = 0.23 cfs @ 15.28 hrs, Volume= 0.141 af
Primary = 0.23 cfs @ 15.28 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev**Hydrograph**

23.0023 Post-Development Proposed Parcels 5-5-25*MSE 24-hr 3 100 yr Rainfall=6.22"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 2S: OnsiteRunoff Area=3.940 ac 29.70% Impervious Runoff Depth>3.03"
Flow Length=293' Tc=11.8 min CN=72 Runoff=17.91 cfs 0.995 af**Pond 1P: Wet Pond**Peak Elev=906.45' Storage=0.783 af Inflow=17.91 cfs 0.995 af
Primary=0.37 cfs 0.235 af Secondary=0.00 cfs 0.000 af Outflow=0.37 cfs 0.235 af**Link 1L: (new Link)**Inflow=17.91 cfs 0.995 af
Primary=17.91 cfs 0.995 af**Link Post-Dev.: Post-Dev**Inflow=0.37 cfs 0.235 af
Primary=0.37 cfs 0.235 af**Total Runoff Area = 3.940 ac Runoff Volume = 0.995 af Average Runoff Depth = 3.03"**
70.30% Pervious = 2.770 ac 29.70% Impervious = 1.170 ac

23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 100 yr Rainfall=6.22"

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Summary for Subcatchment 2S: Onsite

Runoff = 17.91 cfs @ 12.20 hrs, Volume= 0.995 af, Depth> 3.03"

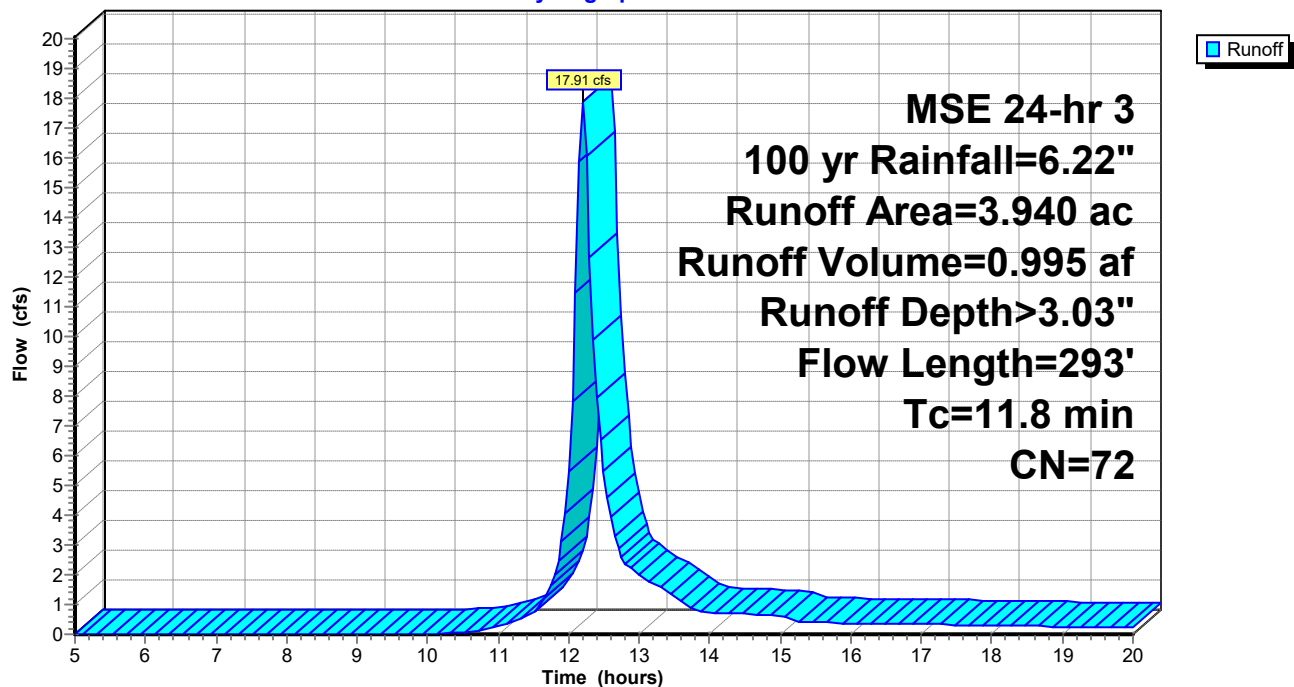
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
MSE 24-hr 3 100 yr Rainfall=6.22"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale Area= 20.0 sf Perim= 20.0' r= 1.00' n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite

Hydrograph



23.0023 Post-Development Proposed Parcels 5-5-25

MSE 24-hr 3 100 yr Rainfall=6.22"

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Summary for Pond 1P: Wet Pond

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 3.03" for 100 yr event
 Inflow = 17.91 cfs @ 12.20 hrs, Volume= 0.995 af
 Outflow = 0.37 cfs @ 16.13 hrs, Volume= 0.235 af, Atten= 98%, Lag= 235.6 min
 Primary = 0.37 cfs @ 16.13 hrs, Volume= 0.235 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 906.45' @ 16.13 hrs Surf.Area= 0.591 ac Storage= 0.783 af

Plug-Flow detention time= 253.4 min calculated for 0.234 af (24% of inflow)
 Center-of-Mass det. time= 177.8 min (966.8 - 789.0)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 ' / Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=0.37 cfs @ 16.13 hrs HW=906.45' (Free Discharge)

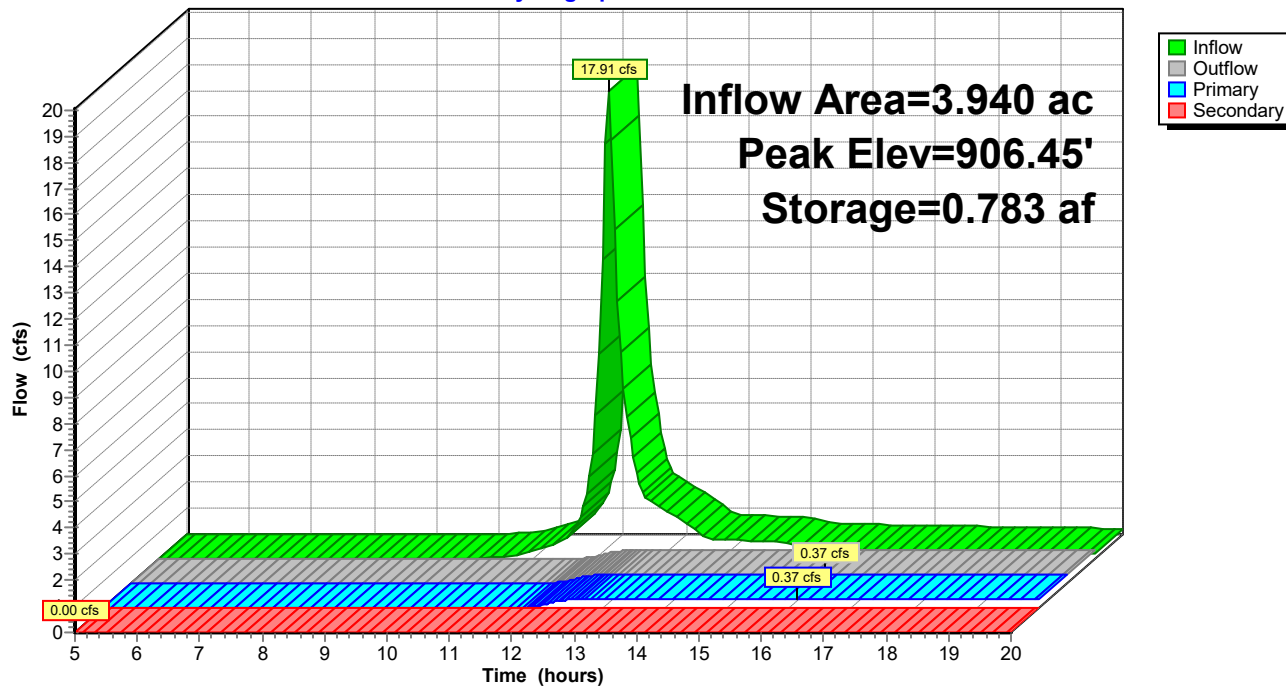
↑ **1=RCP_Round 12"** (Passes 0.37 cfs of 3.25 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 5.50 fps)

↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

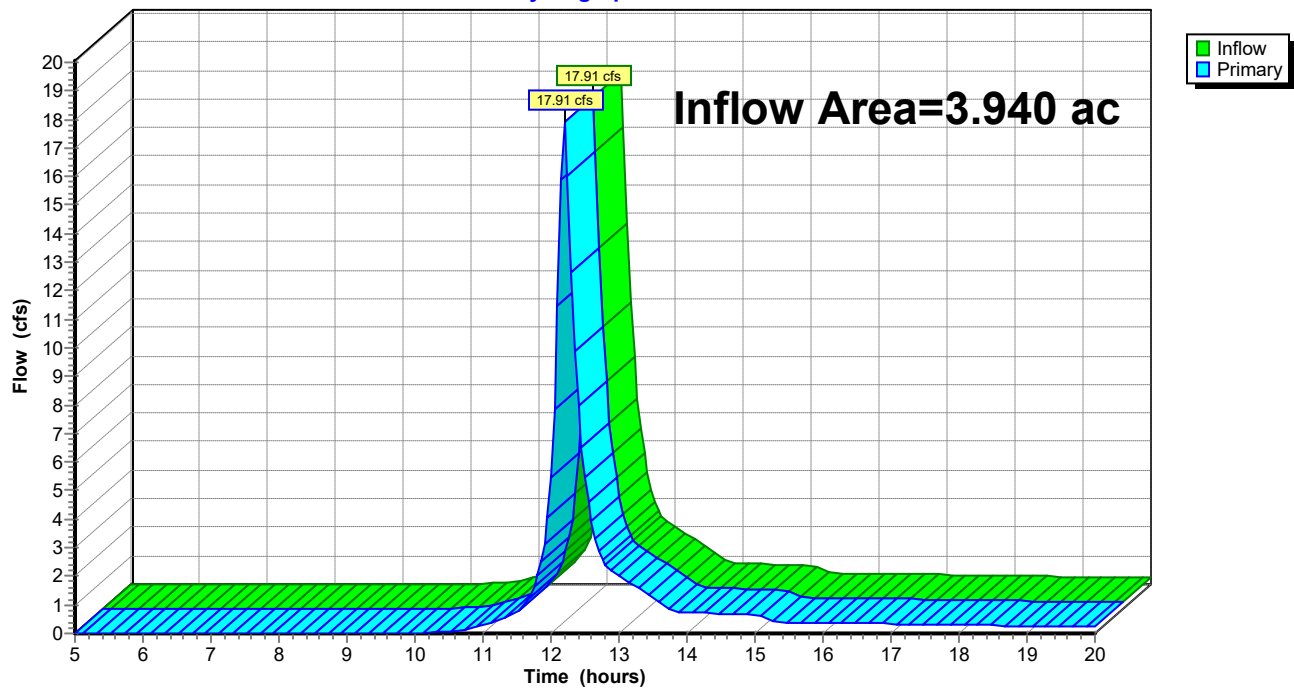
↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond**Hydrograph**

Summary for Link 1L: (new Link)

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 3.03" for 100 yr event
Inflow = 17.91 cfs @ 12.20 hrs, Volume= 0.995 af
Primary = 17.91 cfs @ 12.20 hrs, Volume= 0.995 af, Atten= 0%, Lag= 0.0 min

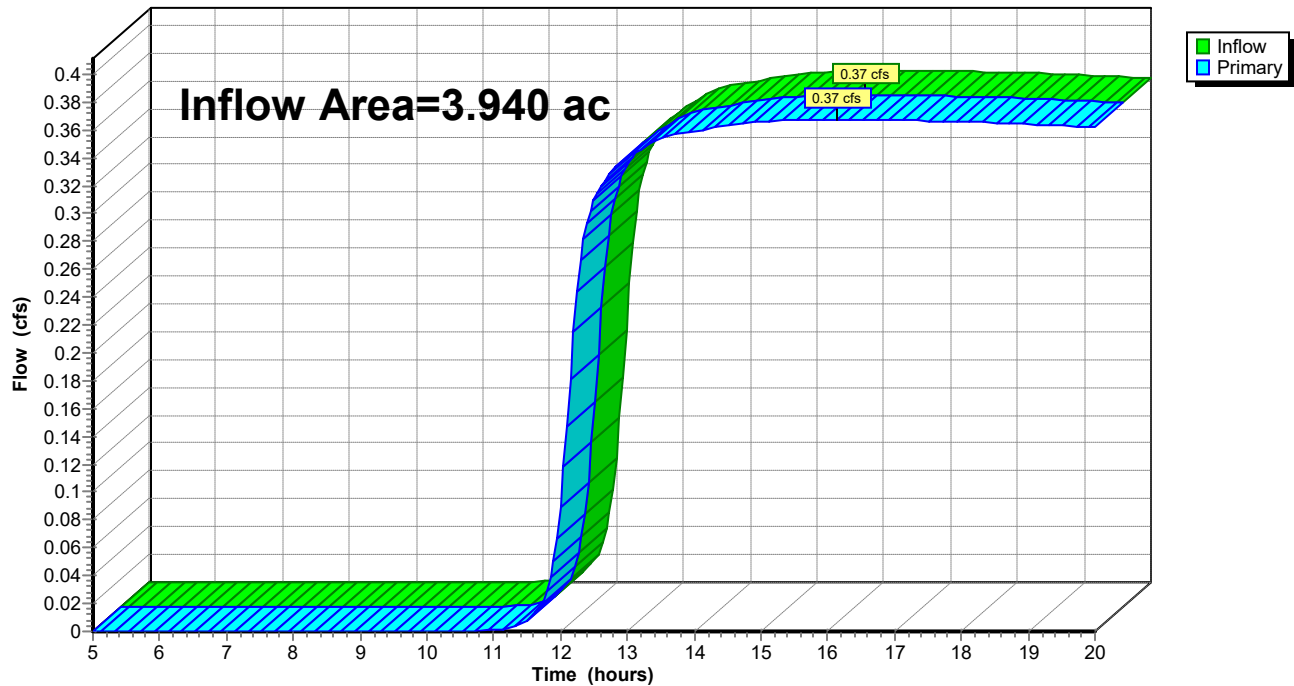
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

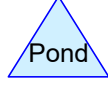
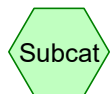
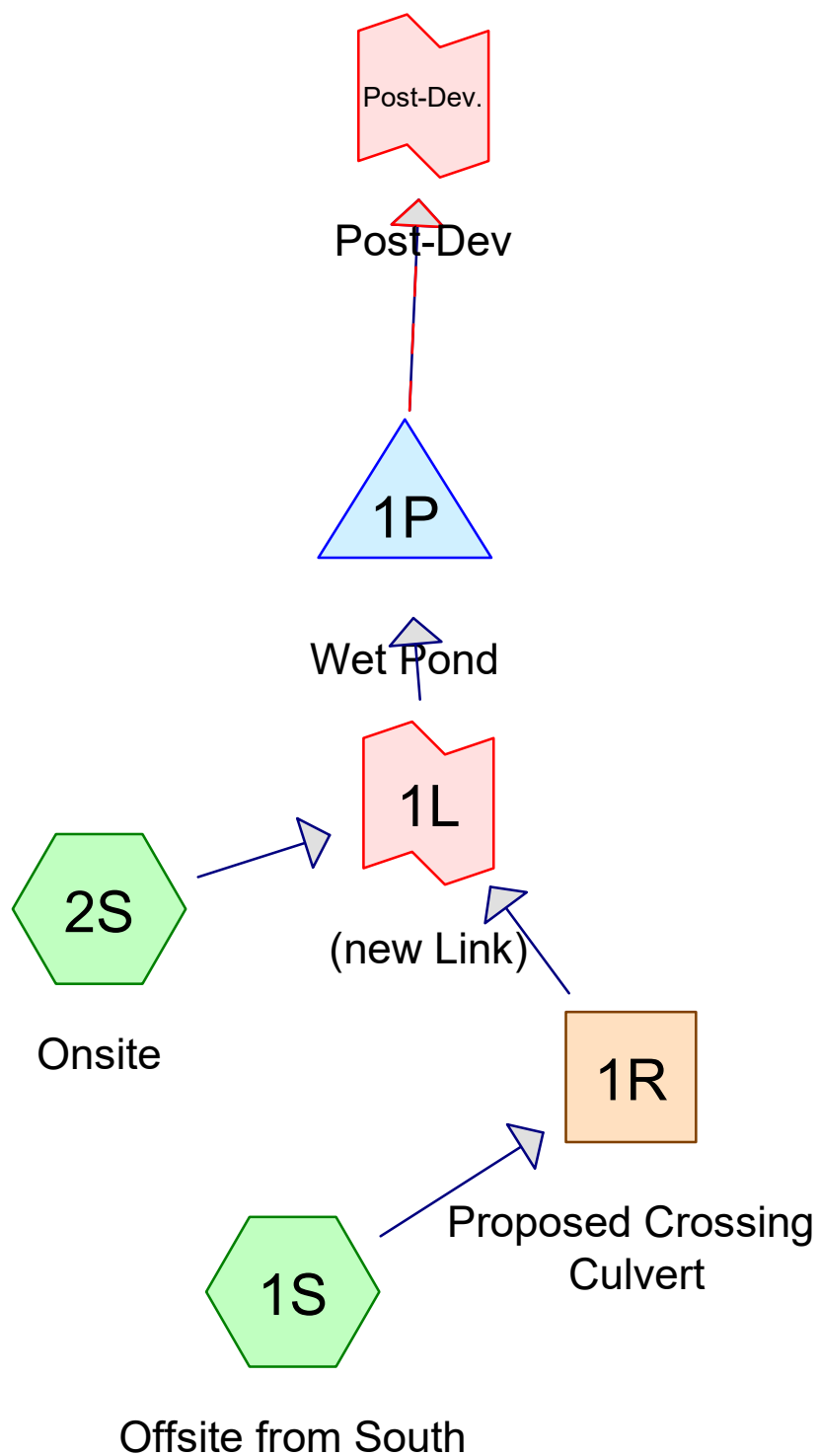
Link 1L: (new Link)**Hydrograph**

Summary for Link Post-Dev.: Post-Dev

Inflow Area = 3.940 ac, 29.70% Impervious, Inflow Depth > 0.72" for 100 yr event
Inflow = 0.37 cfs @ 16.13 hrs, Volume= 0.235 af
Primary = 0.37 cfs @ 16.13 hrs, Volume= 0.235 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev**Hydrograph**



Routing Diagram for 23.0023 Post-Development Proposed Parcels Including Offsite 5-5-25
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23.0023 Post-Development Proposed Parcels Including Offsite 5-5-25

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
3.000	72	1/3 acre lots, 30% imp, HSG B (1S)
2.770	61	>75% Grass cover, Good, HSG B (2S)
0.330	98	Driveways, HSG B (2S)
0.350	98	Roofs, HSG B (2S)
0.490	98	Water Surface, HSG B (2S)
6.940	72	TOTAL AREA

23.0023 Post-Development Proposed Parcels Including Offsite 5-5-25

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
6.940	HSG B	1S, 2S
0.000	HSG C	
0.000	HSG D	
0.000	Other	
6.940		TOTAL AREA

23.0023 Post-Development Proposed Parcels Including Offsite 5-5-25

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Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	3.000	0.000	0.000	0.000	3.000	1/3 acre lots, 30% imp	1S
0.000	2.770	0.000	0.000	0.000	2.770	>75% Grass cover, Good	2S
0.000	0.330	0.000	0.000	0.000	0.330	Driveways	2S
0.000	0.350	0.000	0.000	0.000	0.350	Roofs	2S
0.000	0.490	0.000	0.000	0.000	0.490	Water Surface	2S
0.000	6.940	0.000	0.000	0.000	6.940	TOTAL AREA	

23.0023 Post-Development Proposed Parcels Including Offsite 5-5-25

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Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	1R	925.00	924.00	34.0	0.0294	0.011	12.0	0.0	0.0
2	1P	905.00	904.00	22.0	0.0455	0.011	12.0	0.0	0.0

23.0023 Post-Development Proposed Parcels Including Off MSE 24-hr 3 2 yr Rainfall=2.80"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Offsite from South Runoff Area=3.000 ac 30.00% Impervious Runoff Depth>0.65"
Flow Length=595' Tc=12.9 min CN=72 Runoff=2.59 cfs 0.162 af

Subcatchment 2S: Onsite Runoff Area=3.940 ac 29.70% Impervious Runoff Depth>0.65"
Flow Length=293' Tc=11.8 min CN=72 Runoff=3.58 cfs 0.213 af

Reach 1R: Proposed Crossing Culvert Avg. Flow Depth=0.41' Max Vel=8.41 fps Inflow=2.59 cfs 0.162 af
12.0" Round Pipe n=0.011 L=34.0' S=0.0294 '/' Capacity=7.22 cfs Outflow=2.58 cfs 0.162 af

Pond 1P: Wet Pond Peak Elev=905.52' Storage=0.266 af Inflow=6.17 cfs 0.375 af
Primary=0.20 cfs 0.121 af Secondary=0.00 cfs 0.000 af Outflow=0.20 cfs 0.121 af

Link 1L: (new Link) Inflow=6.17 cfs 0.375 af
Primary=6.17 cfs 0.375 af

Link Post-Dev.: Post-Dev Inflow=0.20 cfs 0.121 af
Primary=0.20 cfs 0.121 af

Total Runoff Area = 6.940 ac Runoff Volume = 0.375 af Average Runoff Depth = 0.65"
70.17% Pervious = 4.870 ac 29.83% Impervious = 2.070 ac

Summary for Subcatchment 1S: Offsite from South

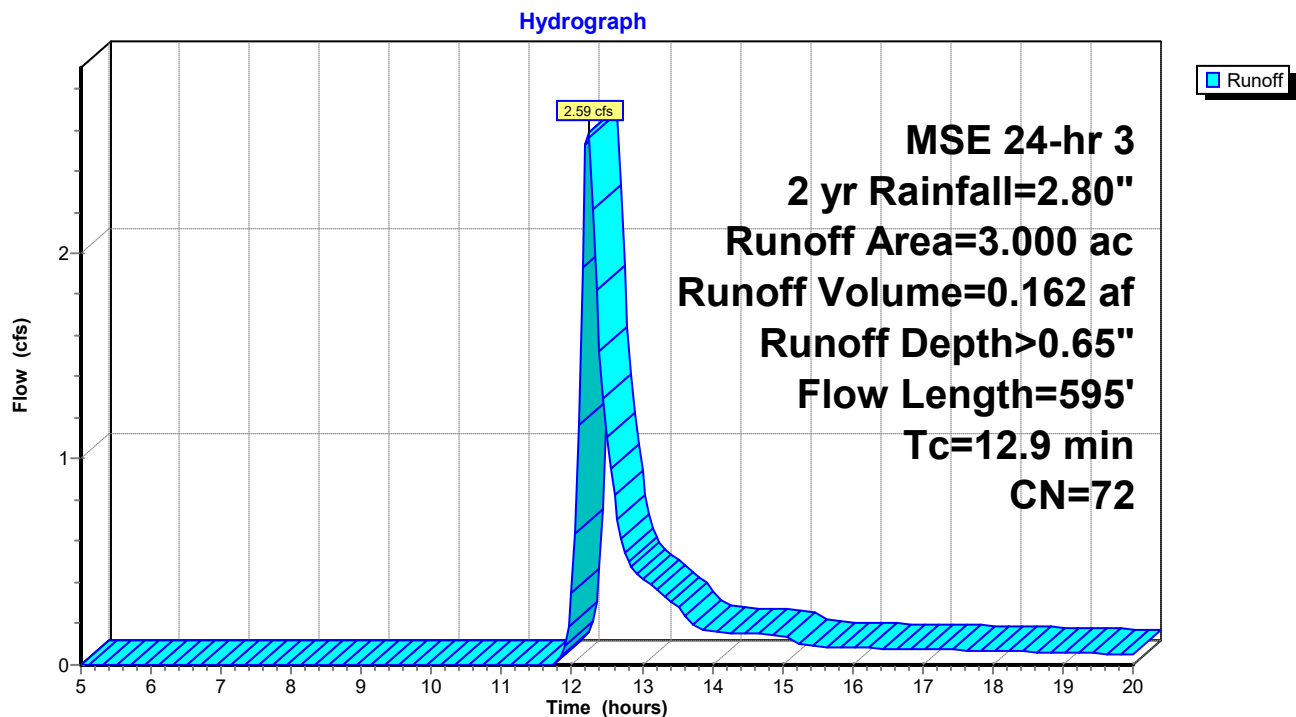
Runoff = 2.59 cfs @ 12.23 hrs, Volume= 0.162 af, Depth> 0.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 2 yr Rainfall=2.80"

Area (ac)	CN	Description
3.000	72	1/3 acre lots, 30% imp, HSG B
2.100		70.00% Pervious Area
0.900		30.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0700	0.18		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
1.8	185	0.0108	1.67		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
1.4	250	0.0360	3.05		Shallow Concentrated Flow, Sh. Conc. Flow-Trees Unpaved Kv= 16.1 fps
0.5	60	0.0167	2.08		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
12.9	595	Total			

Subcatchment 1S: Offsite from South



Summary for Subcatchment 2S: Onsite

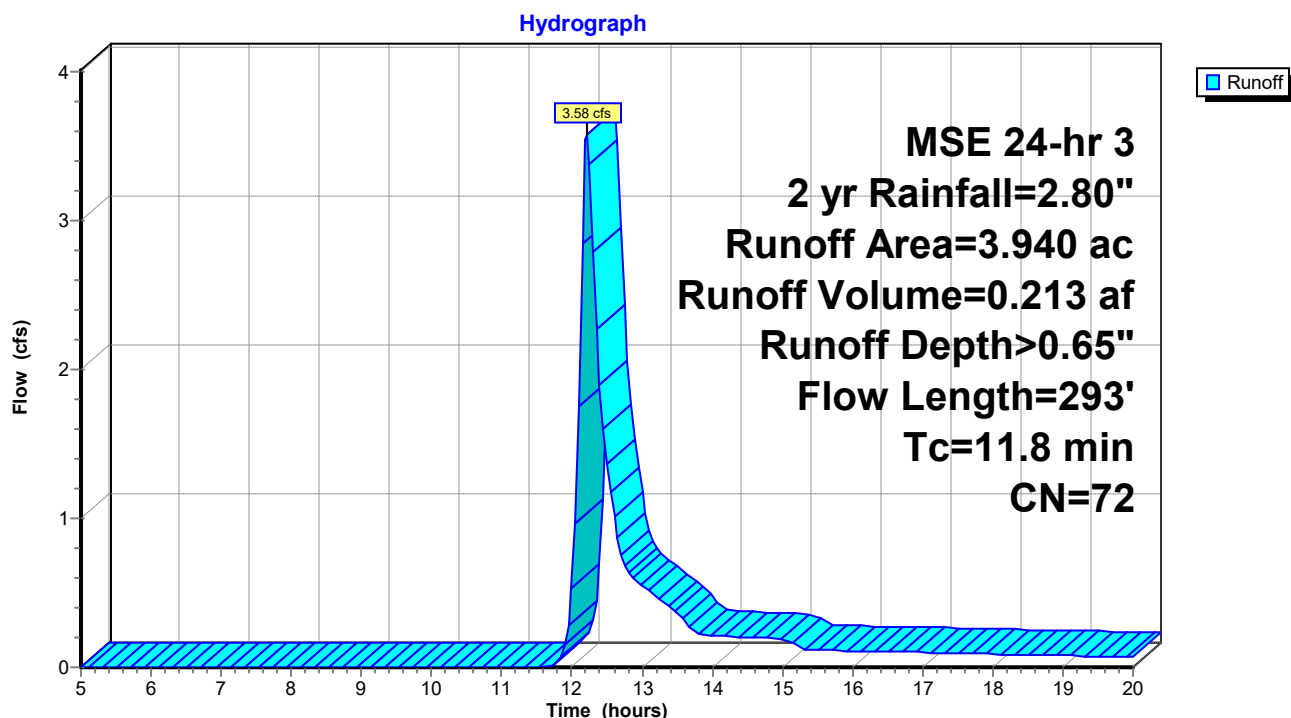
Runoff = 3.58 cfs @ 12.22 hrs, Volume= 0.213 af, Depth> 0.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 2 yr Rainfall=2.80"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale Area= 20.0 sf Perim= 20.0' r= 1.00' n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite



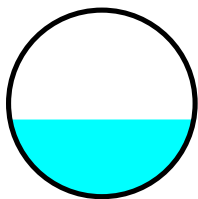
Summary for Reach 1R: Proposed Crossing Culvert

Inflow Area = 3.000 ac, 30.00% Impervious, Inflow Depth > 0.65" for 2 yr event
 Inflow = 2.59 cfs @ 12.23 hrs, Volume= 0.162 af
 Outflow = 2.58 cfs @ 12.23 hrs, Volume= 0.162 af, Atten= 0%, Lag= 0.2 min

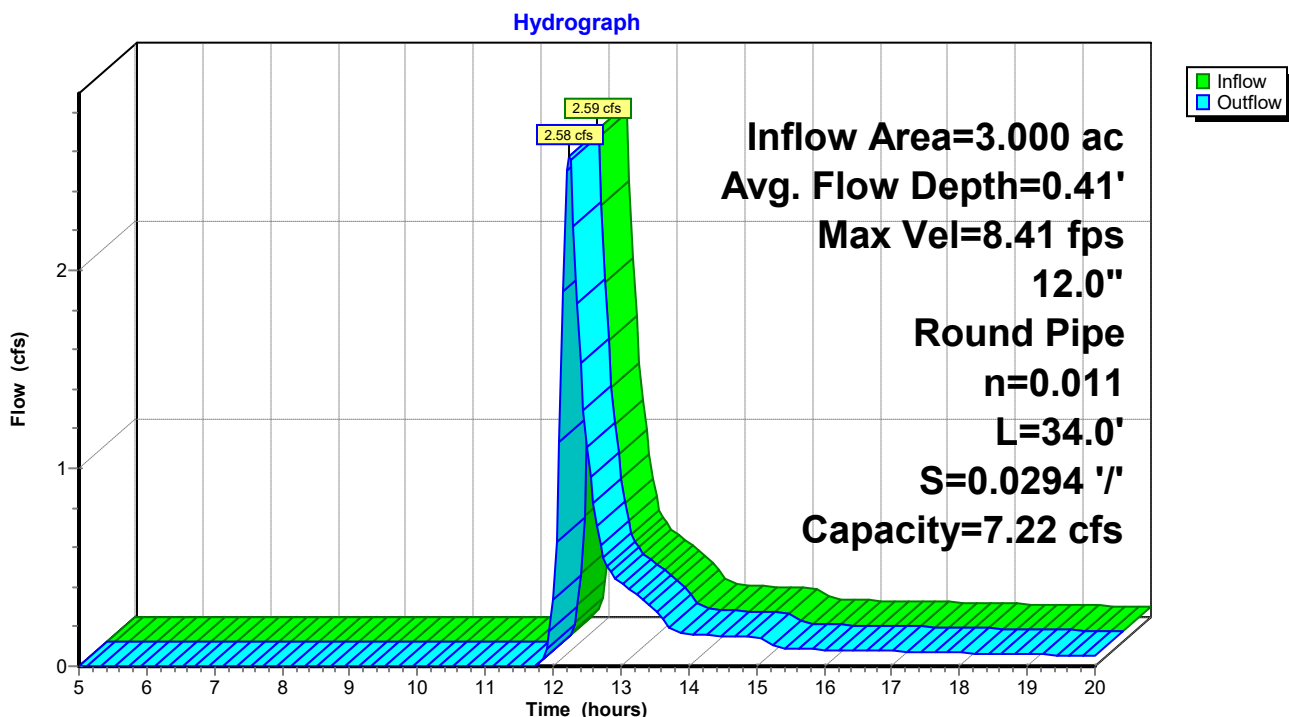
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Max. Velocity= 8.41 fps, Min. Travel Time= 0.1 min
 Avg. Velocity= 3.62 fps, Avg. Travel Time= 0.2 min

Peak Storage= 10 cf @ 12.23 hrs
 Average Depth at Peak Storage= 0.41'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 7.22 cfs

12.0" Round Pipe
 n= 0.011 Concrete pipe, straight & clean
 Length= 34.0' Slope= 0.0294 '/'
 Inlet Invert= 925.00', Outlet Invert= 924.00'



Reach 1R: Proposed Crossing Culvert



23.0023 Post-Development Proposed Parcels Including Off MSE 24-hr 3 2 yr Rainfall=2.80"

Prepared by {enter your company name here}

Printed 4/18/2025

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Summary for Pond 1P: Wet Pond

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 0.65" for 2 yr event
 Inflow = 6.17 cfs @ 12.22 hrs, Volume= 0.375 af
 Outflow = 0.20 cfs @ 15.79 hrs, Volume= 0.121 af, Atten= 97%, Lag= 214.1 min
 Primary = 0.20 cfs @ 15.79 hrs, Volume= 0.121 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 905.52' @ 15.79 hrs Surf.Area= 0.527 ac Storage= 0.266 af

Plug-Flow detention time= 242.8 min calculated for 0.121 af (32% of inflow)
 Center-of-Mass det. time= 159.3 min (975.2 - 815.9)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 ' / Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=0.20 cfs @ 15.79 hrs HW=905.52' (Free Discharge)

↑ **1=RCP_Round 12"** (Passes 0.20 cfs of 0.91 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.20 cfs @ 2.96 fps)

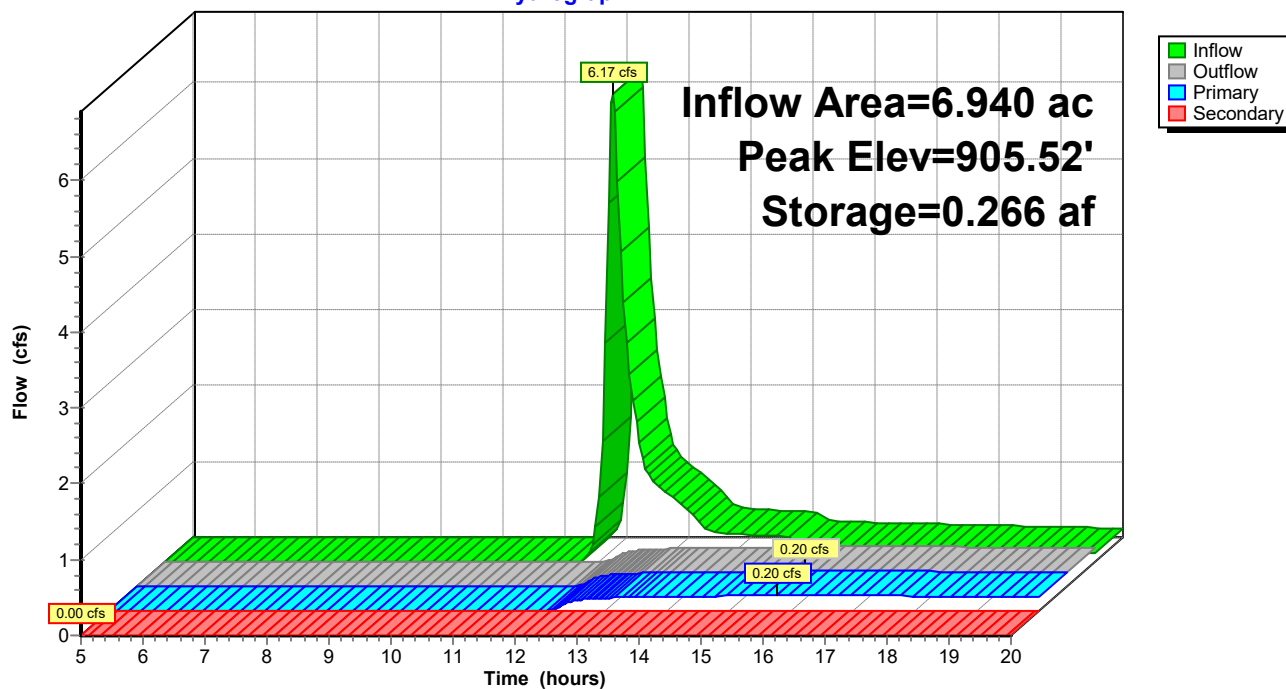
↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond

Hydrograph



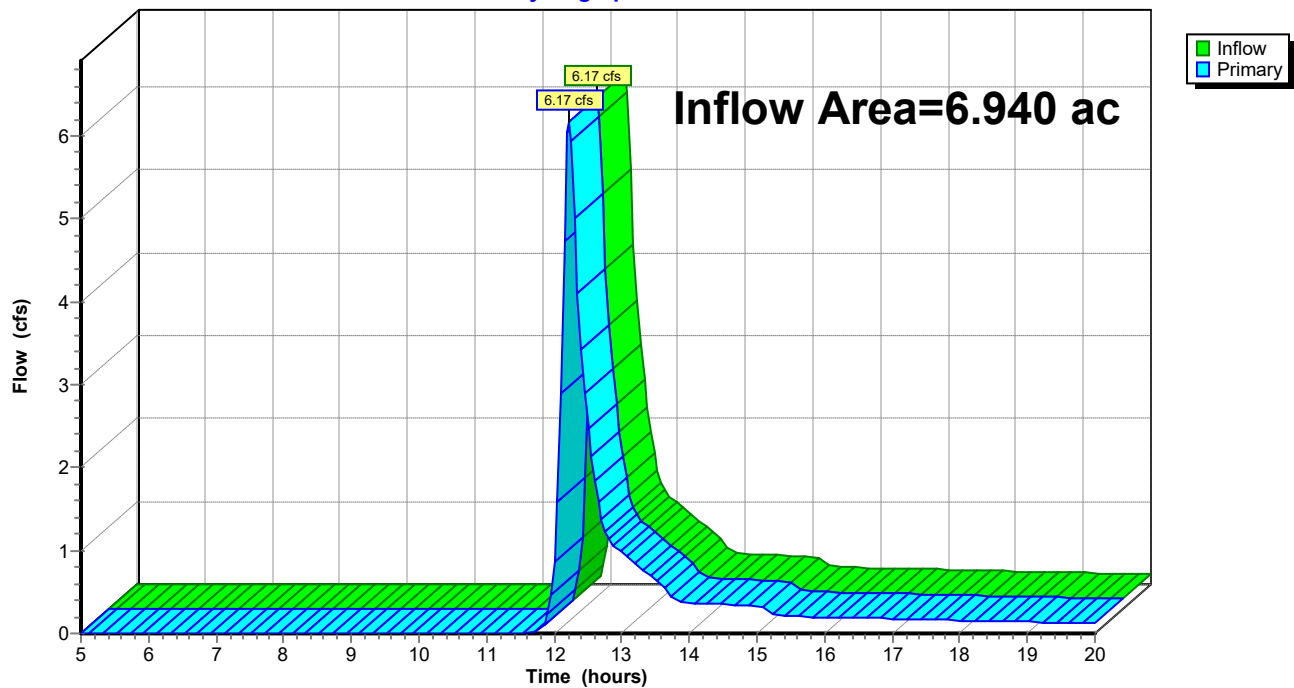
Summary for Link 1L: (new Link)

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 0.65" for 2 yr event
Inflow = 6.17 cfs @ 12.22 hrs, Volume= 0.375 af
Primary = 6.17 cfs @ 12.22 hrs, Volume= 0.375 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: (new Link)

Hydrograph

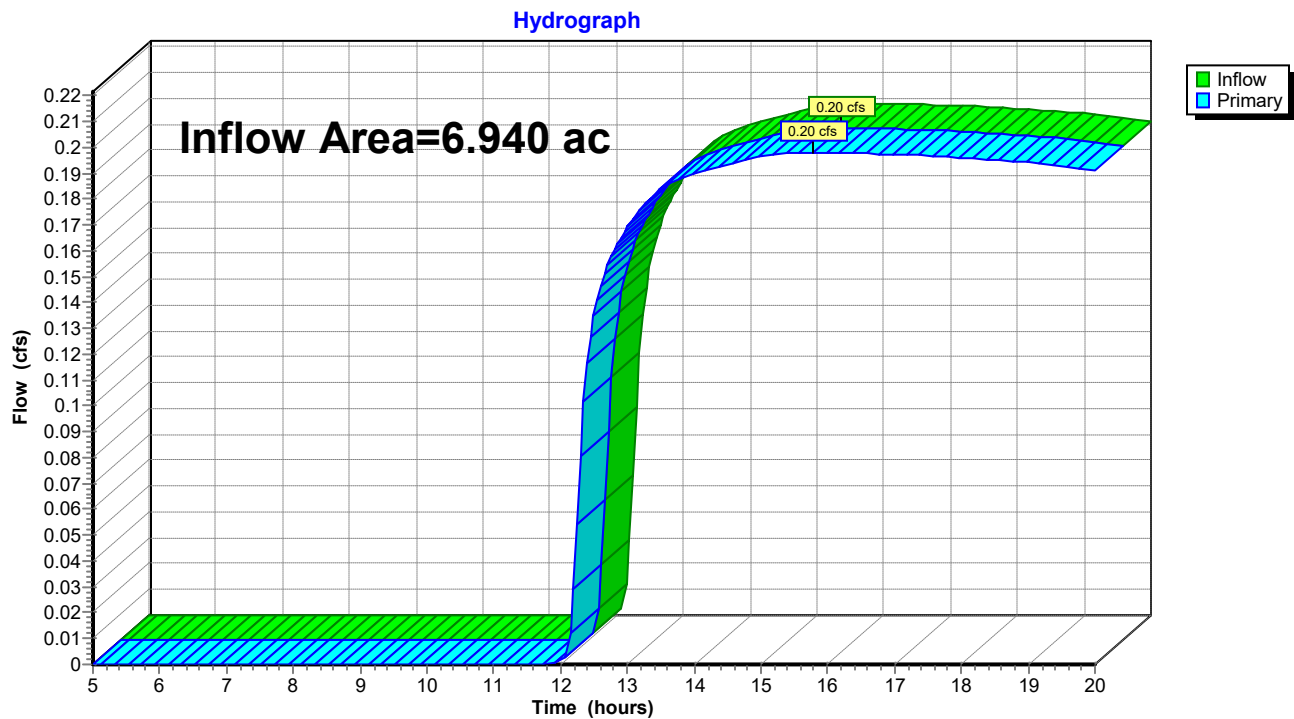


Summary for Link Post-Dev.: Post-Dev

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 0.21" for 2 yr event
Inflow = 0.20 cfs @ 15.79 hrs, Volume= 0.121 af
Primary = 0.20 cfs @ 15.79 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev



23.0023 Post-Development Proposed Parcels Including O MSE 24-hr 3 10 yr Rainfall=3.97"

Prepared by {enter your company name here}

Printed 4/18/2025

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Offsite from South

Runoff Area=3.000 ac 30.00% Impervious Runoff Depth>1.36"
Flow Length=595' Tc=12.9 min CN=72 Runoff=5.84 cfs 0.341 af

Subcatchment 2S: Onsite

Runoff Area=3.940 ac 29.70% Impervious Runoff Depth>1.36"
Flow Length=293' Tc=11.8 min CN=72 Runoff=7.97 cfs 0.447 af

Reach 1R: Proposed Crossing Culvert

Avg. Flow Depth=0.68' Max Vel=10.21 fps Inflow=5.84 cfs 0.341 af
12.0" Round Pipe n=0.011 L=34.0' S=0.0294 '/' Capacity=7.22 cfs Outflow=5.83 cfs 0.341 af

Pond 1P: Wet Pond

Peak Elev=906.13' Storage=0.601 af Inflow=13.78 cfs 0.788 af
Primary=0.32 cfs 0.201 af Secondary=0.00 cfs 0.000 af Outflow=0.32 cfs 0.201 af

Link 1L: (new Link)

Inflow=13.78 cfs 0.788 af
Primary=13.78 cfs 0.788 af

Link Post-Dev.: Post-Dev

Inflow=0.32 cfs 0.201 af
Primary=0.32 cfs 0.201 af

Total Runoff Area = 6.940 ac Runoff Volume = 0.788 af Average Runoff Depth = 1.36"
70.17% Pervious = 4.870 ac 29.83% Impervious = 2.070 ac

Summary for Subcatchment 1S: Offsite from South

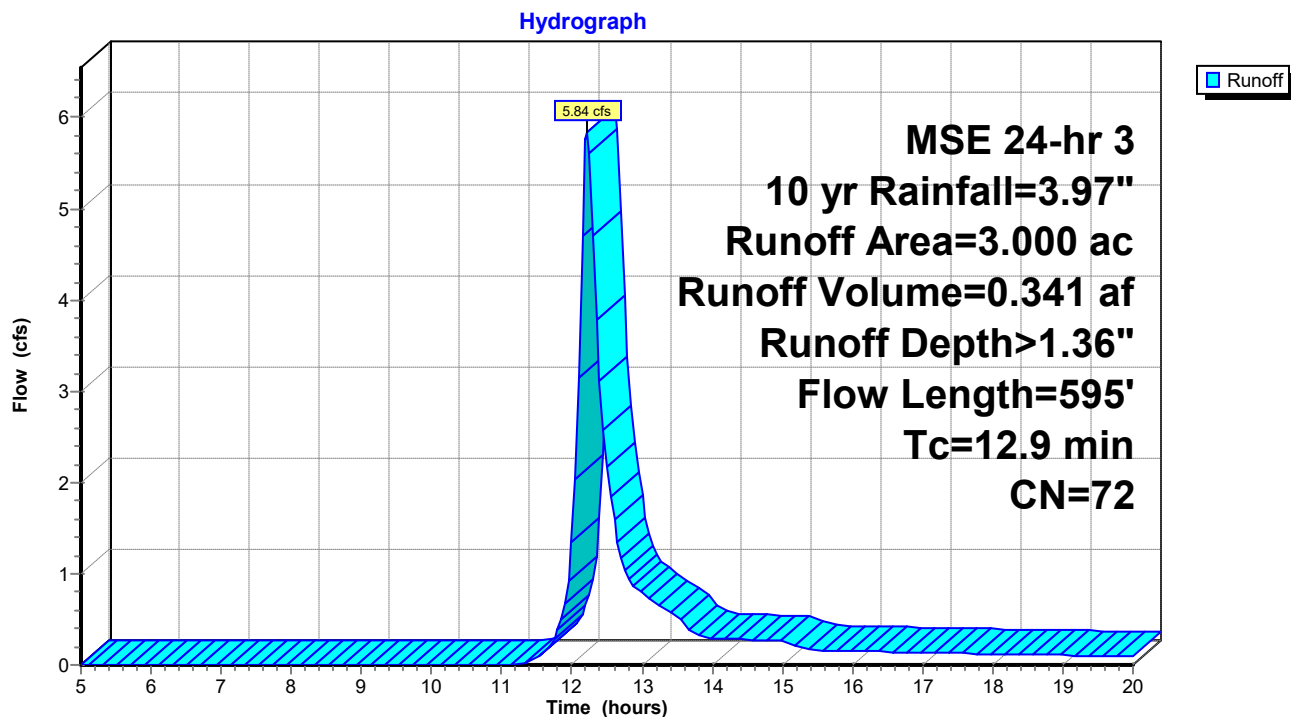
Runoff = 5.84 cfs @ 12.22 hrs, Volume= 0.341 af, Depth> 1.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 10 yr Rainfall=3.97"

Area (ac)	CN	Description
3.000	72	1/3 acre lots, 30% imp, HSG B
2.100		70.00% Pervious Area
0.900		30.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0700	0.18		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
1.8	185	0.0108	1.67		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
1.4	250	0.0360	3.05		Shallow Concentrated Flow, Sh. Conc. Flow-Trees Unpaved Kv= 16.1 fps
0.5	60	0.0167	2.08		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
12.9	595	Total			

Subcatchment 1S: Offsite from South



Summary for Subcatchment 2S: Onsite

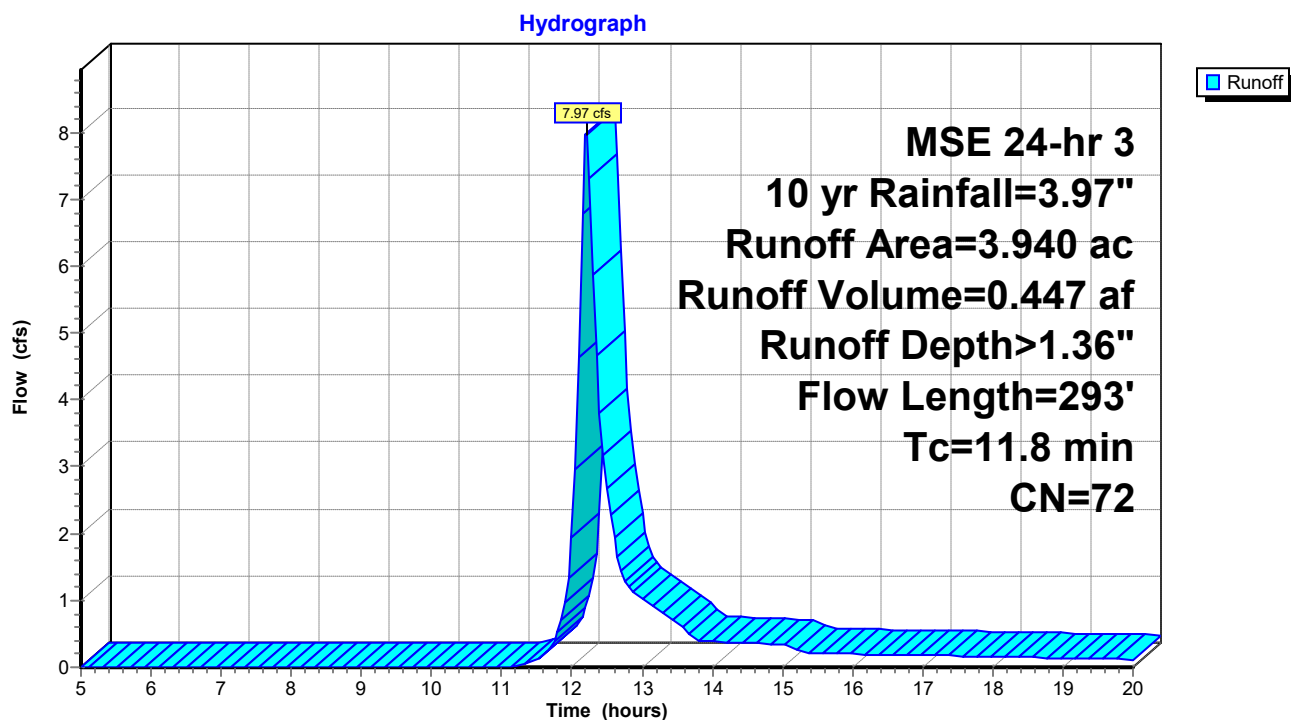
Runoff = 7.97 cfs @ 12.21 hrs, Volume= 0.447 af, Depth> 1.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 10 yr Rainfall=3.97"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale Area= 20.0 sf Perim= 20.0' r= 1.00' n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite



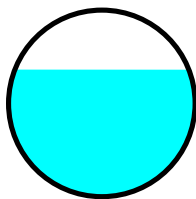
Summary for Reach 1R: Proposed Crossing Culvert

Inflow Area = 3.000 ac, 30.00% Impervious, Inflow Depth > 1.36" for 10 yr event
 Inflow = 5.84 cfs @ 12.22 hrs, Volume= 0.341 af
 Outflow = 5.83 cfs @ 12.22 hrs, Volume= 0.341 af, Atten= 0%, Lag= 0.1 min

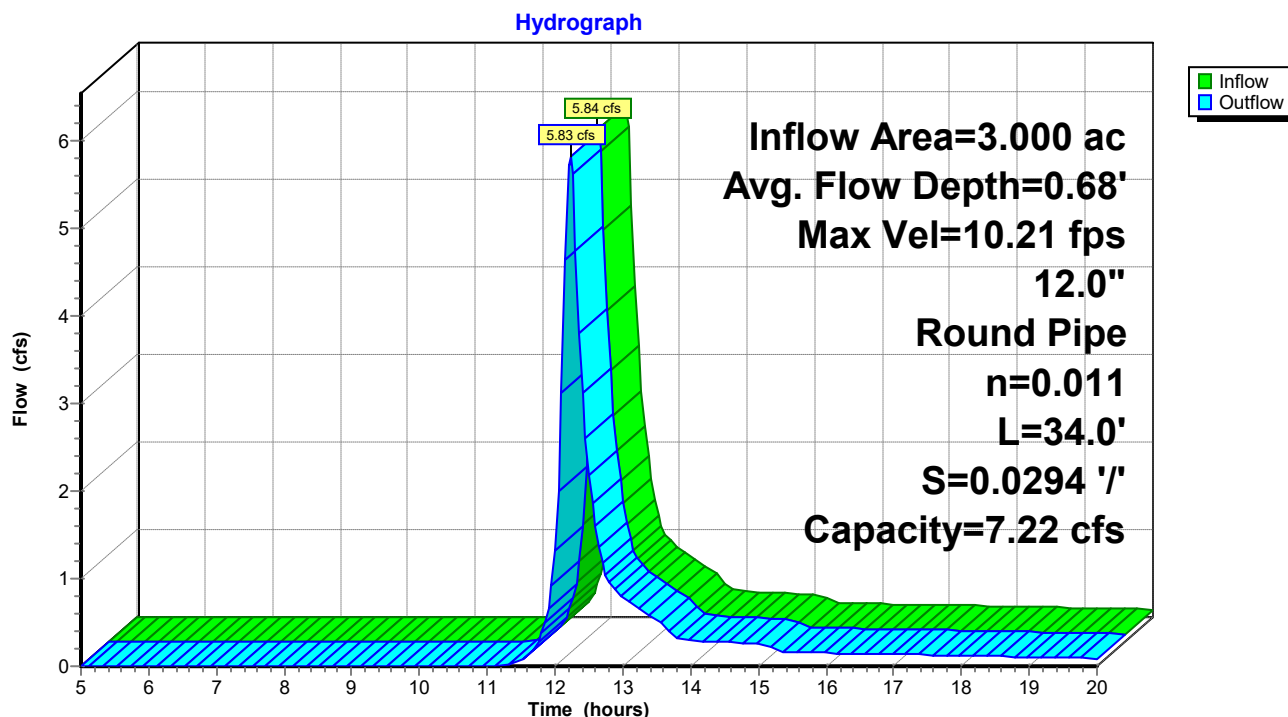
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Max. Velocity= 10.21 fps, Min. Travel Time= 0.1 min
 Avg. Velocity = 4.29 fps, Avg. Travel Time= 0.1 min

Peak Storage= 19 cf @ 12.22 hrs
 Average Depth at Peak Storage= 0.68'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 7.22 cfs

12.0" Round Pipe
 n= 0.011 Concrete pipe, straight & clean
 Length= 34.0' Slope= 0.0294 '/'
 Inlet Invert= 925.00', Outlet Invert= 924.00'



Reach 1R: Proposed Crossing Culvert



Summary for Pond 1P: Wet Pond

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 1.36" for 10 yr event
 Inflow = 13.78 cfs @ 12.21 hrs, Volume= 0.788 af
 Outflow = 0.32 cfs @ 16.81 hrs, Volume= 0.201 af, Atten= 98%, Lag= 276.0 min
 Primary = 0.32 cfs @ 16.81 hrs, Volume= 0.201 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 906.13' @ 16.81 hrs Surf.Area= 0.569 ac Storage= 0.601 af

Plug-Flow detention time= 246.1 min calculated for 0.201 af (25% of inflow)
 Center-of-Mass det. time= 168.7 min (971.3 - 802.6)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=0.32 cfs @ 16.81 hrs HW=906.13' (Free Discharge)

↑ **1=RCP_Round 12"** (Passes 0.32 cfs of 2.66 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.32 cfs @ 4.79 fps)

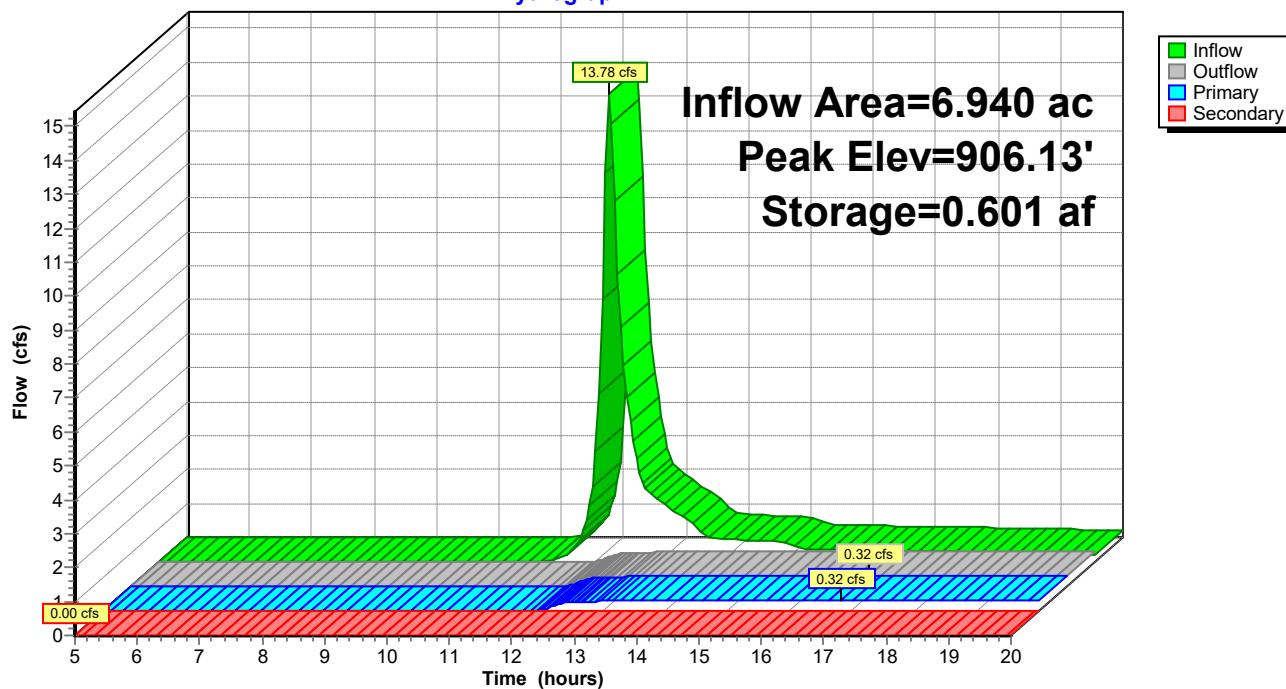
↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond

Hydrograph



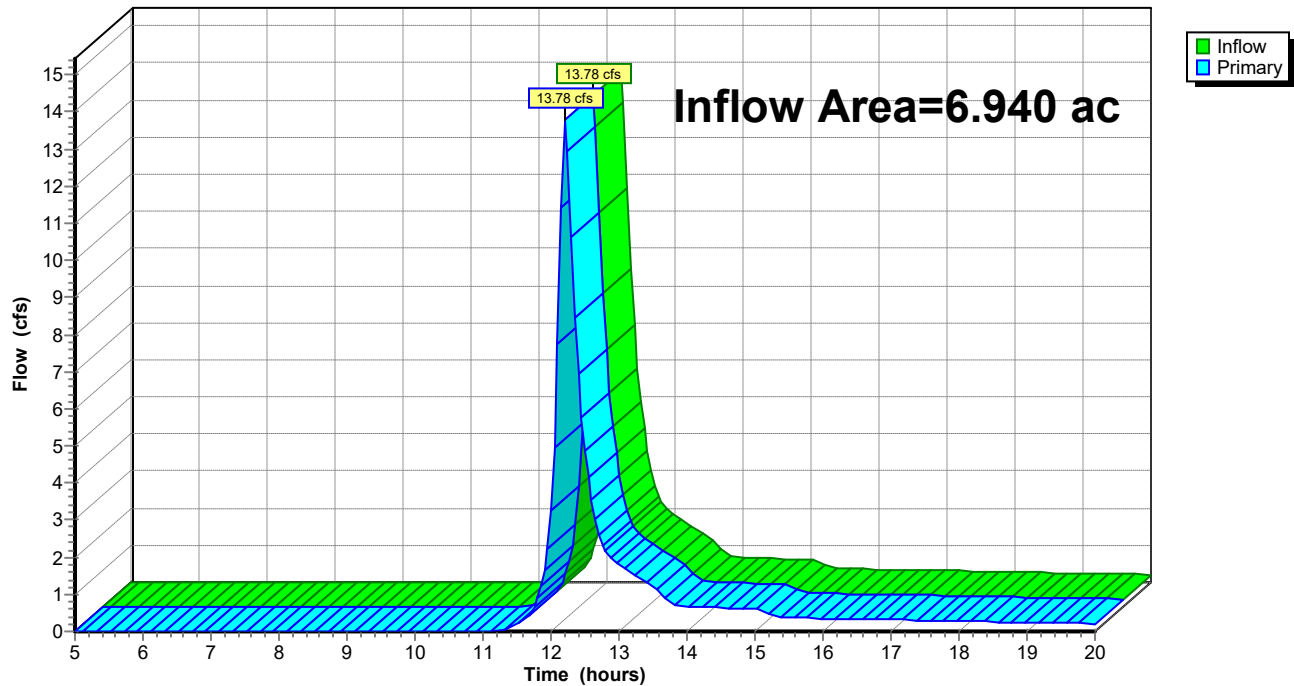
Summary for Link 1L: (new Link)

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 1.36" for 10 yr event
Inflow = 13.78 cfs @ 12.21 hrs, Volume= 0.788 af
Primary = 13.78 cfs @ 12.21 hrs, Volume= 0.788 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: (new Link)

Hydrograph

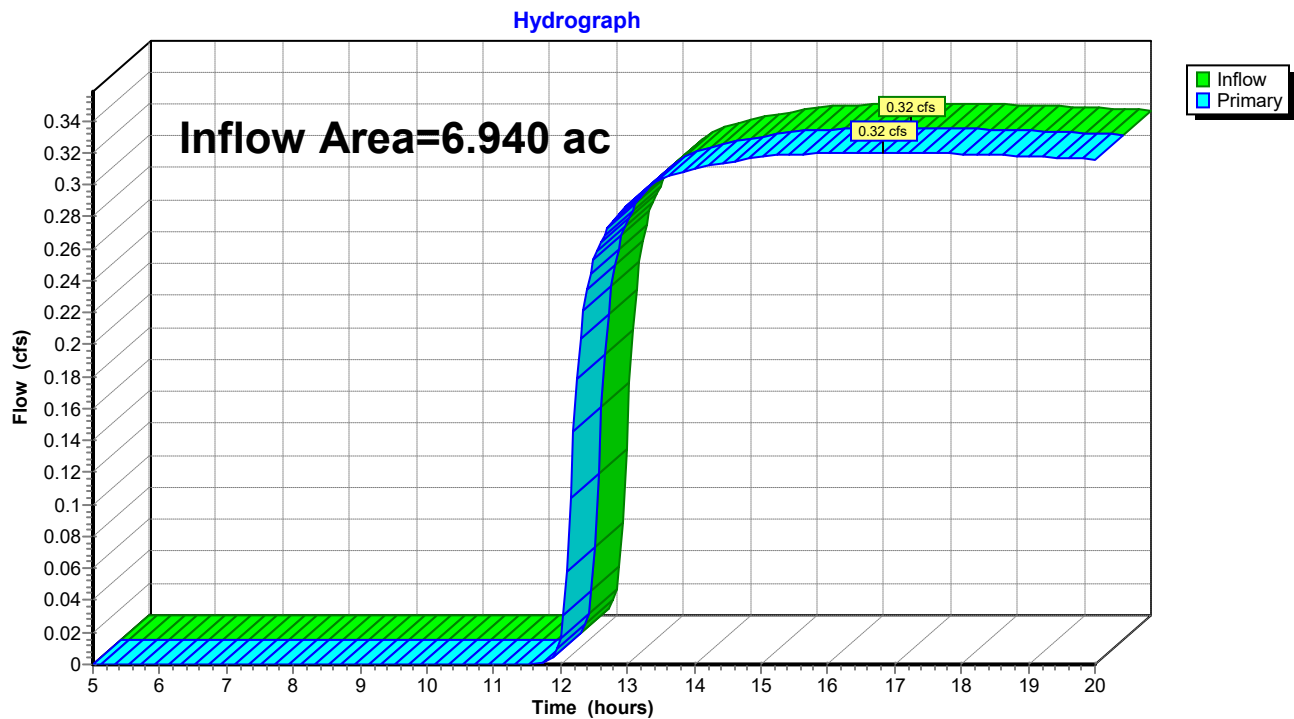


Summary for Link Post-Dev.: Post-Dev

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 0.35" for 10 yr event
Inflow = 0.32 cfs @ 16.81 hrs, Volume= 0.201 af
Primary = 0.32 cfs @ 16.81 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev



23.0023 Post-Development Proposed Parcels Including MSE 24-hr 3 100 yr Rainfall=6.22"

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Offsite from South Runoff Area=3.000 ac 30.00% Impervious Runoff Depth>3.03"
Flow Length=595' Tc=12.9 min CN=72 Runoff=13.17 cfs 0.758 af

Subcatchment 2S: Onsite Runoff Area=3.940 ac 29.70% Impervious Runoff Depth>3.03"
Flow Length=293' Tc=11.8 min CN=72 Runoff=17.91 cfs 0.995 af

Reach 1R: Proposed Crossing Culvert Avg. Flow Depth=1.00' Max Vel=10.09 fps Inflow=13.17 cfs 0.758 af
12.0" Round Pipe n=0.011 L=34.0' S=0.0294 '/' Capacity=7.22 cfs Outflow=7.22 cfs 0.758 af

Pond 1P: Wet Pond Peak Elev=907.08' Storage=1.171 af Inflow=25.13 cfs 1.753 af
Primary=2.80 cfs 0.690 af Secondary=0.00 cfs 0.000 af Outflow=2.80 cfs 0.690 af

Link 1L: (new Link) Inflow=25.13 cfs 1.753 af
Primary=25.13 cfs 1.753 af

Link Post-Dev.: Post-Dev Inflow=2.80 cfs 0.690 af
Primary=2.80 cfs 0.690 af

Total Runoff Area = 6.940 ac Runoff Volume = 1.753 af Average Runoff Depth = 3.03"
70.17% Pervious = 4.870 ac 29.83% Impervious = 2.070 ac

Summary for Subcatchment 1S: Offsite from South

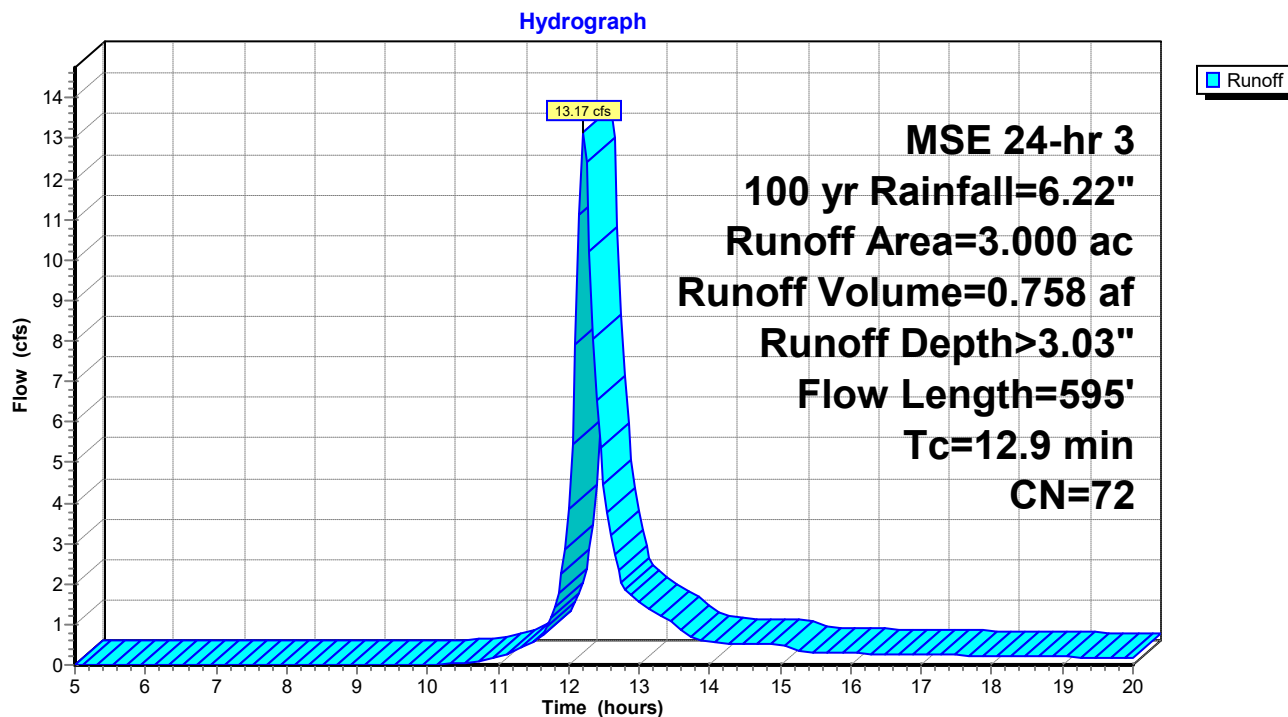
Runoff = 13.17 cfs @ 12.21 hrs, Volume= 0.758 af, Depth> 3.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 100 yr Rainfall=6.22"

Area (ac)	CN	Description
3.000	72	1/3 acre lots, 30% imp, HSG B
2.100		70.00% Pervious Area
0.900		30.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0700	0.18		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
1.8	185	0.0108	1.67		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
1.4	250	0.0360	3.05		Shallow Concentrated Flow, Sh. Conc. Flow-Trees Unpaved Kv= 16.1 fps
0.5	60	0.0167	2.08		Shallow Concentrated Flow, Sh. Conc. Flow-Grass Unpaved Kv= 16.1 fps
12.9	595	Total			

Subcatchment 1S: Offsite from South



Summary for Subcatchment 2S: Onsite

Runoff = 17.91 cfs @ 12.20 hrs, Volume= 0.995 af, Depth> 3.03"

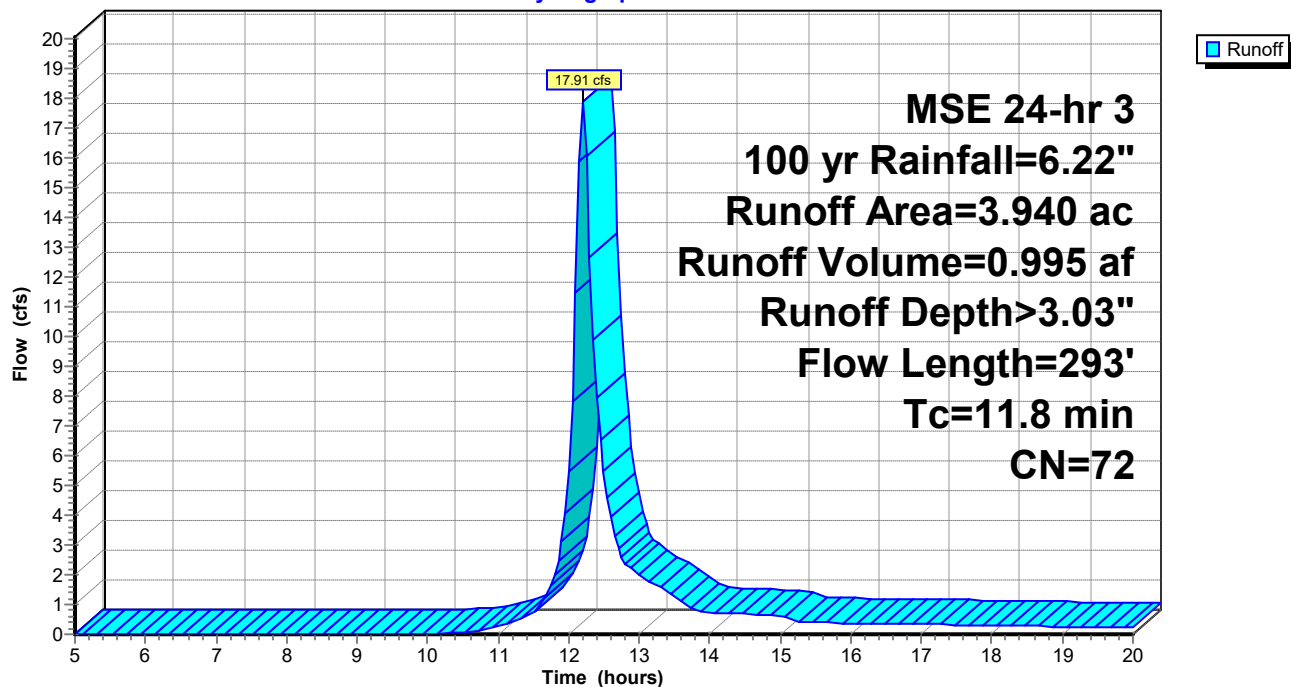
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 MSE 24-hr 3 100 yr Rainfall=6.22"

Area (ac)	CN	Description
0.350	98	Roofs, HSG B
* 0.330	98	Driveways, HSG B
0.490	98	Water Surface, HSG B
2.770	61	>75% Grass cover, Good, HSG B
3.940	72	Weighted Average
2.770		70.30% Pervious Area
1.170		29.70% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	16	0.0300	1.05		Sheet Flow, Sheet Flow Pavement Smooth surfaces n= 0.011 P2= 2.80"
11.3	84	0.0300	0.12		Sheet Flow, Sheet Flow-Grass Grass: Dense n= 0.240 P2= 2.80"
0.2	193	0.0850	14.44	288.83	Channel Flow, Channel-Grass Swale Area= 20.0 sf Perim= 20.0' r= 1.00' n= 0.030 Short grass
11.8	293	Total			

Subcatchment 2S: Onsite

Hydrograph



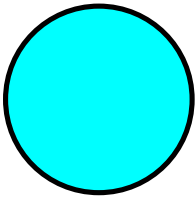
Summary for Reach 1R: Proposed Crossing Culvert

Inflow Area = 3.000 ac, 30.00% Impervious, Inflow Depth > 3.03" for 100 yr event
 Inflow = 13.17 cfs @ 12.21 hrs, Volume= 0.758 af
 Outflow = 7.22 cfs @ 12.15 hrs, Volume= 0.758 af, Atten= 45%, Lag= 0.0 min

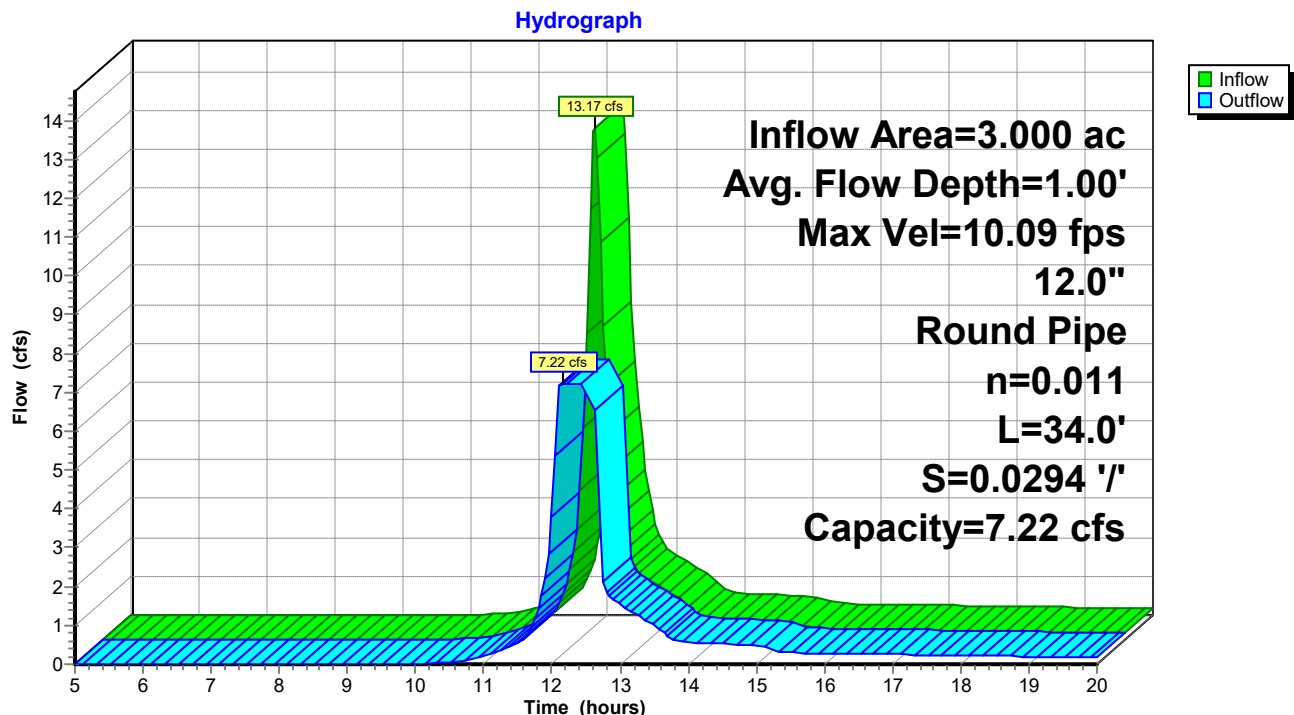
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Max. Velocity= 10.09 fps, Min. Travel Time= 0.1 min
 Avg. Velocity= 4.94 fps, Avg. Travel Time= 0.1 min

Peak Storage= 27 cf @ 12.10 hrs
 Average Depth at Peak Storage= 1.00'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 7.22 cfs

12.0" Round Pipe
 n= 0.011 Concrete pipe, straight & clean
 Length= 34.0' Slope= 0.0294 '/
 Inlet Invert= 925.00', Outlet Invert= 924.00'



Reach 1R: Proposed Crossing Culvert



Summary for Pond 1P: Wet Pond

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 3.03" for 100 yr event
 Inflow = 25.13 cfs @ 12.20 hrs, Volume= 1.753 af
 Outflow = 2.80 cfs @ 13.30 hrs, Volume= 0.690 af, Atten= 89%, Lag= 66.1 min
 Primary = 2.80 cfs @ 13.30 hrs, Volume= 0.690 af
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 907.08' @ 13.30 hrs Surf.Area= 0.636 ac Storage= 1.171 af

Plug-Flow detention time= 183.4 min calculated for 0.687 af (39% of inflow)
 Center-of-Mass det. time= 115.4 min (905.8 - 790.4)

Volume	Invert	Avail.Storage	Storage Description
#1	905.00'	1.785 af	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
905.00	0.490	0.000	0.000
906.00	0.560	0.525	0.525
907.00	0.630	0.595	1.120
908.00	0.700	0.665	1.785

Device	Routing	Invert	Outlet Devices
#1	Primary	905.00'	12.0" Round RCP_Round 12" L= 22.0' RCP, mitered to conform to fill, Ke= 0.700 Inlet / Outlet Invert= 905.00' / 904.00' S= 0.0455 ' / Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 0.79 sf
#2	Device 1	905.00'	3.5" Vert. Orifice/Grate C= 0.600
#3	Device 1	906.90'	36.0" Horiz. Orifice/Grate C= 0.600
			Limited to weir flow at low heads
#4	Secondary	907.50'	10.0' long x 7.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.40 2.52 2.70 2.68 2.68 2.67 2.66 2.65 2.65 2.65 2.66 2.65 2.66 2.68 2.70 2.73 2.78

Primary OutFlow Max=2.80 cfs @ 13.30 hrs HW=907.08' (Free Discharge)

↑ **1=RCP_Round 12"** (Passes 2.80 cfs of 4.19 cfs potential flow)

↑ **2=Orifice/Grate** (Orifice Controls 0.45 cfs @ 6.70 fps)

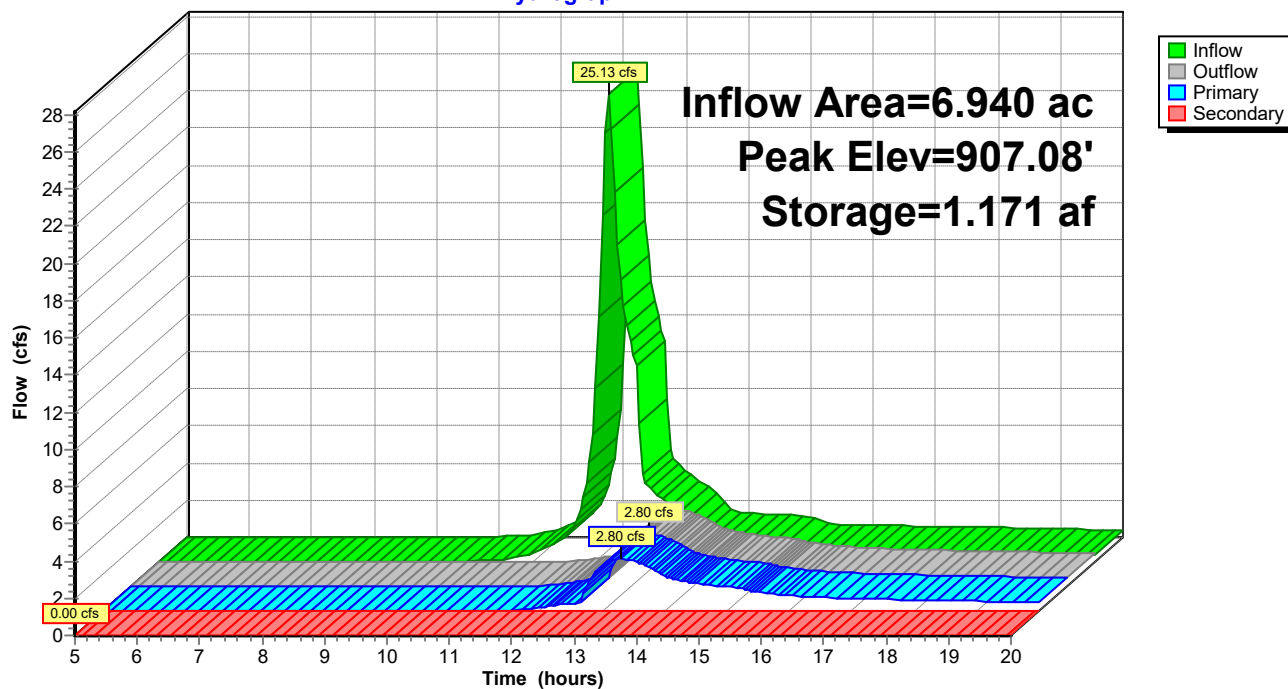
↑ **3=Orifice/Grate** (Weir Controls 2.35 cfs @ 1.39 fps)

Secondary OutFlow Max=0.00 cfs @ 5.00 hrs HW=905.00' (Free Discharge)

↑ **4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: Wet Pond

Hydrograph



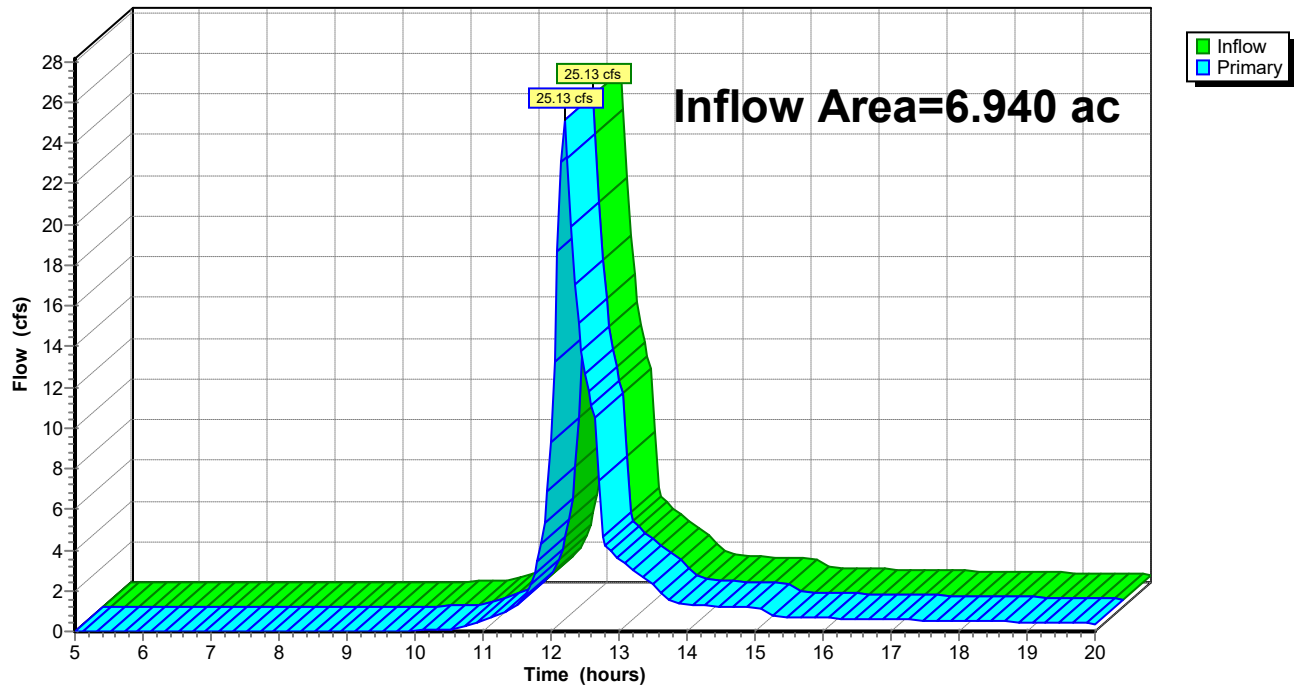
Summary for Link 1L: (new Link)

Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 3.03" for 100 yr event
 Inflow = 25.13 cfs @ 12.20 hrs, Volume= 1.753 af
 Primary = 25.13 cfs @ 12.20 hrs, Volume= 1.753 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 1L: (new Link)

Hydrograph

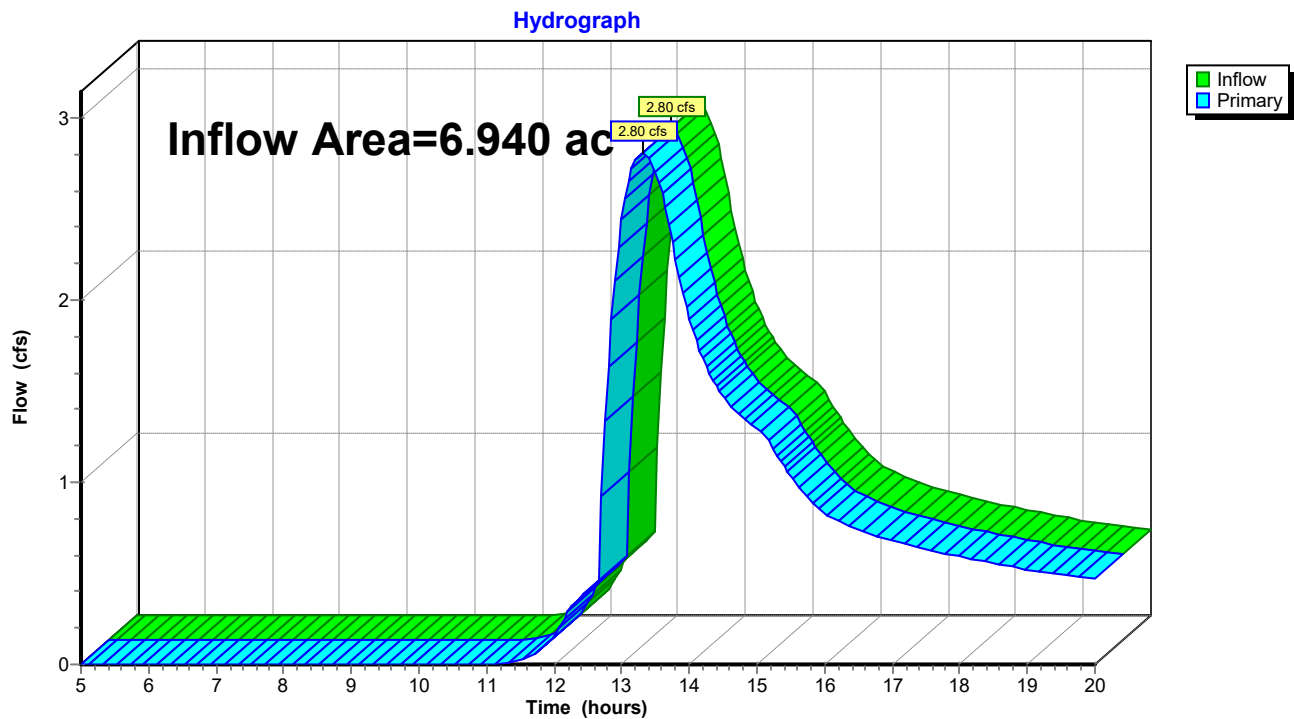


Summary for Link Post-Dev.: Post-Dev

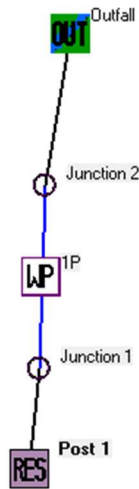
Inflow Area = 6.940 ac, 29.83% Impervious, Inflow Depth > 1.19" for 100 yr event
Inflow = 2.80 cfs @ 13.30 hrs, Volume= 0.690 af
Primary = 2.80 cfs @ 13.30 hrs, Volume= 0.690 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link Post-Dev.: Post-Dev



Appendix 4 POST DEVELOPMENT CONDITIONS (WATER QUALITY)



Canyon Development-Williams Bay-WinSLAMM Water Quality Calculations-Project Parcels

Data file name: P:\Shared\1 - Projects\2023\23.0023 - Canyon Development - WB Residential - 6 Parcels - WHA-00001 - 00006\Hydrology\Slamm\5-5-25 Final Stormwater Management\5-5-25 Proposed Parcels 5-5-25.mdb

WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdX

Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv

Cost Data file name:

Seed for random number generator: -42

Study period starting date: 01/01/81 Study period ending date: 12/31/81

Start of Winter Season: 12/02 End of Winter Season: 03/12

Date: 04-17-2025 Time: 13:07:10

Site information:

Canyon Development-Williams Bay, Wisconsin

LU# 1 - Residential: 2S Onsite Total area (ac): 3.940

1 - Roofs 1: 0.350 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

25 - Driveways 1: 0.330 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

45 - Large Landscaped Areas 1: 2.770 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

70 - Water Body Areas: 0.490 ac. Source Area PSD File:

Control Practice 1: Wet Detention Pond CP# 1 (DS) - 1P

Particle Size Distribution file name: Not needed - calculated by program

Initial stage elevation (ft): 3

Peak to Average Flow Ratio: 3.8

Maximum flow allowed into pond (cfs): No maximum value entered

Outlet Characteristics:

Outlet type: Orifice 1

1. Orifice diameter (ft): 0.29
2. Number of orifices: 1
3. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10
2. Weir crest width (ft): 7
3. Height from datum to bottom of weir opening: 5.5

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 3
2. Stand pipe height above datum (ft): 4.9

Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.01	0.1500	0.00	0.00
2	1.00	0.2100	0.00	0.00
3	2.00	0.2700	0.00	0.00
4	3.00	0.4900	0.00	0.00
5	4.00	0.5600	0.00	0.00
6	5.00	0.6300	0.00	0.00
7	6.00	0.7000	0.00	0.00

File Name:

P:\Shared\1 - Projects\2023\23.0023 - Canyon Development - WB Residential - 6 Parcels - WHA-00001 - 00006\Hydrology\Slamm\5-5-25 Final Stormwater Management\5-5-25 Proposed Parcels 5-5-25.mdb

Outfall Output Summary

	Runoff Volume (cu. ft.)	Percent Runoff Reduction	Runoff Coefficient (Rv)	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of All Land Uses without Controls	72900		0.16	59.63	271.4	
Outfall Total with Controls	73030	-0.18 %	0.16	2.291	10.44	96.15 %
Current File Output: Annualized Total After Outfall Controls	73230		Years in Model Run: 1.00		10.47	

Pollutant	Concen- tration - No Controls	Concen- tration - With Controls	Concen- tration Units	Pollutant Yield - No Controls	Pollutant Yield - With Controls	Pollutant Yield Units	Percent Yield Reduction
Particulate Solids	59.63	2.291	mg/L	271.4	10.44	lbs	96.15 %
Total Solids	91.47	33.97	mg/L	416.3	154.9	lbs	62.79 %
Total Phosphorus	0.4087	0.1593	mg/L	1.860	0.7264	lbs	60.95 %

Print Output Summary to .csv File

Print Output Summary to Text File

Print Output Summary to Printer

Total Area Modeled (ac)

3.940

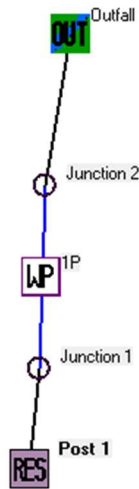
Total Control Practice Costs

Capital Cost	N/A
Land Cost	N/A
Annual Maintenance Cost	N/A
Present Value of All Costs	N/A
Annualized Value of All Costs	N/A

Perform Outfall
Flow Duration
Curve Calculations

Receiving Water Impacts Due To Stormwater Runoff (CWP Impervious Cover Model)

	Calculated Rv	Approximate Urban Stream Classification
Without Controls	0.16	Fair
With Controls	0.16	Fair



Canyon Development-Williams Bay-WinSLAMM Water Quality Calculations-Project Parcels including Offsite

Data file name: P:\Shared\1 - Projects\2023\23.0023 - Canyon Development - WB Residential - 6 Parcels - WHA-00001 - 00006\Hydrology\Slamm\5-5-25 Final Stormwater Management\5-5-25 Proposed Parcels including Offsite 5-5-25.mdb

WinSLAMM Version 10.5.0

Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN

Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx

Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx

Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std

Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std

Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std

Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False

Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdxd

Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv

Cost Data file name:

Seed for random number generator: -42

Study period starting date: 01/01/81 Study period ending date: 12/31/81

Start of Winter Season: 12/02 End of Winter Season: 03/12

Date: 04-17-2025 Time: 13:07:45

Site information:

Canyon Development-Williams Bay, Wisconsin

LU# 1 - Residential: 2S Onsite Total area (ac): 6.940

1 - Roofs 1: 0.800 ac. Pitched Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

25 - Driveways 1: 0.780 ac. Disconnected Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

45 - Large Landscaped Areas 1: 4.870 ac. Normal Silty Source Area PSD File: C:\WinSLAMM Files\NURP.cpz

70 - Water Body Areas: 0.490 ac. Source Area PSD File:

Control Practice 1: Wet Detention Pond CP# 1 (DS) - 1P

Particle Size Distribution file name: Not needed - calculated by program

Initial stage elevation (ft): 3

Peak to Average Flow Ratio: 3.8

Maximum flow allowed into pond (cfs): No maximum value entered

Outlet Characteristics:

Outlet type: Orifice 1

1. Orifice diameter (ft): 0.29
2. Number of orifices: 1
3. Invert elevation above datum (ft): 3

Outlet type: Broad Crested Weir

1. Weir crest length (ft): 10
2. Weir crest width (ft): 7
3. Height from datum to bottom of weir opening: 5.5

Outlet type: Vertical Stand Pipe

1. Stand pipe diameter (ft): 3
2. Stand pipe height above datum (ft): 4.9

Pond stage and surface area

Entry Number	Stage (ft)	Pond Area (acres)	Natural Seepage (in/hr)	Other Outflow (cfs)
0	0.00	0.0000	0.00	0.00
1	0.01	0.1500	0.00	0.00
2	1.00	0.2100	0.00	0.00
3	2.00	0.2700	0.00	0.00
4	3.00	0.4900	0.00	0.00
5	4.00	0.5600	0.00	0.00
6	5.00	0.6300	0.00	0.00
7	6.00	0.7000	0.00	0.00

File Name:

P:\Shared\1 - Projects\2023\23.0023 - Canyon Development - WB Residential - 6 Parcels - WHA-00001 - 00006\Hydrology\Slamm\5-5-25 Final Stormwater Management\5-5-25 Proposed Parcels including Offsite 5-5-25.mdb

Outfall Output Summary

	Runoff Volume (cu. ft.)	Percent Runoff Reduction	Runoff Coefficient (Rv)	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of All Land Uses without Controls	91731		0.11	85.89	491.9	
Outfall Total with Controls	91887	-0.17 %	0.11	4.387	25.17	94.88 %
Current File Output: Annualized Total After Outfall Controls	92139		Years in Model Run: 1.00		25.23	

Pollutant	Concen- tration - No Controls	Concen- tration - With Controls	Concen- tration Units	Pollutant Yield - No Controls	Pollutant Yield - With Controls	Pollutant Yield Units	Percent Yield Reduction
Particulate Solids	85.89	4.387	mg/L	491.9	25.17	lbs	94.88 %
Total Solids	132.0	50.15	mg/L	755.7	287.7	lbs	61.93 %
Total Phosphorus	0.5798	0.2293	mg/L	3.320	1.315	lbs	60.39 %

Print Output Summary to .csv File

Print Output Summary to Text File

Print Output Summary to Printer

Total Area Modeled (ac)

6.940

Total Control Practice Costs

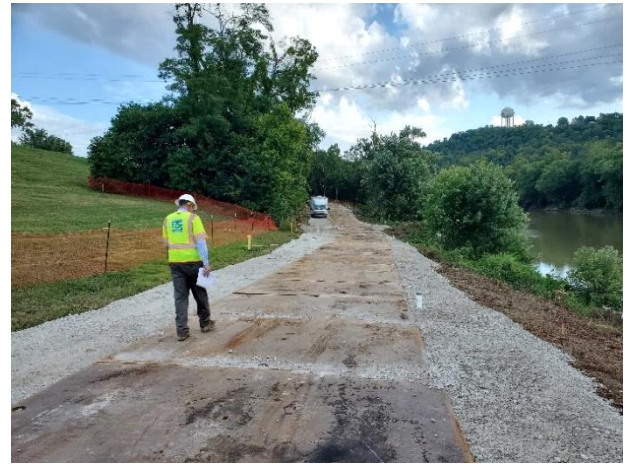
Capital Cost	N/A
Land Cost	N/A
Annual Maintenance Cost	N/A
Present Value of All Costs	N/A
Annualized Value of All Costs	N/A

Perform Outfall
Flow Duration
Curve Calculations

Receiving Water Impacts Due To Stormwater Runoff (CWP Impervious Cover Model)

	Calculated Rv	Approximate Urban Stream Classification
Without Controls	0.11	Good
With Controls	0.11	Good

Appendix 5 GEOTECHNICAL REPORT



ECS Midwest, LLC

Geotechnical Engineering Report Geneva Street Infiltration

Geneva Street
Williams Bay, Wisconsin

ECS Project Number 42:2648

October 28, 2024





ECS MIDWEST, LLC

Geotechnical • Construction Materials • Environmental • Facilities

October 28, 2024

Ms. Jennifer Wiese
Treasurer
Village of Williams Bay
PO BOX 580
Williams Bay, WI 53191

ECS Project No. 42:2648

Reference: Geotechnical Engineering Report
Geneva Street Infiltration
Geneva Street
Williams Bay, Wisconsin

Dear Ms. Wiese:

ECS Midwest, LLC (ECS) has completed the subsurface exploration, field and laboratory testing, and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our agreed scope of services. This report presents our understanding of the geotechnical aspects of the project, the results of the field exploration and laboratory testing conducted, and our design and construction recommendations.

It has been our pleasure to be of service to you on this project. ECS would like to continue its services during design and provide our services during construction to check the assumptions of subsurface conditions made for this report. Please contact us should you have questions about the information contained in this report, or if ECS can be of further assistance to you.

Respectfully submitted,

ECS Midwest, LLC

Lauren McGovern
Geotechnical Staff Project Manager
LMcGovern@ecslimited.com



Darin Maciolek, P.E.
Principal, Geotechnical Dept. Manager
DMaciolek@ecslimited.com

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APPENDICES

Appendix A – Drawings & Reports

- Site Location Diagram
- Boring Location Diagram
- Soil Survey Map

Appendix B – Field Operations

- Reference Notes for Boring Logs
- Subsurface Exploration Procedures: SPT
- Boring Logs

Appendix C – Laboratory Testing

- Laboratory Testing Procedures: Index Testing
- USDA Classification System
- Plasticity Chart(s)
- Particle Size Distribution

Appendix D – Supplemental Report Documents

- Soil Evaluation – Storm Form

Appendix E – Other Information

- Important Information about This Geotechnical-Engineering Report

EXECUTIVE SUMMARY

This Executive Summary is intended as a very brief overview of the primary geotechnical conditions expected to affect design and construction. Information gleaned from this Executive Summary should not be utilized in lieu of reading the entire geotechnical report.

- The main site development challenges are expected to include moisture control of the site soils.
- Because of density of the woods, which included downed trees, two of the planned boring locations could not be accessed.
- The site soils encountered at the borings located within the proposed stormwater management (SWM) area are predominately clayey and are anticipated to have low infiltration rates. Based on the soil types encountered, exemption from infiltration is expected.

1.0 INTRODUCTION

The purpose of this study was to provide geotechnical information for the design of stormwater management basin. The recommendations developed for this report are based on project information supplied by Baxter & Woodman.

Our services were provided in accordance with ECS Proposal No. 42:3888-GP, dated August 7, 2024, as authorized by Mr. William Duncan of the Village of Williams Bay on September 17, 2024, which includes the Terms and Conditions of Service included therein.

This report contains the procedures and results of the subsurface exploration and laboratory testing programs, a description of existing site conditions, engineering analyses, and geotechnical recommendations for the design and construction.

The report includes the following items:

- A brief description of the field and laboratory test procedures and results.
- A description of the observed surface topographical features and site conditions.
- A description of area and site geologic conditions.
- A description of the interpreted subsurface soil stratigraphy with pertinent available physical properties.
- Records of the subsurface exploration(s) (test boring log).
- Evaluation and recommendations for wet detention pond design in accordance with the Wisconsin Department of Natural Resources Conservation Practice Standard 1001 and NRCS.
- Evaluation of infiltration in accordance with the Wisconsin Department of Natural Resources Conservation Practice Standard 1002 and NRCS.
- Recommendations for site preparation and construction of engineered fills, including an evaluation of on-site soils for use as engineered fills, and delineation of potentially unsuitable soils and/or soils exhibiting excessive moisture at the time of sampling.
- General considerations relative to groundwater.

The scope of services for this project did not include an environmental assessment for determining the presence or absence of wetlands, or corrosive, hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air on or below, or around this site. Statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes.

2.0 PROJECT INFORMATION

2.1 PROJECT LOCATION/CURRENT SITE USE/PAST SITE USE

The project site is located at the north side of East Geneva Street in Williams Bay, Walworth County, Wisconsin. The subject property is bounded to the north, east and west by residential developments, and to the south by Geneva Street. The site location is shown in Figure 2.1.1 below, and on the Site Location Diagram in Appendix A.



Figure 2.1.1 Site Location (approximate site outlined in red)

The site is currently undeveloped, wooded land. At the time this report was written, a site-specific topographic survey was not available. The ground surface elevations, estimated from the topographic information on the Walworth County, WI – One View website, vary from approximately EL. 898 to EL. 930 feet.

2.2 PROPOSED CONSTRUCTION

We understand the proposed project will include the construction of a stormwater management area. The information in the table below summarizes our understanding.

DESIGN INFORMATION			
Subject		Expectation	
SWM Device	Type	Infiltration	B
	Bottom Depth/Elevation	4 to 8 feet below site grade	B
Grading	Cut	Less than 8 feet	B
	Fill	Less than 2 feet	B

R: Reported by client and/or design team

B: Based on ECS estimates in absence of information from client and/or design team

If ECS' understanding of the project is not correct or the design changes, especially if elevations are different, please contact ECS so that we may review these changes and revise our recommendations, as appropriate.

3.0 FIELD EXPLORATION AND LABORATORY TESTING

3.1 FIELD EXPLORATION

The exploration procedures are described in greater detail in Appendix B in the insert titled Subsurface Exploration Procedures: SPT.

ECS used a handheld GPS unit to field locate the borings prior to mobilization of the drilling equipment. The approximate boring location is shown on the Boring Location Diagram in Appendix A. Ground surface elevations at the boring locations were estimated from the topographic information on the Walworth County, WI – One View website. Ground surface elevations and boring locations determined without professional survey are approximate and may not be appropriate for final design and construction.

Our scope of services included three borings. However, due to the density of trees and presence of fallen trees only one of the planned borings was drilled at the site on October 9, 2024, by a subcontracted driller. The boring was advanced to an approximate depth of 20 feet. The drill crew utilized a 7822DT Geoprobe track-mounted rotary drilling rig equipped with continuous flight, hollow stem augers.

The drill crew backfilled the boreholes at completion of drilling. Settlement or expansion of borehole backfill can occur over time resulting in a trip hazard. Monitoring the boreholes after initial drilling activities is not within our scope but should be done by the client or property owner.

3.2 SUBSURFACE CHARACTERIZATION

The observed subsurface conditions were generally consistent with published geological mapping. Information regarding the site geology (Soil Survey Mapping) is included in Appendix A. Below is a generalized characterization of the subsurface materials observed at the boring locations. Please refer to the Boring Logs in Appendix B.

GENERALIZED SUBSURFACE STRATIGRAPHY					
Approx. Depth to Stratum Bottom (feet)	Strata	Description	SPT ⁽¹⁾ N-value Range (bpf)	Calibrated Penetrometer Resistance (tsf)	Moisture Content (%)
Surface	--	Topsoil (6 inches ±)	--	--	--
6	I	(CL) LEAN CLAY, stiff to hard	7 - 17	1.5 - 4.5	12 - 18
12	II	(GC) CLAYEY GRAVEL WITH SAND, very stiff to hard	12	2.5 - 4.5	8 - 9
20	III	(CL) SANDY LEAN CLAY WITH GRAVEL, stiff to very stiff	8 - 11	1.25 - 3	10 - 15

1. Standard Penetration Test.

The soil stratification shown on the boring logs represents the interpreted soil conditions at the boring locations. Variations in the stratification can occur between sample intervals and between boring locations. The subsurface conditions at other times and locations on the site may differ from those found at the boring locations. If different site conditions are encountered during construction, ECS should be contacted to review our recommendations relative to the new information.

Because the split-spoon sampler has a 1⅜-inch inside diameter, the soil classifications noted on the boring logs may not be representative of the entire soil matrix. Material larger than the 1⅜-inch inside diameter of the split-spoon sampler cannot be collected and observed directly.

3.3 GROUNDWATER OBSERVATIONS

The drillers observed the boreholes for the presence of measurable free water during drilling and at the completion of drilling. The approximate depths and elevations of measurable water observed at the boring locations are listed on the boring logs in Appendix B.

Because mostly poor draining soils were encountered at the boring locations, the static groundwater level may take days or weeks to stabilize. Therefore, the lack of observed water may not provide a reasonable indication of the static groundwater conditions at the time of drilling.

Based upon our interpretation of the subsurface data, ECS estimates the static groundwater level to be at a depth deeper than the explored depth of approximately 20 feet below the site surface at the boring location.

Variations in the long-term water table elevation may result because of changes in precipitation, evaporation, surface water runoff, construction activities, and other factors. Perched water conditions may also develop and/or exist at shallower or variable depths seasonally, particularly within more permeable soil underlain by less permeable soil.

3.4 LABORATORY TESTING

The laboratory services performed by ECS for this project included classification and index property tests on select representative soil samples.

Each soil sample was visually classified based on texture and plasticity using ASTM D2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedures) and ASTM D2487 Standard Practice for Classification for Engineering Purposes (Unified Soil Classification System (USCS)) as a general guideline. After classification, the samples were grouped into the major zones noted on the boring logs in Appendix B. The USCS group symbols for each soil type are indicated in parentheses along

with the soil descriptions. The stratification lines between strata on the boring logs are approximate; in-situ, the transitions may be gradual.

The soils were also classified using the U.S. Department of Agriculture (USDA) Soil Classification System. The USDA classification system is briefly described in Appendix C. The USDA classifications can be found on the "Soil and Site Evaluation – Storm" form included in Appendix D of this report.

The results of the laboratory tests are included on the boring logs in Appendix B or separate test sheets in Appendix C. These tests included:

- Moisture content (ASTM D2216)
- Calibrated Penetrometer Resistance
- Atterberg Limits (ASTM D4318)
- Particle Size Distribution (ASTM D6913)
- Organic content by Loss on Ignition (LOI) (ASTM D2974)

The laboratory procedures are described in greater detail in Appendix C including the insert titled Laboratory Procedures.

The soil samples will be retained in our laboratory for a period of 60 days, after which, the samples will be discarded, unless other instructions are received as to their disposal.

4.0 DESIGN RECOMMENDATIONS

The following sections contain geotechnical design recommendations for stormwater management devices.

4.1 INFILTRATION BASIN DESIGN CONSIDERATIONS

The recommendations presented in this section are limited to stormwater infiltration considerations, which follows the general guidelines of WDNR Conservation Practice Standard 1002, Site Evaluation for Stormwater Infiltration. The recommendations in this section are based on the soil and groundwater conditions observed at the boring.

Specific details of the proposed infiltration device were not available at the time of this report preparation; it is recommended ECS be provided the plans, when available, to check that the recommendations provided herein are applicable. ECS should be retained to provide observation and testing during construction.

Our scope of services is not inclusive of each step involved in the initial site screening (Part A) of the WDNR Technical Standard 1002. Therefore, other conditions may exist at, or near the site that could exclude or exempt the site, or portions of the site from the infiltration requirements.

Infiltration Rates: Based on the soil types encountered, exemption from infiltration is expected. Estimated soil infiltration rates based on the textural classification of the soils encountered and the guidelines provided in the WDNR Conservation Practice Standard 1002 ranged from 0.03 to 0.11 inches/hour and are listed on the Soil and Site Evaluation - Storm form included in Appendix D. Infiltration rates based on soil textural classification and the guidelines provided in Table 2 of the WDNR Conservation Practice Standard 1002 should be adjusted for the least permeable soil layer within 5 feet of each of the listed intervals. These infiltration rates are estimates only. If better estimates of infiltration are required, ECS recommends field double ring infiltrometer tests be conducted.

Estimation of the final design infiltration rate should consider the effects of engineered fill placed, surface vegetation, erosion control devices, and potential groundwater mounding. Prior to and during construction, the design infiltration rate of the soil at the SWM device bottom should be verified. Compaction of the basin bottom subgrade during and following construction should be prevented as this may reduce the infiltration rate of the soil. This may require exclusion of construction traffic from the infiltration bottom, or loosening of the subgrade soil, such as by raking or discing. Sediment allowed to accumulate at the basin bottom will reduce infiltration. Measures should be taken to reduce accumulation of sediment. Periodic removal of sediment should be expected.

Seasonal High Water Table: Intermittent wet and dry periods may lead to soil mottling. The NRCS considers soil matrix or mottle colors of chroma 2 or lower (gray colors) as a potential indication of horizons that are saturated for at least part of the year. The upper limits of these mottles have been considered in the estimate of the seasonal high water table. Based on the boring information, the seasonal high water level is estimated to be at a depth deeper than the explored depth of 20 feet. Estimation of the seasonal high water level based on colors (redoximorphic features) may not be reliable. Redox features can be difficult to distinguish in sandy soils. Also, we often don't know how often or long the soil is saturated at a given depth from color alone. A better estimate of the seasonal high groundwater table would require installation of groundwater observation wells along with observing the wells over a long time period.

Bedrock: Bedrock is estimated to be deeper than the depth explored of 20 feet.

4.2 WET DETENTION POND DESIGN CONSIDERATIONS

The recommendations presented in this section are limited to a wet detention pond, which follows the general guidelines of Wisconsin Department of Natural Resources (WDNR) Conservation Practice Standard 1001, Wet Detention Ponds.

The predominant site clayey soils are estimated to have relatively low infiltration rates. The construction and use of a wet detention basin is considered to be feasible at this site provided any sands and silts are lined with clay.

Given the predominate clay soils at the site, scarification and recompaction of the basin sidewalls and bottom, to help disrupt fissures or more permeable thin soil seams is expected to be adequate. More gravelly layers, and permeable soil layers, seams or lenses where present are recommended to be undercut at least 2 feet and at least 2 feet of compacted clay liner placed to reduce lateral and/or vertical movement of water through the basin walls and bottom, particularly if a stable pool elevation is desired. Based on the boring information the lean clay excavated to construct the pond is expected to be adequate for use as a clay liner. The gravelly layer encountered between approximately 6 and 12 feet may have too much coarse material to meet liner material requirements. Testing of the soil to be used as liner material is recommended to check its adequacy for use as a clay liner. Moisture content adjustment of the soils prior to placement and compaction may be needed depending on the source. More moisture adjustment of the soils borrowed from the upper few feet than deeper is expected based on the borings. Scarification and recompaction of basin walls and bottom, and construction of the clay liner are recommended to be observed and tested by ECS.

Liner material is recommended to conform to WDNR Conservation Practice Standard 1001, Type A or Type B Liner requirements, as appropriate, which include the properties listed below.

RECOMMENDED CLAY LINER MATERIAL PROPERTIES		
Material Characteristic	Material Values	
	Type A Liner	Type B Liner
USCS Classification	CL or CH	CL or CH
Percentage Passing a No. 200 Sieve	50% minimum	50% minimum
In-Place Hydraulic Conductivity (cm/sec)	1×10^{-7} or less	1×10^{-6} or less
Liquid Limit (%)	25 or greater average, no value less than 20	16 or greater average, no value less than 14
Plasticity Index (%)	12 or greater average, no value less than 10	7 or greater average, no value less than 5
Organic Content per ASTM D2487	Less than 3% loss on ignition	Less than 3% loss on ignition

Clay liner material is recommended to be compacted at a moisture content 0 to 4 percent above the optimum moisture content and to a minimum of 95 percent of the maximum dry density determined by Standard Proctor (ASTM D698). Compact with a footed compactor weighing at least 25,000 pounds, operated continuously, in loose lift thicknesses not to exceed the smaller of 6 inches or the length of the teeth on the footed compactor used. The liner material must not contain deleterious materials. Materials considered deleterious include but are not limited to miscellaneous construction material, rubble fragments, wood fragments, material greater than 3 inches in nominal diameter, and hazardous materials.

A higher density than the minimum required by Natural Resources Conservation Practice Standard 1001 may be required depending on permeability requirements and should be determined based on laboratory testing of compacted samples of the liner material to be used. USDA-NRCS Wisconsin Construction Specification 300 Clay Liner gives additional information pertaining to selection and compaction of engineered fill for the clay liner. In addition to the USDA-NRCS Wisconsin Construction Specification 300 Clay Liner requirement that the water content of fill material be above the optimum moisture content, it is recommended the water content of fill material be no more than 4 percent above the optimum moisture content. The clay is recommended to be mechanically processed, such as with discing, prior to compaction to break up clods of clay to no more than half the loose lift thickness in size. The clay liner, once placed, should be protected from desiccation caused by drying of the soil. The formation of desiccation cracks will increase the risk of water loss through the clay liner.

As an alternative to a compacted clay liner, Appendix D of the WDNR Conservation Practice Standard 1001 outlines other acceptable liner materials, which include high density polyethylene (HDPE) and Geosynthetic Clay (GCL) liners.

If water control measures require a dewatering system, then it should be installed outside of the perimeter of the pond to avoid liner penetrations that could compromise the integrity of the liner system.

Remove water that accumulates in excavations and other construction areas, along with unstable soil as soon as possible.

Take measures to reduce seepage along conduits where inlet and outlet pipes are constructed. Typically accepted measures may include the use of granular filters, anti-seepage collars or bentonite.

Provide erosion protection to protect the pond side slopes and embankments. The placement of a granular riprap and/or establishment of vegetation can be considered for erosion control within the pond and surrounding areas. The interior slopes of the ponds should be constructed at an inclination of

3:1 (Horizontal: Vertical) or flatter to help reduce the potential for instability related problems. If steeper slopes are required, then slope stability analysis is recommended to be conducted.

5.0 SITE CONSTRUCTION CONSIDERATIONS

5.1 SUBGRADE PREPARATION

The method of site preparation will be influenced by factors unknown at the time this report was prepared, which may include weather before and during construction, the possibility of subsurface conditions not revealed by the boring(s), and the final project details.

5.1.1 Stripping and Grubbing

The subgrade preparation should include stripping pavement, vegetation, rootmat, topsoil, and other soft or otherwise unsuitable materials from the 10-foot expanded building limits, 5-foot expanded pavement limits, and 5 feet beyond the toe of engineered fills, where feasible. Topsoil deposits (approximately 6 inches thick) was observed at the boring location. Deeper topsoil or organic laden soils may be present, particularly in wet, low-lying, and poorly drained areas. In wooded areas, root masses may extend deeper and require additional localized excavation depth to completely remove the organics (root mass). The project team should be prepared to remove unsuitable material in its entirety within the limits noted above. Because topsoil depths can vary greatly across a site the contractor should verify topsoil depths as part of their bidding process. Note topsoil removal should not be based on soil coloration alone. After removal of the rootmat, it may be possible to leave some darker soils in place provided the soil contains no more than 5 percent organic matter, by dry weight, as determined by Loss on Ignition ASTM D2974, has the recommended strength characteristics and is stable under proofroll. ECS should be retained to observe and document that topsoil and other unsuitable surficial materials have been removed prior to the placement of engineered fill or construction of structures.

The subgrade should not be left exposed to the elements or construction traffic for a prolonged time as the subgrade may become disturbed and/or softened. If pavement or other protective coverings are not placed within a few days after exposing the final design subgrade, consideration should be given to leaving the subgrade approximately 1 foot above the final design subgrade, where feasible, to help reduce softening of the design subgrade soil.

5.1.2 Site Temporary Dewatering

The contractor shall make their own assessment of temporary dewatering needs based upon the limited subsurface groundwater information presented in this report. Soil and groundwater conditions may vary between sampling intervals. If the contractor believes additional subsurface information is needed to assess dewatering needs, the contractor should obtain such information at their own expense. ECS makes no warranties or guarantees regarding the adequacy of the provided information to determine dewatering requirements; such recommendations are beyond our scope of services.

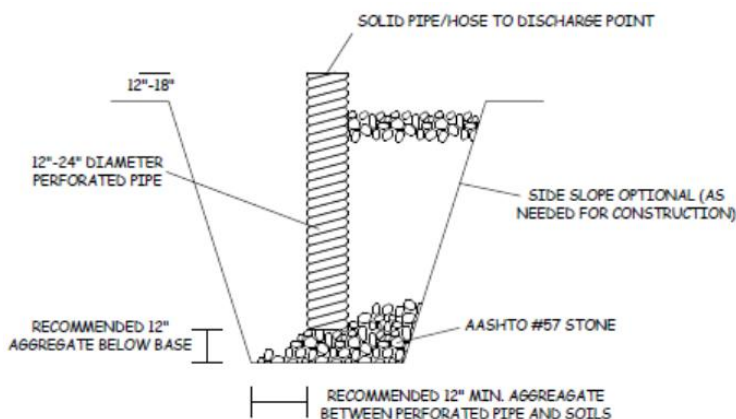
Dewatering systems are a critical component of many construction projects. Dewatering systems must be selected, designed, and maintained by a qualified and experienced (specialty or other) contractor familiar with the geotechnical and other aspects of the project. The failure to properly design and maintain a dewatering system for a given project can result in delayed construction, unnecessary undercuts, detrimental phenomena such as ‘running sand’ conditions, heaved subgrades, internal erosion (i.e., ‘piping’), the migration of ‘fines’ down-gradient towards the dewatering system, localized settlement of nearby infrastructure, foundations, slabs-on-grade and pavements, etc. Water discharged

from site dewatering systems are recommended to be discharged in accordance with local, state and federal requirements.

Surface Water: The surface of the site should be kept properly graded to enhance drainage of the surface water to appropriate discharge or storage areas during construction. Effort should be made to enhance the natural drainage without interrupting its pattern.

Subsurface Water: Groundwater observations are described in the **Groundwater Observations** section of this report. It appears the hydrostatic groundwater level at this site may be deeper than the explored depth of approximately 20 feet below grade. Based upon the results of the subsurface exploration and proposed construction, ECS' opinion is that construction dewatering at this site will be mainly to remove accumulated runoff water and perched water. Strategies for addressing groundwater are discussed below.

Strategies for Addressing Perched Groundwater: The typical strategy for addressing perched groundwater seepage into excavations and where excavations extend typically less than 1 to 2 feet below the water level, especially in areas containing primarily clay soils, is pumping from trench (or French) drains and sump pits with sump pumps which are backfilled with drainage aggregate such as AASHTO Size No. 57 Stone or open-graded bedding material. A typical sump pump drain (found in a sump pit or along a French drain) is depicted below. The inlet of the sump pump is placed at the bottom of the corrugated pipe and the discharge end of the sump is directed to an appropriate stormwater drain.



Sump Pit/Pump Conceptual Sketch

A typical French drain consists of an 18 to 24-inch wide by 18- to 24-inch-deep bed of AASHTO No. 57 aggregate (or similar open graded aggregate) wrapped in a medium duty, non-woven geotextile and (sometimes) containing a 6-inch diameter, Schedule 40 PVC perforated or slotted pipe. Actual dimensions should be determined during construction. After installation, the geotextile should be wrapped over the top of the aggregate and pipe followed by placement of backfill. The top of the drain should be positioned at least 3½ feet below the design subgrade elevation. Drains should not be routed within the expanded building limits.

Pumping wells or a vacuum system could also be used to address perched groundwater. These techniques often are only effective during the initial depletion of the perched water quantity and may quickly be ineffective at addressing accumulation of water from rain, snow, etc.

Install required sump pits and other dewatering systems outside the perimeter of the pond liner to reduce the potential for the formation of a detrimental preferential flow path through the liner.

5.2 EARTHWORK OPERATIONS

The following sections describe existing fill, soil reusability, and recommendations for engineered fill.

5.2.1 Engineered Fill

Product Submittals: Prior to placement of engineered fill, representative bulk samples (typically at least 50 to 100 pounds) of on-site and off-site borrow per material type should be submitted to ECS for laboratory testing, which may include natural moisture content, organic content, grain-size distribution, Atterberg limits, and moisture-density relationships for compaction. Import material should be tested prior to being hauled to the site to determine if it complies with project specifications. Alternatively, Proctor data from other accredited laboratories can be submitted if the test results are within the last 90 days.

Satisfactory Engineered Fill Materials: Engineered fills should consist of materials free of debris with the following engineering properties.

ENGINEERED FILL INDEX PROPERTIES		
Subject		Property
Plasticity	Upper 4 feet in Structure Areas and Upper 2 feet in Pavement Areas	LL ≤ 40, PI ≤ 15
	Below 4 feet in Structure Areas and Below 2 feet in Pavement Areas	LL ≤ 50, PI ≤ 20
Max. Particle Size		3 inches
Max. Organic Content (by dry weight)		5 percent

Open-graded materials, such as coarser sands, and gravels (SP and GP), which contain increased void space in their mass may need to be encapsulated within a filter geotextile. If the engineered fill is to provide low-frost susceptible characteristics, the engineered fill must be classified as a clean GP or GW (or clean coarser SW or SP) per Unified Soil Classification System (ASTM D-2487) and must be properly drained.

Unsatisfactory Materials: Unsatisfactory fill materials, which do not satisfy the requirements for suitable materials, include topsoil and organic materials (PT, OH, OL), silt (ML) within the frost zone, and high plasticity soils elastic silt (MH) and fat clay (CH).

Pea gravel is not recommended to be used as engineered fill. Pea gravel has round/smooth characteristics, no fines and does not interlock when compacted, which makes it more susceptible to future movement and instability resulting in excessive and variable settlement.

On-Site Borrow Suitability: Natural deposits of soils that meet the definition of Satisfactory Engineered Fill Materials are expected to be present at the site. Site soil used as engineered fill must not contain more than 5 percent organic matter as determined by ASTM D2974, and must be free of frozen matter, deleterious materials, over-sized material (maximum 3-inch particle diameter), or chemicals that may result in the material being classified as “contaminated.” The on-site soil may be feasible to use as engineered fill with proper moisture conditioning during favorable conditions. Site soil considered for use as engineered fill should be further evaluated by ECS prior to its use.

Depending on the conditions at the time of construction some drying of site soil prior to reuse as engineered fill may be needed. This may involve spreading and disking to aerate, chemical modification or other methods to reduce the soil moisture to within a narrow range of the soil's optimum moisture content to facilitate placement and compaction. Reuse of soils having elevated moisture content is often a point of contention and a source of delays and change orders. From a technical standpoint, soils with moisture contents wet of optimum can be reused provided the moisture is properly adjusted to within a workable range of the material optimum moisture content. From a practical standpoint, wet soils can be difficult to dry within small or congested areas or during unfavorable weather, and such difficulties should be considered during planning and budgeting. A clear understanding by the general contractor and grading subcontractor regarding the reuse of excavated soils will be important to reduce delays and unexpected cost overruns. It is important to establish as part of the contract whether soils having elevated moisture content will be considered suitable for reuse. Some conditions at the time of construction, such as wet or freezing weather, may preclude the use of on-site soil.

5.2.2 Compaction

Subgrade Benching: Fill material should be placed in horizontal lifts. Where fill materials will be placed to widen existing embankment fills, or placed up against sloping ground, the soil subgrade should be scarified, and the new fill benched and keyed into the existing material. Placement and compaction of fill is recommended to be on a 5 (H):1 (V) or flatter slope, or stepped or benched as required to flatten.

Engineered Fill Compaction: Engineered fill is recommended to be placed and compacted in appropriate thickness loose lifts as recommended below. Give as much importance to the moisture content requirements of the material as the density requirements during placement and compaction considering the moisture sensitivity of the soil.

ENGINEERED FILL COMPACTION RECOMMENDATIONS		
Subject		Recommendation
Compaction Standard		Standard Proctor, ASTM D698
Recommended Compaction	Structural Areas	≥ 98 percent of Maximum Dry Density
	Landscape/Greenspace Areas	≥ 90 percent of Maximum Dry Density
Moisture Content	Fine-grained	-1 to +3 % points of the material's optimum value
	Coarse-grained	-3 to +3 % points of the material's optimum value
Maximum Loose Thickness		8 inches prior to compaction ⁽¹⁾

1. The maximum loose lift thickness depends upon the type of compaction equipment used and material being compacted. Density testing during fill placement is important to check and document that the specified compaction is being achieved. In some cases, thinner lifts than noted above and/or more compaction energy may be needed to achieve the required degree of compaction.

Compaction equipment appropriate for the material type being compacted should be used. Sheepfoot compaction equipment is typically used for the fine-grained soils (clays). A vibratory steel drum roller is typically used for compaction of coarse-grained soils (sands and gravels) as well as to help seal compacted surfaces.

5.3 GENERAL CONSIDERATIONS

Fill Placement Considerations: Fill materials should not be placed on frozen soils, on frost-heaved soils, on excessively wet soils, or soils that are otherwise unstable. Borrow fill materials should not contain frozen materials at the time of placement, and frozen or frost-heaved soils should be removed prior to placement of engineered fill or other fill soils and aggregates. Excessively wet soils or aggregates should be scarified, aerated, and moisture conditioned.

Excavation Safety: Excavations and slopes should be maintained in accordance with OSHA excavation safety standards. The Contractor is solely responsible for designing and constructing stable, temporary excavations and slopes and should shore, slope, or bench the sides of the excavations and slopes as required to maintain stability of both the excavation sides and bottom. The Contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. In some cases, the use of shoring, bracing, or trench boxes may be required. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

Bidding/Estimating Considerations: Contractors bidding or undertaking work at the site should examine the results of the subsurface exploration, satisfy themselves as to the adequacy of the information for bidding and construction, make their own interpretation of the data, and consider the effect it may have on their cost proposal, construction techniques, schedule, and equipment capabilities. Furthermore, it is recommended contractors complete additional fieldwork and exploration they deem necessary to properly prepare a cost proposal for the site work. Soil borings do not provide the same wide-scale view of the subsurface conditions that is obtained during site grading, excavation or other aspects of earthwork construction. Additional scope may be required to obtain more detailed subsurface information needed for earthwork bid preparation, which could include test pits to better understand the lateral and vertical extents of subsurface materials of concern, particularly topsoil and existing undocumented fill, which may not be as easily identifiable from disturbed auguring and/or with spilt-spoon samples. Even with this additional information, budget contingencies should be carried in construction to help cover potential variations in subsurface conditions.

6.0 CLOSING

ECS has prepared this report to guide geotechnical-related design and construction aspects of the project. We performed these services in accordance with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at this time in the region. No other representation, express or implied, and no warranty or guarantee is included or intended in this report.

The description of the proposed project is based on information provided to ECS. If this information is inaccurate, either because of our interpretation of the documents provided, or site or design changes that may occur later, ECS should be contacted so that we can review our recommendations and provide additional or alternate recommendations as may be required to reflect the proposed construction.

We recommend ECS review the project's plans and specifications so that we may evaluate consistency of those plans/specifications with the intent of the geotechnical report recommendations.

Field observations and quality assurance testing during earthwork and foundation installation are an extension of, and integral to, the geotechnical design recommendations. We recommend that ECS be retained to apply our expertise throughout the geotechnical phases of construction, and to provide consultation and recommendations should issues arise.

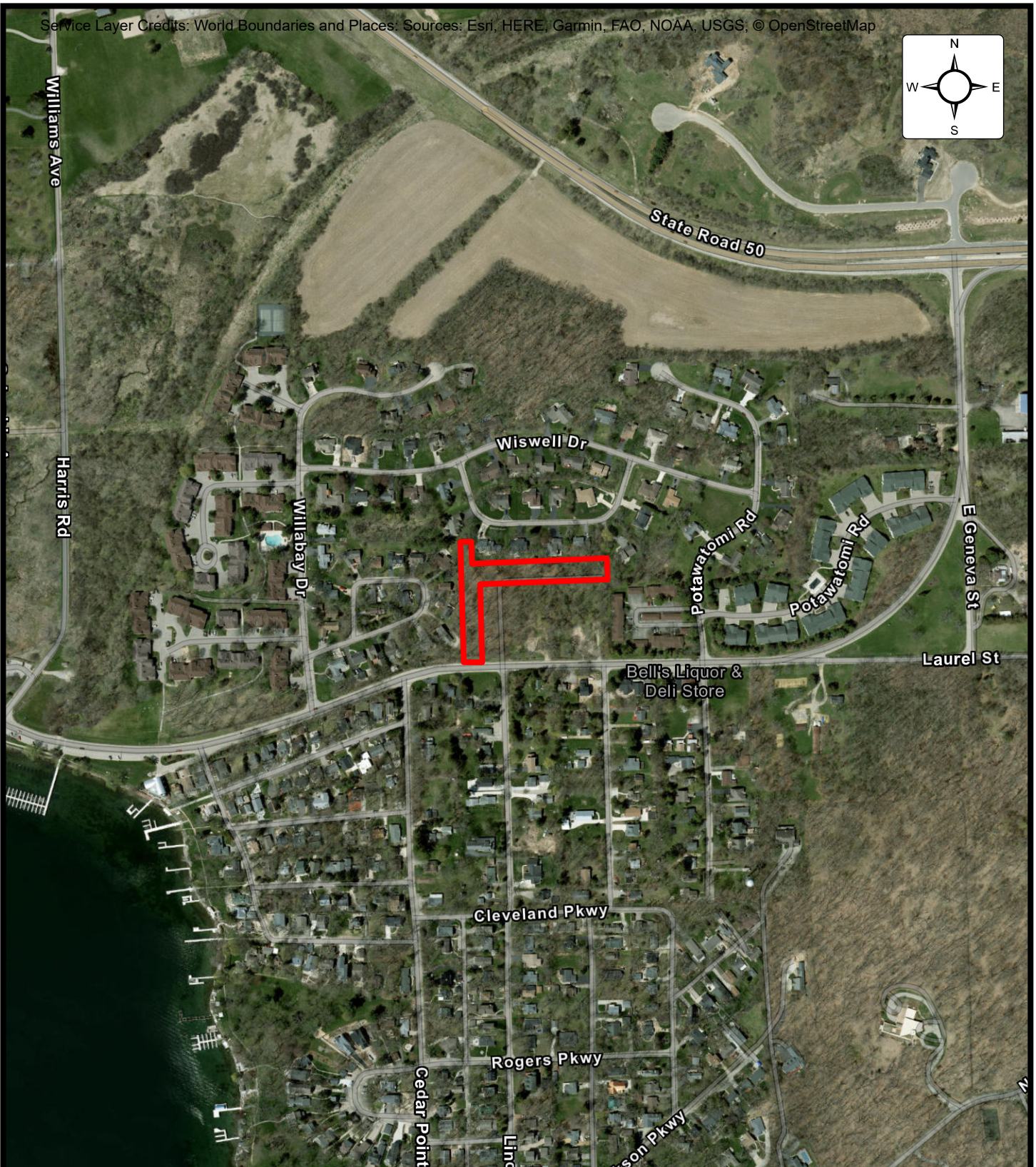
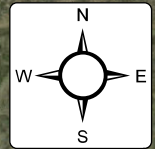
ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

Appendix A - Drawings and Reports

Site Location Diagram

Boring Location Diagram(s)

Soil Survey Map



SITE LOCATION DIAGRAM Geneva Street Infiltration

E Geneva Street, Williams Bay, Wisconsin

Village of Williams Bay

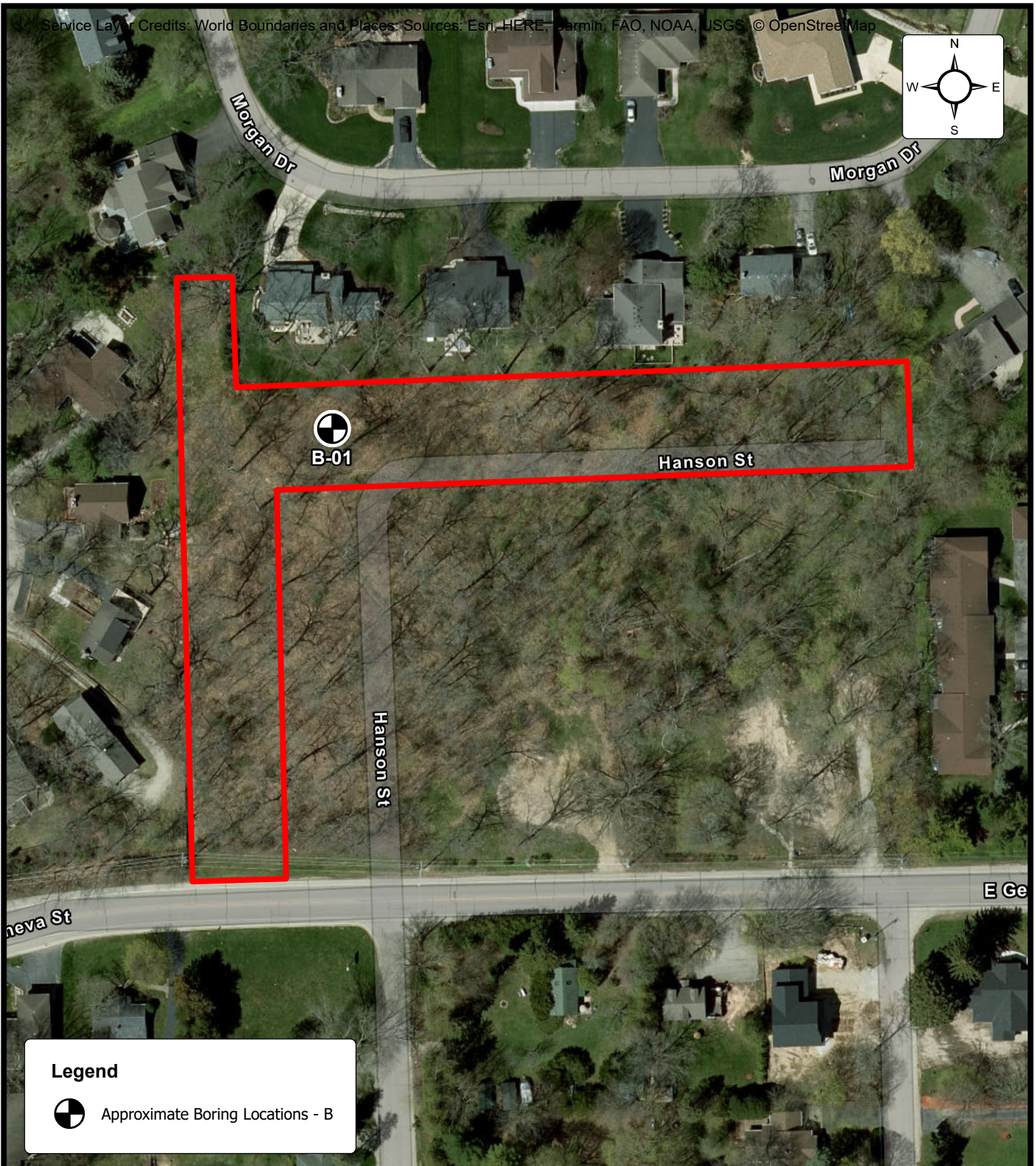
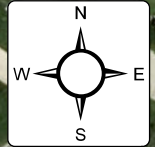
ENGINEER
DM1

SCALE
1" = 500'

PROJECT NO.
42:2648

SHEET
SLD

DATE
10/25/2024



Legend



Approximate Boring Locations - B



BORING LOCATION DIAGRAM Geneva Street Infiltration

E Geneva Street, Williams Bay, Wisconsin

Village of Williams Bay

ENGINEER
DM1

SCALE
1" = 100'

PROJECT NO.
42:2648

SHEET
BLD

DATE
10/25/2024



SOIL SURVEY MAPPING
Geneva Street Infiltration

Geneva Street, Williams Bay, Wisconsin
Village of Williams Bay

Engineer	DM
Scale	AS SHOWN
Project No.	42:2648
Figure	SS
Date	10/28/2024

SUMMARY OF SOIL SURVEY MAP UNIT CHARACTERISTICS			
Item	Map Unit		
Symbol	CyA	MyB	MyC
Landforms	Drainageways	Till plains	Till plains
Parent Material	Thin loess over loamy till	Thin loess over loamy lodgment till	Thin loess over loamy lodgment till
Typical Soil Profile	silt loam, clay loam, loam	silt loam, clay loam, loam	silt loam, clay loam, loam
Shrink-Swell Potential	Low	Low	Low
Potential for Frost Action	High	Moderate	Moderate
Corrosion Risk–Uncoated Steel	High	Low	Low
Corrosion Risk – Concrete	Low	Moderate	Moderate
Drainage	Somewhat poorly drained	Well drained	Well drained
Hydrologic Group	C/D	B	B
Hydric Soil	No	No	No
Ksat (in/hr)	0.14 to 0.57	0.57 to 1.98	0.57 to 1.98
Depth to Water Table (inches)	About 0 to 24	About 60 to 80	About 60 to 80

Appendix B – Field Operations

Reference Notes

Exploration Procedures

Boring Logs



REFERENCE NOTES FOR BORING LOGS

MATERIAL^{1,2}

	ASPHALT
	CONCRETE
	GRAVEL
	TOPSOIL
	VOID
	BRICK
	AGGREGATE BASE COURSE
	GW WELL-GRADED GRAVEL gravel-sand mixtures, little or no fines
	GP POORLY-GRADED GRAVEL gravel-sand mixtures, little or no fines
	GM SILTY GRAVEL gravel-sand-silt mixtures
	GC CLAYEY GRAVEL gravel-sand-clay mixtures
	SW WELL-GRADED SAND gravelly sand, little or no fines
	SP POORLY-GRADED SAND gravelly sand, little or no fines
	SM SILTY SAND sand-silt mixtures
	SC CLAYEY SAND sand-clay mixtures
	ML SILT non-plastic to medium plasticity
	MH ELASTIC SILT high plasticity
	CL LEAN CLAY low to medium plasticity
	CH FAT CLAY high plasticity
	OL ORGANIC SILT or CLAY non-plastic to low plasticity
	OH ORGANIC SILT or CLAY high plasticity
	PT PEAT highly organic soils

DRILLING SAMPLING SYMBOLS & ABBREVIATIONS

SS	Split Spoon Sampler	PM	Pressuremeter Test
ST	Shelby Tube Sampler	RD	Rock Bit Drilling
WS	Wash Sample	RC	Rock Core, NX, BX, AX
BS	Bulk Sample of Cuttings	REC	Rock Sample Recovery %
PA	Power Auger (no sample)	RQD	Rock Quality Designation %
HSA	Hollow Stem Auger		

PARTICLE SIZE IDENTIFICATION

DESIGNATION	PARTICLE SIZES
Boulders	12 inches (300 mm) or larger
Cobbles	3 inches to 12 inches (75 mm to 300 mm)
Gravel: Coarse	¾ inch to 3 inches (19 mm to 75 mm)
Fine	4.75 mm to 19 mm (No. 4 sieve to ¾ inch)
Sand: Coarse	2.00 mm to 4.75 mm (No. 10 to No. 4 sieve)
Medium	0.425 mm to 2.00 mm (No. 40 to No. 10 sieve)
Fine	0.074 mm to 0.425 mm (No. 200 to No. 40 sieve)
Silt & Clay ("Fines")	<0.074 mm (smaller than a No. 200 sieve)

COHESIVE SILTS & CLAYS

UNCONFINED COMPRESSION STRENGTH, QP ⁴	SPT ⁵ (BPF)	CONSISTENCY ⁷ (COHESIVE)
<0.25	<2	Very Soft
0.25 - <0.50	2 - 4	Soft
0.50 - <1.00	5 - 8	Firm
1.00 - <2.00	9 - 15	Stiff
2.00 - <4.00	16 - 30	Very Stiff
4.00 - 8.00	31 - 50	Hard
>8.00	>50	Very Hard

RELATIVE AMOUNT ⁷	COARSE GRAINED (%) ⁸	FINE GRAINED (%) ⁸
Trace	≤5	≤5
With	10 - 20	10 - 25
Adjective (ex: "Silty")	25 - 45	30 - 45

GRAVELS, SANDS & NON-COHESIVE SILTS

SPT ⁵	DENSITY
<5	Very Loose
5 - 10	Loose
11 - 30	Medium Dense
31 - 50	Dense
>50	Very Dense

WATER LEVELS⁶

	WL (First Encountered)
	WL (Completion)
	WL (Seasonal High Water)
	WL (Stabilized)

FILL AND ROCK

FILL	POSSIBLE FILL	PROBABLE FILL	ROCK

¹Classifications and symbols per ASTM D 2488-17 (Visual-Manual Procedure) unless noted otherwise.

²To be consistent with general practice, "POORLY GRADED" has been removed from GP, GP-GM, GP-GC, SP, SP-SM, SP-SC soil types on the boring logs.

³Non-ASTM designations are included in soil descriptions and symbols along with ASTM symbol [Ex: (SM-FILL)].

⁴Typically estimated via pocket penetrometer or Torvane shear test and expressed in tons per square foot (tsf).

⁵Standard Penetration Test (SPT) refers to the number of hammer blows (blow count) of a 140 lb. hammer falling 30 inches on a 2 inch OD split spoon sampler required to drive the sampler 12 inches (ASTM D 1586). "N-value" is another term for "blow count" and is expressed in blows per foot (bpf). SPT correlations per 7.4.2 Method B and need to be corrected if using an auto hammer.

⁶The water levels are those levels actually measured in the borehole at the times indicated by the symbol. The measurements are relatively reliable when augering, without adding fluids, in granular soils. In clay and cohesive silts, the determination of water levels may require several days for the water level to stabilize. In such cases, additional methods of measurement are generally employed.

⁷Minor deviation from ASTM D 2488-17 Note 14.

⁸Percentages are estimated to the nearest 5% per ASTM D 2488-17.



SUBSURFACE EXPLORATION PROCEDURE: STANDARD PENETRATION TESTING (SPT) ASTM D 1586 Split-Barrel Sampling

Standard Penetration Testing, or **SPT**, is the most frequently used subsurface exploration test performed worldwide. This test provides samples for identification purposes, as well as a measure of penetration resistance, or N-value. The N-Value, or blow counts, when corrected and correlated, can approximate engineering properties of soils used for geotechnical design and engineering purposes.

SPT Procedure:

- Involves driving a hollow tube (split-spoon) into the ground by dropping a 140-lb hammer a height of 30-inches at desired depth
- Recording the number of hammer blows required to drive split-spoon a distance of 18-24 inches (in 3 or 4 Increments of 6 inches each)
- Auger is advanced* and an additional SPT is performed
- One SPT typically performed for every two to five feet. An approximate 1.5 inch diameter soil sample is recovered.



**Drilling Methods May Vary—* The predominant drilling methods used for SPT are open hole fluid rotary drilling and hollow-stem auger drilling.

CLIENT: Village of Williams Bay				PROJECT NO.: 42:2648		BORING NO.: B-01		SHEET: 1 of 1		
PROJECT NAME: Geneva Street Infiltration				DRILLER/CONTRACTOR: Professional Testing Service						
SITE LOCATION: E Geneva Street, Williams Bay, Wisconsin, 53191								LOSS OF CIRCULATION 100		
LATITUDE: 42.579763		LONGITUDE: -88.525617		STATION:		SURFACE ELEVATION: 907.0		BOTTOM OF CASING 		

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6" (TCP/MC/SPT-N value) *	STANDARD PENETRATION BLOWS/FT		ROCK QUALITY DESIGNATION & RECOVERY		LIQUID LIMIT X PLASTIC LIMIT		CALIBRATED PENETROMETER TSF					WATER CONTENT % [FINES CONTENT] %				
									10 20 30 40 50		10 20 30 40 50		1 2 3 4 5		10 20 30 40 50									
									RQD		REC		MC SAMPLER BLOWS/FT		TEXAS CONE PENETRATION BLOWS/FT									
									10 20 30 40 50		10 20 30 40 50													
	S-1	SS	24	24	Topsoil Thickness[6"]			4-4-5-6 (9)																
	S-2	SS	24	20	(CL) LEAN CLAY, trace sand, contains slight roots, brown, moist, stiff to hard, contains some SILT lenses (organic content = 2.8%)			4-5-5-7 (10)																
5	S-3	SS	24	10	(CL) LEAN CLAY WITH SAND, trace sand, contains slight roots, brown, moist, hard, contains SILT lenses		902	3-5-7-7 (12)																
	S-4	SS	13	13	(GC) CLAYEY GRAVEL WITH SAND, brown, moist, hard (organic content = 0.8%) (possible cobbles at 7+/- feet)			6-7-50/1" (57/7")																
10	S-5	SS	24	16				9-10-7-8 (17)																
	S-6	SS	24	20				5-6-6-7 (12)																
	S-7	SS	24	16	(CL) SANDY LEAN CLAY WITH GRAVEL, brown, moist, stiff to very stiff			7-5-4-4 (9)																
15	S-8	SS	24	18				4-4-4-4 (8)																
	S-9	SS	24	24				3-4-6-6 (10)																
20	S-10	SS	24	9				5-5-6-7 (11)																
					END OF BORING AT 20 FT			887																
25																								
30																								

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

☒ WL (First Encountered) ☒ WL (Completion) ☒ WL (Seasonal High Water) ☒ WL (Stabilized) Dry	BORING STARTED: Oct 09 2024 BORING COMPLETED: Oct 09 2024 EQUIPMENT: Geoprobe 7822DT CAVE IN DEPTH: HAMMER TYPE: Auto LOGGED BY: LEM1	DRILLING METHOD: Hollow Stem Auger
---	--	--

GEOTECHNICAL BOREHOLE LOG

Appendix C – Laboratory Testing

Other Laboratory Test Results

Textural Triangle USDA Test(s)

Grain Size Analysis/Analyses

Plasticity Chart(s)



LABORATORY PROCEDURES:

Index Testing

Moisture content determination was performed on select fine-grained soil samples in accordance with ASTM D 2216.

Calibrated hand penetrometer tests (Qp) were performed on select cohesive soil samples. In the hand penetrometer test, the unconfined compressive strength of a soil sample is estimated, to a maximum of 4.5 or 6 tons per square foot (tsf), depending on the penetrometer model, by measuring the resistance of a soil sample to penetration by a small, calibrated, spring-loaded cylinder.

Atterberg limits determination was performed on select fine-grained soil samples in accordance with ASTM D 4319. The Atterberg limits are a basic measure of the critical water contents of a fine-grained soil: its **liquid limit**, **plastic limit**, and **shrinkage limit**. Depending on its water content, a soil may appear in one of four states: solid, semi-solid, plastic and liquid. In each state, the consistency and behavior of a soil is different and consequently so are its engineering properties. Atterberg limits can also be used to help distinguish between silt and clay, and to distinguish between different types of silts and clays.

Particle size distribution, also referred to as gradation or sieve analysis, refers to the proportions by dry mass of a soil particles distributed over specified particle-size ranges. The particle size distribution is used to help classify soils for engineering purposes. Particle size distribution determination was performed on select fine-grained soil samples in accordance with ASTM D 421, D 422 and/or D 1140.

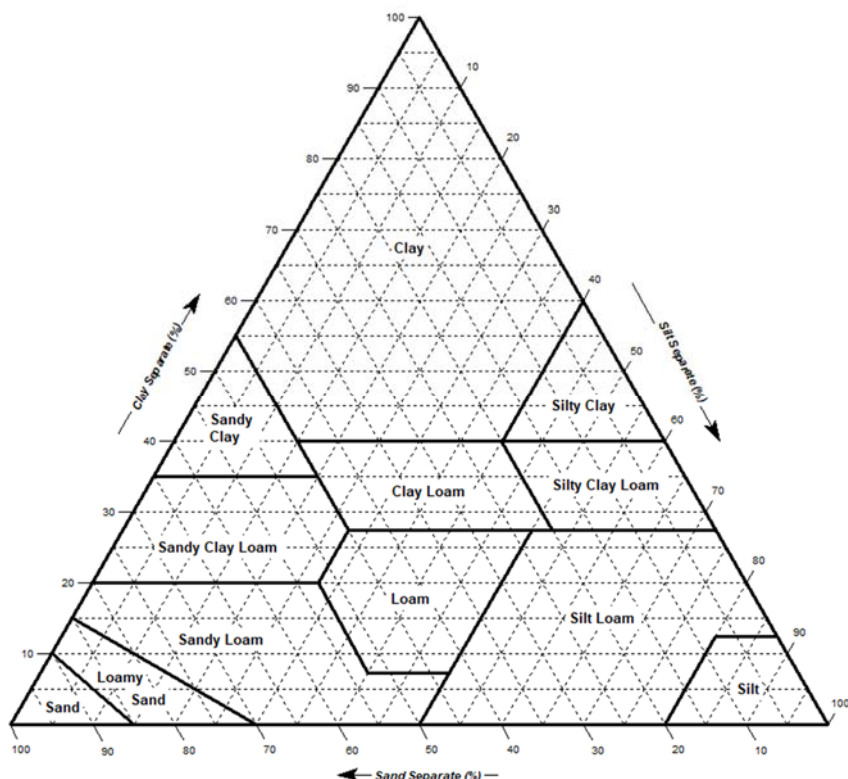
A **loss on ignition (LOI)** test is used to estimate the organic content of the soil. In the LOI test a dry sample is heated to 440° C to burn off organic matter within the sample. The lost weight is compared to the initial dry weight to estimate the percentage of organics in the material. LOI determination was performed in accordance with ASTM D 2974.



U.S. Department of Agriculture (USDA) Soil Classification System

Texture Triangle

Fine Earth Texture Classes (—)



Texture Class

Texture Class or Subclass	Code	
	Conv.	NASIS
Coarse Sand	cos	COS
Sand	s	S
Fine Sand	fs	FS
Very Fine Sand	vfs	VFS
Loamy Coarse Sand	lcos	LCOS
Loamy Sand	ls	LS
Loamy Fine Sand	lfs	LFS
Loamy Very Fine Sand	lvfs	LVFS
Coarse Sandy Loam	cosl	COSL
Sandy Loam	sl	SL
Fine Sandy Loam	fsl	FSL
Very Fine Sandy Loam	vfsl	VFSL
Loam	l	L
Silt Loam	sil	SIL
Silt	si	SI
Sandy Clay Loam	scl	SCL
Clay Loam	cl	CL
Silty Clay Loam	sicl	SICL
Sandy Clay	sc	SC
Silty Clay	sic	SIC
Clay	c	C

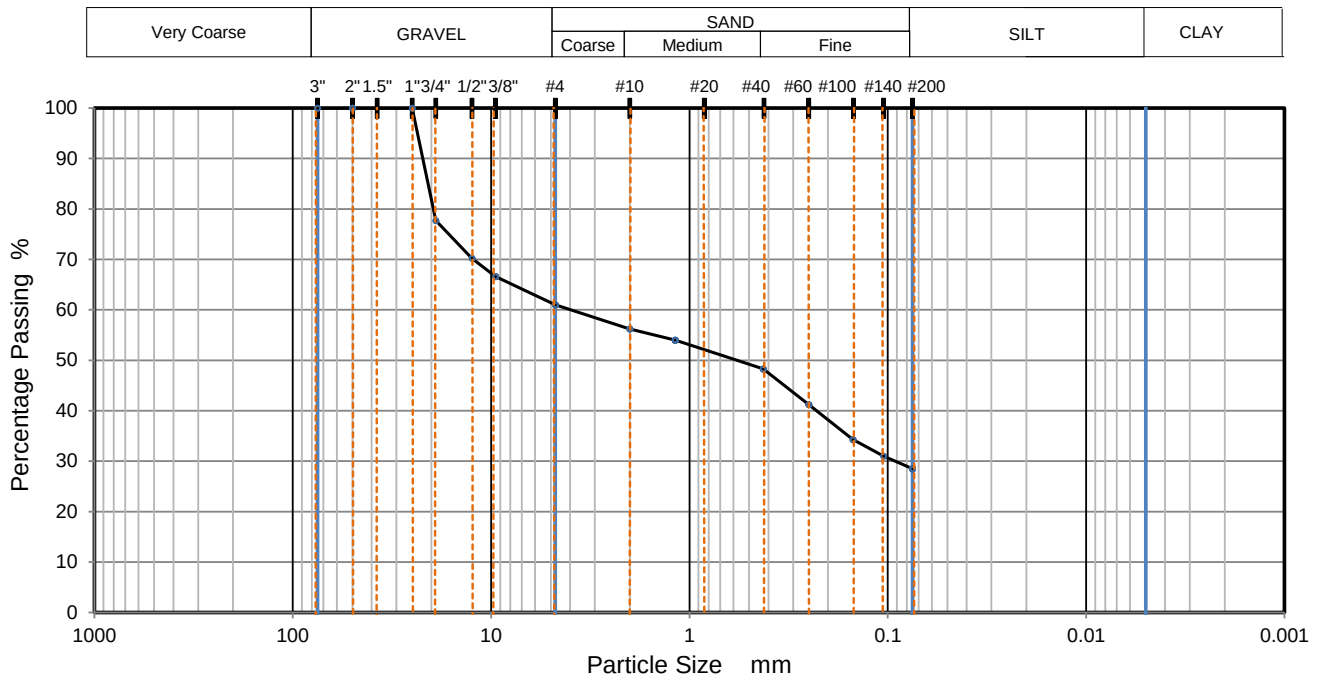
Texture Modifiers – Conventions for using “Rock Fragment Texture Modifiers” and for using textural adjectives that convey the “% volume” ranges for **Rock Fragments – Size and Quantity**.

Fragment Content % By Volume	Rock Fragment Modifier Usage
< 15	No texture adjective is used (noun only; e.g., <i>loam</i>).
15 to < 35	Use adjective for appropriate size; e.g., <i>gravelly</i> .
35 to < 60	Use “very” with the appropriate size adjective; e.g., <i>very gravelly</i> .
60 to < 90	Use “extremely” with the appropriate size adjective; e.g., <i>extremely gravelly</i> .
≥ 90	No adjective modifier. If ≤ 10% fine earth, use the appropriate noun for the dominant size class; e.g., <i>gravel</i> . Use terms in lieu of texture.

Texture Modifiers – (Adjectives)

Rock Fragments: Size and Quantity	Code		Criteria: Percent (by volume) of total rock fragments and dominated by (<i>name size</i>):
	Conv.	PDP/ NASIS	
<i>Rock Fragments (> 2mm; ≥ Strongly Cemented)</i>			
Gravelly	GR	GR	≥ 15% but < 35% gravel
Fine Gravelly	FGR	GRF	≥ 15% but < 35% fine gravel
Medium Gravelly	MGR	GRM	≥ 15% but < 35% med. gravel
Coarse Gravelly	CGR	GRC	≥ 15% but <35% coarse gravel
Very Gravelly	VGR	GRV	≥ 35% but < 60% gravel
Extremely Gravelly	XGR	GRX	≥ 60% but < 90% gravel
Cobbly	CB	CB	≥ 15% but < 35% cobbles
Very Cobbly	VCB	CBV	≥ 35% but < 60% cobbles
Extremely Cobbly	XCB	CBX	≥ 60% but < 90% cobbles
Stony	ST	ST	≥ 15% but < 35% stones
Very Stony	VST	STV	≥ 35% but < 60% stones
Extremely Stony	XST	STX	≥ 60% but < 90% stones
Bouldery	BY	BY	≥ 15% but < 35% boulders
Very Bouldery	VBY	BYV	≥ 35% but < 60% boulders
Extremely Bouldery	XBY	BYX	≥ 60% but < 90% boulders
Channery	CN	CN	≥ 15% but < 35% channers
Very Channery	VCN	CNV	≥ 35% but < 60% channers
Extremely Channery	XCN	CNX	≥ 60% but < 90% channers
Flaggy	FL	FL	≥ 15% but < 35% flagstones
Very Flaggy	VFL	FLV	≥ 35% but < 60% flagstones
Extremely Flaggy	XFL	FLX	≥ 60% but < 90% flagstones

PARTICLE SIZE DISTRIBUTION



TEST RESULTS ()

Sieving		Hydrometer Sedimentation	
Particle Size	% Passing	Particle Size mm	% Passing
3"	100.0		
2"	100.0		
1"	100.0		
3/4"	77.7		
1/2"	70.2		
3/8"	66.6		
#4	61.0		
#10	56.2		
#16	54.0		
#40	48.3		
#60	41.2		
#100	34.3		
#140	31.0		
#200	28.5		

Dry Mass of sample, g

536.6

Sample Proportions	% dry mass
Very coarse, >3" sieve	0.0
Gravel, 3" to # 4 sieve	39.0
Coarse Sand, #4 to #10 sieve	4.8
Medium Sand, #10 to #40	7.9
Fine Sand, #40 to #200	19.8
Fines <#200	28.5

USCS	GC	Liquid Limit	D90	22.110	D50	0.576	D10	
AASHTO		Plastic Limit	D85	20.790	D30	0.092	Cu	
USCS Group Name	Clayey Gravel with Sand	Plasticity Index	D60	3.967	D15		Cc	

Project: Geneva Street Infiltration
 Client: Village of Williams Bay
 Sample Description: Clayey Gravel with Sand
 Sample Source: B-01

Project No.: 42:2648
 Depth (ft): 8.0 - 10.0
 Sample No.: S-5
 Date Reported: 10/25/2024



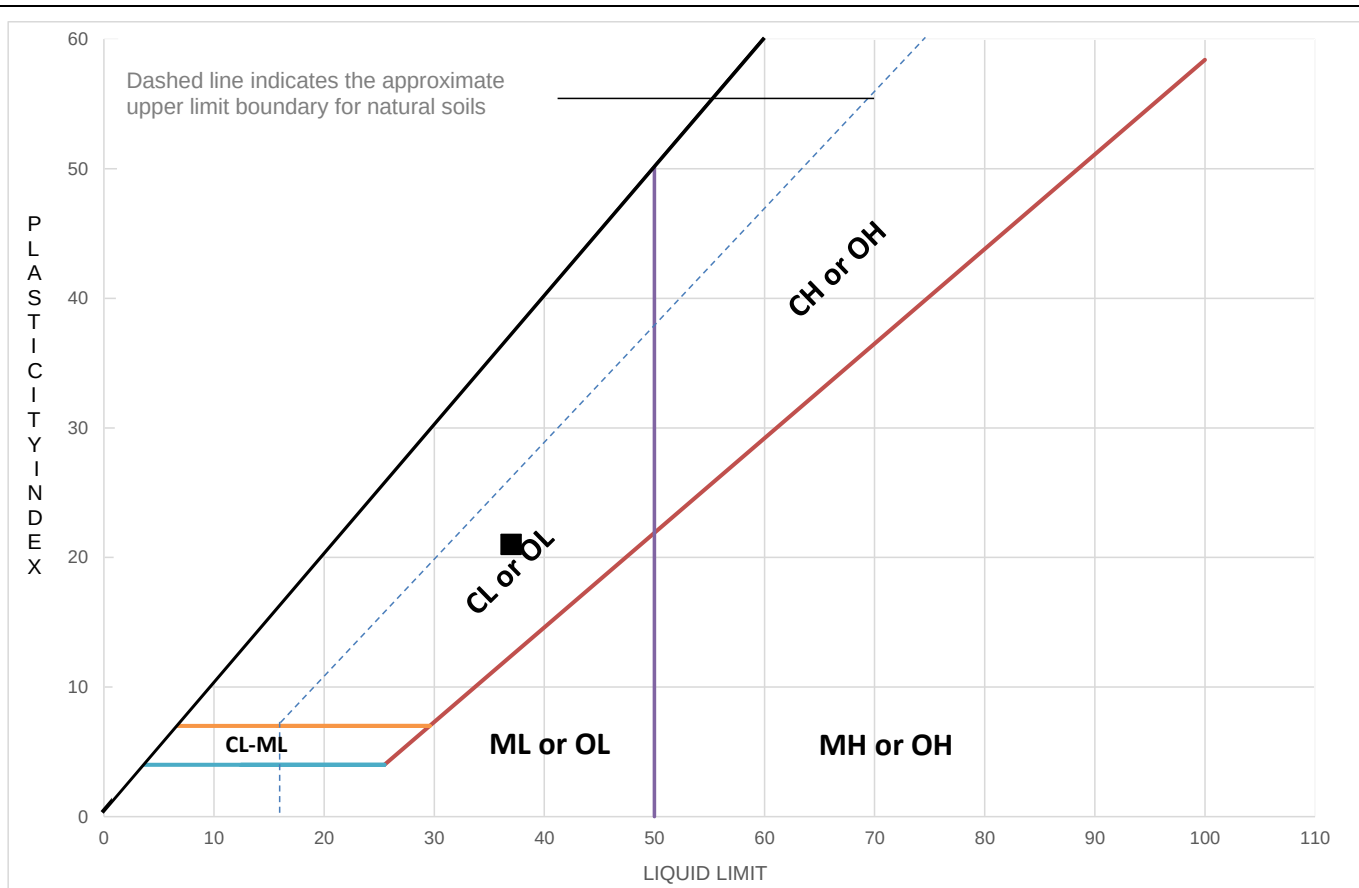
Office / Lab
 ECS Midwest LLC - Milwaukee

Address
 3695 N. 126TH Street
 Unit C
 Brookfield, WI 53005

Office Number / Fax
 (414)286-7557
 (262)886-1988

Tested by	Checked by	Approved by	Date Received	Remarks
LMcGovern	LMcGovern	LMcGovern		USDA Classification: Very Gravely Sandy Clay Loam

LIQUID AND PLASTIC LIMITS TEST REPORT



TEST RESULTS (ASTM D4318-10 (MULTIPOINT TEST))

	Sample Location	Sample Number	Sample Depth (ft)	LL	PL	PI	%<#40	%<#200	AASHTO	USCS	Material Description
■	B-01	S-3	4.00-6.00	37	16	21					

Project: Geneva Street Infiltration
Client: Village of Williams Bay

Project No.: 42:2648
Date Reported: 10/22/2024



Office / Lab
ECS Midwest LLC - Milwaukee

Address
3695 N. 126TH Street Unit C
Brookfield, WI 53005

Office Number / Fax
(414)286-7557
(262)886-1988

Tested by	Checked by	Approved by	Date Received
LMcGovern	LMcGovern	LMcGovern	

Appendix D – Supplemental Documents

Other Supplemental Documents



Soil and Site Evaluation – Stormwater Infiltration

In accordance with SPS 382.365, 385, Wis. Adm. Code, and WDNR Standard 1002

Personal information you provide may be used for secondary purposes [Privacy Law, s. 15.04(1)(m)]

Page 1 of 2

Attach a complete site plan on paper not less than 8 ½ x 11 inches in size. Plan must include, but is not limited to: vertical and horizontal reference point (BM); direction and percent of slope; scale or dimensions; north arrow; and BM referenced to nearest road. PLEASE PRINT ALL INFORMATION		COUNTY Walworth
		PARCEL ID
PROPERTY OWNER Village of Williams Bay		PROPERTY LOCATION Govt. Lot ____, NE ¼, NE ¼, S 6 ____, T 1 ____, R 17 E Lot #, Block #, Subd. Name or CSM #: _____ Municipality: Williams Bay ☐ City ☒ Village ☐ Town Nearest Road: E. Geneva Street
PROPERTY OWNER'S MAILING ADDRESS		
CITY, STATE, ZIP CODE	PHONE	
Drainage area _____ ☐ sq. ft. ☐ acres Test site suitable for (check all that apply): ☐ Site not suitable ☐ Bioretention ☐ Reuse ☐ Subsurface Dispersal System ☐ Irrigation ☐ Other _____		HYDRAULIC APPLICATION TEST METHOD ☒ Morphological Evaluation ☐ Double Ring Infiltrometer ☐ Other: (specify) _____
		SOIL MOISTURE Date of soil borings: 10/9/2024 USDA-NRCS WETS VALUE: ☐ Dry = 1 ☒ Normal = 2 ☐ Wet = 3

B-01 #OBS. ☐ Pit ☒ Boring Ground Surface Elevation 9007 ft. Elevation of Limiting Factor -- ft.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App. Rate Inches/Hr.
A	0-6	--	Topsoil	--	--	--	--	--	--	--
B	6-48	10YR 5/3	No Redox Features	c	1 vf abk	mvfi	g	< 5	85-95	0.07
C	48-72	10YR 5/3	No Redox Features	c	1 vf abk	mvfi	g	< 5	80-90	0.07
C	72-144	10YR 5/3	No Redox Features	vgr-scl	1 vf abk	mfi	g	44	28	0.11
C	144-240	10YR 5/3	No Redox Features	gr-cl	1 vf abk	mfi	g	15	60-70	0.03

Comments:

No water encountered.
No bedrock encountered

#OBS. ☐ Pit ☐ Boring Ground Surface Elevation _____ ft. Elevation of Limiting Factor _____ ft.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App. Rate Inches/Hr.

Comments:

#OBS. ☐ Pit ☐ Boring Ground Surface Elevation _____ ft. Elevation of Limiting Factor _____ ft.

Horizon	Depth in.	Dominant Color Munsell	Redox Description Qu. Sz. Cont. Color	Texture	Structure Gr. Sz. Sh.	Consistence	Boundary	% Rock Frags.	% Fines	Hydraulic App. Rate Inches/Hr.

Comments:

Overall Site Comments:

Matthew Meyer		1053414 (SP-110700001)
_____ Name (Please Print)	_____ Signature	_____ Credential Number
1060 Breezewood Ln, Suite 102 Neenah, WI 54956	10/25/2024	920.886.1406
_____ Address	_____ Date Evaluation Conducted	_____ Phone Number

Appendix E – Other Information

GBA - Geotechnical Engineering Report Information Sheet

Important Information about This Geotechnical-Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

The Geoprofessional Business Association (GBA) has prepared this advisory to help you – assumedly a client representative – interpret and apply this geotechnical-engineering report as effectively as possible. In that way, you can benefit from a lowered exposure to problems associated with subsurface conditions at project sites and development of them that, for decades, have been a principal cause of construction delays, cost overruns, claims, and disputes. If you have questions or want more information about any of the issues discussed herein, contact your GBA-member geotechnical engineer. Active engagement in GBA exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project.

Understand the Geotechnical-Engineering Services Provided for this Report

Geotechnical-engineering services typically include the planning, collection, interpretation, and analysis of exploratory data from widely spaced borings and/or test pits. Field data are combined with results from laboratory tests of soil and rock samples obtained from field exploration (if applicable), observations made during site reconnaissance, and historical information to form one or more models of the expected subsurface conditions beneath the site. Local geology and alterations of the site surface and subsurface by previous and proposed construction are also important considerations. Geotechnical engineers apply their engineering training, experience, and judgment to adapt the requirements of the prospective project to the subsurface model(s). Estimates are made of the subsurface conditions that will likely be exposed during construction as well as the expected performance of foundations and other structures being planned and/or affected by construction activities.

The culmination of these geotechnical-engineering services is typically a geotechnical-engineering report providing the data obtained, a discussion of the subsurface model(s), the engineering and geologic engineering assessments and analyses made, and the recommendations developed to satisfy the given requirements of the project. These reports may be titled investigations, explorations, studies, assessments, or evaluations. Regardless of the title used, the geotechnical-engineering report is an engineering interpretation of the subsurface conditions within the context of the project and does not represent a close examination, systematic inquiry, or thorough investigation of all site and subsurface conditions.

Geotechnical-Engineering Services are Performed for Specific Purposes, Persons, and Projects, and At Specific Times

Geotechnical engineers structure their services to meet the specific needs, goals, and risk management preferences of their clients. A geotechnical-engineering study conducted for a given civil engineer

will not likely meet the needs of a civil-works constructor or even a different civil engineer. Because each geotechnical-engineering study is unique, each geotechnical-engineering report is unique, prepared *solely* for the client.

Likewise, geotechnical-engineering services are performed for a specific project and purpose. For example, it is unlikely that a geotechnical-engineering study for a refrigerated warehouse will be the same as one prepared for a parking garage; and a few borings drilled during a preliminary study to evaluate site feasibility will not be adequate to develop geotechnical design recommendations for the project.

Do not rely on this report if your geotechnical engineer prepared it:

- for a different client;
- for a different project or purpose;
- for a different site (that may or may not include all or a portion of the original site); or
- before important events occurred at the site or adjacent to it; e.g., man-made events like construction or environmental remediation, or natural events like floods, droughts, earthquakes, or groundwater fluctuations.

Note, too, the reliability of a geotechnical-engineering report can be affected by the passage of time, because of factors like changed subsurface conditions; new or modified codes, standards, or regulations; or new techniques or tools. *If you are the least bit uncertain about the continued reliability of this report, contact your geotechnical engineer before applying the recommendations in it. A minor amount of additional testing or analysis after the passage of time – if any is required at all – could prevent major problems.*

Read this Report in Full

Costly problems have occurred because those relying on a geotechnical-engineering report did not read the report in its entirety. Do not rely on an executive summary. Do not read selective elements only. *Read and refer to the report in full.*

You Need to Inform Your Geotechnical Engineer About Change

Your geotechnical engineer considered unique, project-specific factors when developing the scope of study behind this report and developing the confirmation-dependent recommendations the report conveys. Typical changes that could erode the reliability of this report include those that affect:

- the site's size or shape;
- the elevation, configuration, location, orientation, function or weight of the proposed structure and the desired performance criteria;
- the composition of the design team; or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project or site changes – even minor ones – and request an assessment of their impact. *The geotechnical engineer who prepared this report cannot accept*

responsibility or liability for problems that arise because the geotechnical engineer was not informed about developments the engineer otherwise would have considered.

Most of the “Findings” Related in This Report Are Professional Opinions

Before construction begins, geotechnical engineers explore a site’s subsurface using various sampling and testing procedures. *Geotechnical engineers can observe actual subsurface conditions only at those specific locations where sampling and testing is performed.* The data derived from that sampling and testing were reviewed by your geotechnical engineer, who then applied professional judgement to form opinions about subsurface conditions throughout the site. Actual site-wide subsurface conditions may differ – maybe significantly – from those indicated in this report. Confront that risk by retaining your geotechnical engineer to serve on the design team through project completion to obtain informed guidance quickly, whenever needed.

This Report’s Recommendations Are Confirmation-Dependent

The recommendations included in this report – including any options or alternatives – are confirmation-dependent. In other words, they are not final, because the geotechnical engineer who developed them relied heavily on judgement and opinion to do so. Your geotechnical engineer can finalize the recommendations *only after observing actual subsurface conditions* exposed during construction. If through observation your geotechnical engineer confirms that the conditions assumed to exist actually do exist, the recommendations can be relied upon, assuming no other changes have occurred. *The geotechnical engineer who prepared this report cannot assume responsibility or liability for confirmation-dependent recommendations if you fail to retain that engineer to perform construction observation.*

This Report Could Be Misinterpreted

Other design professionals’ misinterpretation of geotechnical-engineering reports has resulted in costly problems. Confront that risk by having your geotechnical engineer serve as a continuing member of the design team, to:

- confer with other design-team members;
- help develop specifications;
- review pertinent elements of other design professionals’ plans and specifications; and
- be available whenever geotechnical-engineering guidance is needed.

You should also confront the risk of constructors misinterpreting this report. Do so by retaining your geotechnical engineer to participate in prebid and preconstruction conferences and to perform construction-phase observations.

Give Constructors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can shift unanticipated-subsurface-conditions liability to constructors by limiting the information they provide for bid preparation. To help prevent the costly, contentious problems this practice has caused, include the complete geotechnical-engineering report, along with any attachments or appendices, with your contract documents, *but be certain to note*

conspicuously that you’ve included the material for information purposes only. To avoid misunderstanding, you may also want to note that “informational purposes” means constructors have no right to rely on the interpretations, opinions, conclusions, or recommendations in the report. Be certain that constructors know they may learn about specific project requirements, including options selected from the report, *only* from the design drawings and specifications. Remind constructors that they may perform their own studies if they want to, and *be sure to allow enough time* to permit them to do so. Only then might you be in a position to give constructors the information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions. Conducting prebid and preconstruction conferences can also be valuable in this respect.

Read Responsibility Provisions Closely

Some client representatives, design professionals, and constructors do not realize that geotechnical engineering is far less exact than other engineering disciplines. This happens in part because soil and rock on project sites are typically heterogeneous and not manufactured materials with well-defined engineering properties like steel and concrete. That lack of understanding has nurtured unrealistic expectations that have resulted in disappointments, delays, cost overruns, claims, and disputes. To confront that risk, geotechnical engineers commonly include explanatory provisions in their reports. Sometimes labeled “limitations,” many of these provisions indicate where geotechnical engineers’ responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The personnel, equipment, and techniques used to perform an environmental study – e.g., a “phase-one” or “phase-two” environmental site assessment – differ significantly from those used to perform a geotechnical-engineering study. For that reason, a geotechnical-engineering report does not usually provide environmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated subsurface environmental problems have led to project failures.* If you have not obtained your own environmental information about the project site, ask your geotechnical consultant for a recommendation on how to find environmental risk-management guidance.

Obtain Professional Assistance to Deal with Moisture Infiltration and Mold

While your geotechnical engineer may have addressed groundwater, water infiltration, or similar issues in this report, the engineer’s services were not designed, conducted, or intended to prevent migration of moisture – including water vapor – from the soil through building slabs and walls and into the building interior, where it can cause mold growth and material-performance deficiencies. Accordingly, *proper implementation of the geotechnical engineer’s recommendations will not of itself be sufficient to prevent moisture infiltration.* Confront the risk of moisture infiltration by including building-envelope or mold specialists on the design team. *Geotechnical engineers are not building-envelope or mold specialists.*



**GEOPROFESSIONAL
BUSINESS
ASSOCIATION**

Telephone: 301/565-2733

e-mail: info@geoprofessional.org www.geoprofessional.org

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Appendix 6 MAINTENANCE AGREEMENT

Storm Water Management Practice Maintenance Agreement

Document Number

THIS AGREEMENT, made and entered into this _____ day of _____, 2025, by and between Canyon Development, hereinafter called the “Owner”, and the Village of Williams Bay, hereinafter called the “Village”.

WITNESSETH:

WHEREAS, the Owner is the owner of the following described lands situated in the Village of Williams Bay, County of Walworth County, State of Wisconsin, to-wit:

Tax Parcel Number: WHA 00001 and WHA 00006

hereinafter called the “Property”.

WHEREAS, the Owner is developing the property; and

WHEREAS, the Site Plan known as Canyon Development-Residential Site, hereinafter called the “Plan”, which is expressly made a part hereof, as approved or to be approved by the Village, provides for on-site storm water management practices within the confines of the Property; and

Name and Return Address:

Attn: Wayne Edwards
Village of Williams Bay
250 Williams Bay
Williams Bay, Wisconsin 53191

WHEREAS, the Village and the Owner, its successors and assigns, including any homeowners association, agree that the health, safety and welfare of the residents of the Village of Williams Bay, require that on-site storm water management practices as defined in the Williams Bay Municipal Code be constructed and maintained on the Property; and

WHEREAS, the Village requires that on-site storm water management practices as shown on the Plan be constructed and adequately maintained by the Owner, its successors, and assigns, including any homeowners association.

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The on-site storm water management practices shall be constructed by the Owner, its successors, and assigns, including any homeowners association, in accordance with the plans and specifications indicated in the Plan and applicable statutes, ordinances and rules. The storm water management practices shall serve the drainage area designated in the Plan.
2. The Owner, its successors and assigns including but not limited to any homeowners association, shall regularly inspect the storm water management practices and specifically the function of the approved storm water management system as often as conditions require, but in any event at least once each year. The standard Operation and Maintenance Report attached to this agreement as Exhibit A and by this reference made a part hereof shall be used for the purpose of the regular inspections of the storm water management practices. The Owner, its successors and assigns shall keep the Operation and Maintenance Reports from past inspections as well as a log of maintenance activity indicating the date and type of maintenance completed. The Reports and maintenance log shall be made available to the Village for review. The purpose of the inspections is to assure safe and proper functioning of the facilities. The inspections shall cover all facilities including but not limited to storm sewer, underdrains, inlets/grates, and wet detention basins. Deficiencies shall be noted in the Operation and Maintenance Report.
3. The Owner, its successors, and assigns, including any homeowners association, shall adequately maintain the storm water management practices, including but not limited to all pipes and channels built to convey storm

water to the facility, as well as all structures, improvements, and vegetation provided to control the quantity and quality of the storm water. Adequate maintenance is herein defined as keeping the storm water management facilities in good working condition so that these facilities are performing their design functions and are in accordance with the Operation and Maintenance Standards attached to this agreement as Exhibit B and by this reference made a part hereof.

4. The Owner, its successors, and assigns, including any homeowners Association, hereby grant permission to the Village, its authorized agents, and employees, to enter upon the Property and to inspect the storm water management practices whenever the Village deems necessary. The purpose of inspection is to investigate reported deficiencies and/or to respond to citizen complaints. The Village shall provide the Owner, its successors, and assigns, including any homeowners association, copies of the inspection findings and a directive to commence with the repairs if necessary. Corrective actions shall be taken within a reasonable timeframe as established by the Village Engineer.
5. If the Owner, its successors and assigns, including any homeowners Association, fails to maintain the storm water management practices in good working condition, consistent with the terms of the approved plans and specifications approved by the Village and does not perform the required corrective actions and inspections in the specified time, the Village may:
 - a. Issue a citation to the Owner, its successors, and assigns. Each day that the violation exists shall constitute a separate offense and shall be considered a continuing violation.
 - b. Perform the corrective actions identified in the inspection report and assess the Owner, its successors and assigns for the cost of such work. The cost of such work may be specially assessed against the property pursuant to Wisconsin Statutes Section 66.0703. If the facilities are located on an outlot owned collectively by homeowners association, the Village may assess each member of the homeowners association according to the ownership interest in the facilities located on the property. This provision shall not be construed to allow the Village to erect any structure of permanent nature on the land of the Owner outside of the easement for the storm water management practices, and in no event shall this Agreement be construed to impose any such obligation on the Village.
6. The Owner, its successors, and assigns, including any homeowners Association, will perform the work necessary to keep these facilities in good working order as appropriate. In the event a maintenance schedule for the storm water management practices (including sediment removal) is outlined on the approved plans, the schedule will be followed. The minimal amount of maintenance on the storm water management practices shall be in accordance with the Operation and Maintenance Standards (Exhibit B).
7. In the event the Village pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Owner, its successors and assigns, including any homeowners association, shall reimburse the Village upon demand, within thirty (30) days of receipt for all actual costs incurred by the Village hereunder.
8. This Agreement imposes no liability of any kind whatsoever on the Village, its officers, agents and employees, and the owner agrees to indemnify and hold the Village harmless as and against any and all claims, actions, causes of action, demands, including attorney fees which the Village may incur as a result of the failure of the storm water management system and/or actions taken or not taken by the Village to enforce the terms of this agreement including, but not limited to, the performance of maintenance activities.
9. This Agreement shall be attached as an exhibit to any document which creates a homeowners association that is responsible for maintenance of the storm water management practices and be recorded at the Walworth County Register of Deeds, and shall constitute covenant running with the land, and shall be binding on the Owner, its administrators, executors, assigns, heirs and any other successors in interests, including any homeowners association. The owner shall provide the Village with a copy of any document which creates a homeowner's association that is responsible for the storm water management practices.
10. Notwithstanding anything in this Agreement to the contrary, in the event the Owner, or the Owner's successors and assigns, sell or otherwise transfer ownership in the Property, the Owner and the Owners successors and assigns, are hereby released from any and all liabilities and obligations under the terms of this Agreement.
11. This Agreement shall be governed and construed in accordance with the laws of the State of Wisconsin and may only be modified in a writing executed by both parties.
12. The Owner stipulates that this agreement permits the Village to have access to his or her property for purposes of storm water inspection and maintenance and that the Owner waives the right to an appraisal or to

pursue any other rights it may have pursuant to Ch 32 of the Wisconsin statutes.

13. Any notice, request or demand required or permitted under this Agreement shall be in writing and shall be deemed given when personally served or three (3) days after the same has been deposited with the United States Post Office, registered or certified mail, return receipt requested, postage prepaid and addressed as follows:

If to Owner: Canyon Development
937 Tarrant Drive
Fontana, WI 53125
Contact: Stephen Greenburg
Phone: 815-451-2276
Email: steve@cdgrp.net

If to City: Village of Williams Bay
250 Williams Bay Williams
Bay, WI 53191
Contact: Wayne Edwards Phone:
262-245-2706
Email: wedwards@willisamsbay.wi.gov

Any party may change its address for the receipt of notice by written notice to the other.

IN WITNESS WHEREOF, the parties have executed this agreement as of the date first above written.

PROPERTY OWNER

Canyon Development

Canyon Development Representative

The foregoing Agreement was acknowledged before me this ____ day of _____, 2025, by _____.

NOTARY PUBLIC

My Commission Expires: _____

This document was drafted by:
Lynch & Associates, LLC. Contact:
Ryan W. Kloth, P.E., CFM
Email: rkloth@lynch-engineering.com

Approved for recording: _____

Project: Canyon Development Location Site Status:
 _____ Inspector: _____ Date: _____
 Time: _____

Additional Comments - Actions to be Taken:

EXHIBIT B

STORMWATER WET DETENTION BASIN OPERATION AND MAINTENANCE STANDARDS

I. ROUTINE MAINTENANCE

A. Inspection

1. Side slopes, embankments, and emergency spillways that are not rock lined which have been planted with turf grasses should be mowed at least twice a year to prevent woody growth and control noxious weeds.
2. Adjacent to the residential areas, more frequent mowing, typically once a week during a normal growing season, is recommended for aesthetic and allergy control purposes.
3. Native grasses should be mowed to a height of 6" in mid to late summer or after they have achieved a height of 1-1/2 feet during the first growing season. Further mowing in subsequent growing seasons will not be required.
4. If possible, the native grass area should be burned off every three to four years in the spring of the year. Check local burning regulations as permits may be required.
5. If burning of the native grass areas is not possible, a 5 to 8" mowing every 3 to 4 years, may suffice as a substitute management technique. The mowed area should be raked and performed in the spring.

B. Inspections

1. Inspections of the ponds shall be completed on an annual basis or after significant rainfall events.
2. The inspections should be completed during wet weather conditions to determine if the ponds are functioning properly.
3. Inspection priorities shall be as follows:
 - a. Inspect the embankments for subsidence, erosion, cracking, and tree growth.
 - b. Inspect the condition of the emergency spillway and overland flow path.
 - c. Inspect the pond for accumulation of sediment.
 - d. Inspect the outlet control structure for clogs, debris, and material failures.
 - e. Inspect upstream and downstream channels from an erosion perspective.
 - f. Inspect any modifications that may have been made to the ponds following their initial construction.
 - g. Inspect the side slopes of the pond for erosion, slumping, cracking, or woody plant materials.
4. As-built plans shall accompany the person responsible for the pond inspections.
5. Documentation of the inspections should be completed and filed. Documentation should include as a minimum:
 - a. Inspectors name, affiliation and professional credentials if applicable.
 - b. Date, time and weather conditions.
 - c. Approximate rainfall total over a 24-hour period if applicable.
 - d. Existing embankment, outlet and inlet conveyance systems and vegetation condition.
 - e. Sediment depth at the outlet control structure and at a minimum one other location.
 - f. Identification of potential structural failures and repair needs.

- g. Other pond conditions such as vegetation growth, algae growth, and emergency spillway conditions.
- h. Repair recommendations.

C. Debris and Litter Removal.

1. Debris and litter removal from the pond surface shall be completed at least once a month.
2. Particular attention should be paid to debris accumulating around the riser pipe to prevent potential clogging.

D. Erosion Control.

1. The pond side slopes, embankments and emergency spillways may suffer from periodic slumpage and erosion.
2. Corrective measures shall include regrading, filling, and revegetation of the eroded or slumping areas.
3. Rip rap at the pond outlet and emergency spillways should be inspected for displacement or undermining. Repairs shall be made upon discovery.

E. Nuisance Control.

1. Biological control of algae and mosquitoes is preferred over chemical control. Consultation with local WDNR officials is recommended prior to the introduction of any biological control.
2. Maintaining the native grass perimeter will aid in the control of geese.
3. Mechanical controls should be used when feasible.

II. NON-ROUTINE MAINTENANCE

A. Structural Repairs and Replacement.

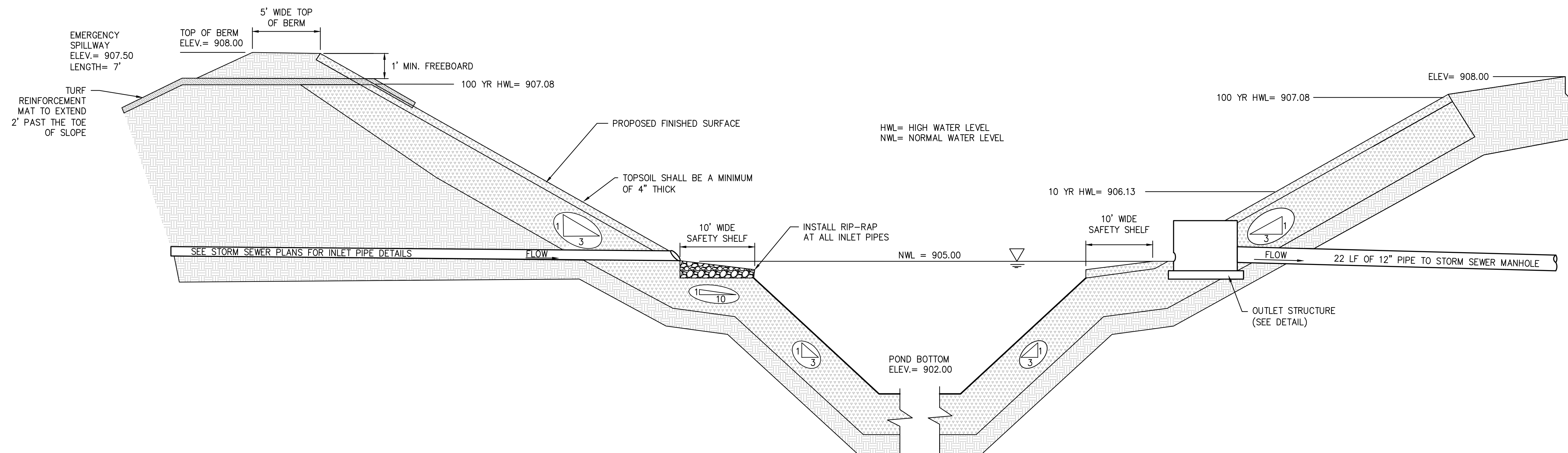
1. The outlets of the pond have been constructed utilizing concrete pipe. The estimate life of these structures is 75 to 100 years. Annual inspection of the structures will disclose any potential structural problems. If structural problems appear, repair, or replace the outlet.
2. Excessive or chronic drawdowns of the ponds may cause leaks or seepage through the embankments. Excessive drawdowns should be avoided and thus corrective measures for leakage and seepage can be avoided.

B. Sediment Removal.

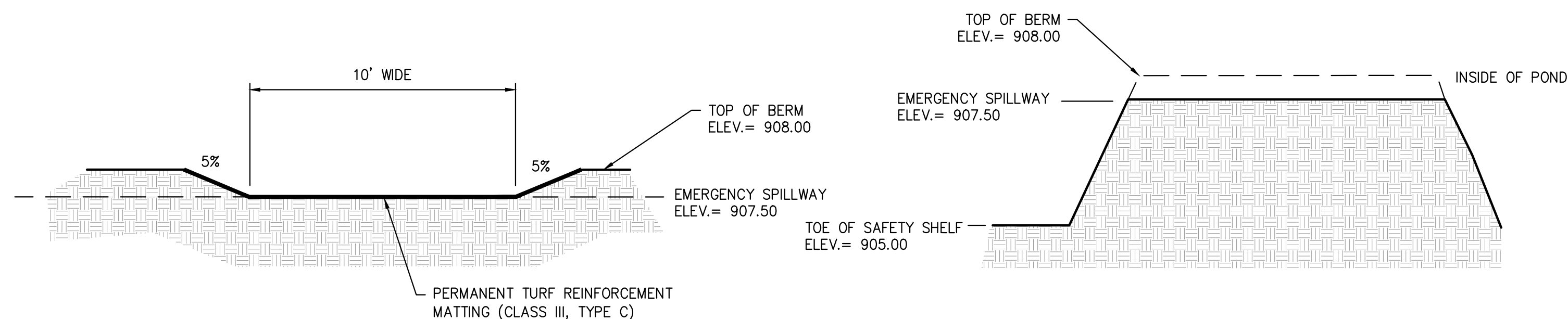
1. A sediment clean out cycle of 10 to 15 years is recommended. Sediment removal is required when the average depth of the permanent pool is 3.5 feet. Annual inspections shall be made to ensure that the design depth of the permanent water pool is maintained.
2. Sediment removed from the ponds shall be hauled to an upland area, spread and stabilized with vegetative material.
3. It is recommended that the sediment be tested to determine if land filling is necessary. Contact the local DNR prior to sediment sampling and testing to ensure compliance with State standards and regulations.
4. Surveyed depths of the sediment storage area and permanent pool elevations shall be made immediately following the construction of the ponds and recorded on the as-built plans. Annual inspections shall include measure downs to determine sediment elevations in relation to the permanent pool elevation.

Appendix 7 CONSTRUCTION DETAILS

1. ALL CONSTRUCTION SHALL MEET THE SPECIFICATIONS OF WDMR WET DETENTION BASIN TECHNICAL STANDARDS 1001.
2. ALL WORK TO BE CONDUCTED IN CONFORMANCE WITH THE STORMWATER MANAGEMENT PLAN FOR THE PROJECT SITE AS APPROVED BY THE REGULATORY ENGINEER OF RECORD.
3. RCP PIPING & INSTALLATION WITHIN THE BASIN SHALL BE IN ACCORDANCE WITH (ASTM C-76/C443) WITH RUBBER GASKETS.
4. FOR CONSTRUCTED EMBANKMENTS WHERE THE PERMANENT POOL IS PONDED 3 FEET OF MORE AGAINST THE EMBANKMENT. THERE SHALL BE A CORE TRENCH OR KEYWAY ALONG THE CENTERLINE OF THE EMBANKMENT UP TO THE PERMANENT POOL ELEVATION. THE CORE TRENCH OR KEYWAY SWALE SHALL BE A MINIMUM OF 2 FEET DEEP AND 8 FEET WIDE WITH SIDE SLOPE OF 1:1 OR FLATTER.
5. CONTRACTOR SHALL POSITION ANTI-SEEP COLLAR SUCH THAT THE COLLARS ARE COMPLETELY CONTAINED WITHIN THE EMBANKMENT.
6. IMMEDIATELY INSTALL FILTER FABRIC OVER ALL OUTLETS TO PREVENT SEDIMENT DEPOSITION IN THE PIPING. (REMOVE FOLLOWING AREA STABILIZATION.)



1 WET DETENTION BASIN
DETAILS



1. EXTEND MATTING 2' BELOW THE ELEVATION OF THE EMERGENCY SPILLWAY ON THE INSIDE OF THE POND.
2. EXTEND MATTING TO TOE OF SLOPE ON THE OUTSIDE OF THE POND.
3. MATTING SHALL BE INSTALLED IN ACCORDANCE WITH WDNR TECH STANDARD 1052.

2 EMERGENCY SPILLWAY

STORM WATER MANAGEMENT PLAN FOR CANYON DEVELOPMENT

WILLIAMS BAY, WI

LYNCH & ASSOCIATES
ENGINEERING CONSULTANTS, LLC

PLAN DETAILS

NO.	REVISIONS	BY	DATE
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ISSUED FOR
REVIEW

PLAN DATE	4.22.2025
-----------	-----------

DESIGNED BY BRW

0 N/A
SCALE

PROJECT NO.
23.0023

SHEET NO.

DETAILS

10/1/2025	REVENUES	2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
	10/10/2025	Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual Audited	Actual 6 Months	Estimates	Budget	Budget	\$ DIFF	\$ DIFF	
GENERAL FUND:											
100-41100	GENERAL FUND - PROPERTY TAX LEVY:	1,720,376	1,776,259	1,763,209	1,192,094	1,793,544	1,793,544	1,805,600	12,056	12,056	Was \$1,809,000.
100-41101	DELINQUENT PP TAX (R)	299	37	70	0	0	50	0	0	(50)	
100-41104	UTILITY TAX EQUIVALENT (R)	103,634	77,245	104,570	0	77,000	77,000	77,000	0	0	
100-41105	ROOM TAX (R)	63,022	72,273	85,941	32,695	65,391	75,000	75,000	9,609	0	
100-41106	CABLE FRANCHISE FEES (R)	53,112	50,765	49,108	24,383	48,766	51,000	48,000	(766)	(3,000)	
100-41110	MERCY PILOT (R)	55,774	55,813	57,583	0	59,310	59,310	60,793	1,483	1,483	2.5 CPI estimate
100-41111	WLC PILOT (R)	0	0	0	0	37,500	37,500	37,500	0	0	Flat annual amount, no CPI
100-41200	COUNTY AND MUNICIPAL AID (R)	0	0	0	0	0	30,600	0	0	(30,600)	Should be 100-42002
100-41201	SUPPLEMENTAL CTY & MUNICPL AID (R)	0	0	0	0	0	82,000	0	0	(82,000)	Should be 100-42002
	PD REFERENDUM PAYROLL 25 PAYBACK TO GF		NA	NA	NA	0	24,850	0	24,850	24,850	Added to revenues, was in PD referendum expenditures
	GEN FUND - OTHER TAXES:	275,840	256,133	297,272	57,078	287,967	437,310	298,293	35,176	(89,317)	
100-42001	EXEMPT COMPUTER AID (R)	470	470	470	470	470	500	500	30	0	
100-42002	STATE SHARED REVENUE (R)	65,744	64,979	144,452	0	146,141	64,000	148,638	2,497	84,638	2025 Revised Estimate Per DOR 09152025 and 2026 Estimate Per DOR 091520
100-42006	TRANSPORTATION AID (R)	191,204	204,452	208,415	110,376	210,000	220,000	210,000	0	(10,000)	2025 Per WI DOT Sheet
100-42007	POLICE TRAINING FROM STATE (R)	1,120	1,440	2,640	0	1,400	1,400	1,400	0	0	
100-42008	OTHER STATE AIDS (R)	18,165	24,475	16,465	4,710	24,000	24,000	5,000	(19,000)	(19,000)	
100-42009	POLICE GRANT FROM CTY (R)	7,195	3,065	8,488	1,820	3,640	3,000	3,000	(640)	0	
100-42010	POLICE SRO REVENUE (R)	66,455	67,452	29,406	71,648	101,000	67,000	68,000	(33,000)	1,000	1 xtra billing 2025, late for 2024
100-42011	POLICE GRANT FROM LWMMI	2,500	0	0	0	0	0	0	0	0	
100-42012	MISC GRANTS	0	0	306	37,312	37,312	0	0	(37,312)	0	2025 Tornado Grants
100-42013	POLICE FEDERAL/DOJ GRANTS	0	0	0	1,315	1,315	0	0	(1,315)	0	
100-42020	LAND USE CONVERSION FEES (R)	3,489	1,574	2,307	0	0	0	0	0	0	
100-42035	WEC SECURITY GOV SUBGRANT	600	0	0	0	0	0	0	0	0	
	GEN FUND - INTERGOVERNMENTAL:	356,941	367,908	412,949	227,650	525,278	379,900	436,538	(88,740)	56,638	

10/1/2025	REVENUES	2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
	10/10/2025	Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual Audited	Actual 6 Months	Estimates	Budget	Budget	\$ DIFF	\$ DIFF	
100-43001	LIQUOR/BEER LICENSE (R)	17,048	8,947	6,495	6,535	6,535	6,300	6,525	(10)	225	
100-43002	OPERATOR LICENSE (R)	2,560	3,860	2,510	2,700	3,000	2,200	2,700	(300)	500	
100-43006	BUILDING PERMITS (R)	88,365	111,812	136,432	68,170	110,000	80,000	290,000	180,000	210,000	\$90K Permit for Preserve Development
100-43007	ELECTRICAL PERMITS (R)	17,491	23,597	27,072	9,325	18,649	17,000	20,000	1,351	3,000	2024 total permits revenues = \$400,846, Expenses = \$168,888 (42%)
100-43008	PLUMBING PERMITS (R)	20,306	27,680	237,402	10,969	21,939	20,000	22,000	61	2,000	
100-43009	ROOM TAX PERMIT (R)	800	1,275	450	425	850	600	600	(250)	0	2024 Plumbing Permits?
100-43013	RENTAL PROP ADMIN (R)	20	30	0	10	20	0	0	(20)	0	2024 \$90K WLC Permit in Plumbing
100-43014	CIGARETTE LICENSE (R)	300	400	300	300	300	300	300	0	0	
100-43015	ZONING AND PLANNING FEES (R)	27,551	23,244	21,561	9,458	18,916	20,000	20,000	1,084	0	
100-43016	TREE PERMIT (R)	5,435	6,800	7,855	2,425	4,850	6,000	6,000	1,150	0	
100-43018	DOG LICENSE (R)	503	477	337	1,255	1,255	1,000	1,000	(255)	0	
100-43021	TOURIST ROOMING HOUSE PERMIT (R)	3,375	8,100	5,400	5,850	5,850	5,850	7,500	1,650	1,650	
100-43022	SHORT TERM RENTAL PERMIT (R)	19,368	27,550	27,175	1,900	18,050	19,000	25,000	6,950	6,000	
100-43025	TRANSIENT MERCHANT PERMIT (R)	0	1,000	400	400	400	150	400	0	250	
	GEN FUND - LICENSES & PERMITS:	203,121	244,772	473,388	119,722	210,614	178,400	402,025	191,411	223,625	
100-44040	POLICE GEN REVENUE (R)	354	4,475	312	112	224	250	250	27	0	
100-44043	POLICE ALARM PERMITS	0	0	10	10	20	0	0	(20)	0	
100-44049	SPECIAL ASSESSMENT LETTERS (R)	5,300	4,400	5,080	2,200	4,400	4,000	4,000	(400)	0	
100-44060	STREET OPENING PERMIT (R)	1,600	1,400	1,900	550	1,100	1,000	1,000	(100)	0	
100-44090	DONATION/SPONSORSHIP REVENUE (R)	0	0	500	3,100	5,000	6,000	7,000	2,000	1,000	Rec Dept
100-44092	RECREATION MISC REVENUE (R)	0	0	0	810	1,619	3,700	2,000	381	(1,700)	Rec Dept
100-44094	ATHLETIC PROGRAM REVENUE (R)	0	0	190	7,658	7,700	12,000	12,500	4,800	500	Rec Dept
100-44098	REC DEPT PROGRAM REVENUE (R)	1,238	922	770	4,170	14,000	15,000	12,000	(2,000)	(3,000)	Rec Dept
100-44100	BASEBALL/SOFTBALL REG FEES	7,795	6,765	6,795	0	0	0	0	0	0	
100-44101	REC DEPT EVENTS/TRIPS (R)	0	0	0	0	0	500	0	0	(500)	Rec Dept
100-44102	MISC REV REVENUE	3,833	3,499	3,431	0	0	0	0	0	0	
100-44103	SUMMER PROGRAM REVENUE	2,175	3,835	2,770	0	0	0	0	0	0	
100-44106	DONATION/SPONSORSHIP REVENUE (R)	2,450	1,950	3,000	0	0	0	0	0	0	
100-44107	FACILITY RENTAL REVENUE (R)	2,800	4,300	5,100	3,360	6,720	9,300	8,200	1,480	(1,100)	Rec Dept
100-44301	WATERWAY MARKERS (R)	6,309	6,629	6,321	6,559	6,559	6,300	6,300	(259)	0	
100-44620	LAKEFRONT/ShORE INCOME (R)	9,749	15,028	16,193	8,168	8,200	16,000	8,200	0	(7,800)	
100-44621	BEACH REVENUE (R)	94,681	103,569	59,349	47,908	85,000	85,000	85,000	0	0	
100-44622	LAUNCH REVENUE (R)	190,034	212,924	221,958	129,262	175,000	210,000	300,000	125,000	90,000	Full year increased launch rates
100-44623	HORVATH DRY STORAGE REVENUE (R)	24,231	24,257	25,217	25,117	25,117	25,300	25,300	183	0	
100-44625	TOWN OF LINN BEACH REVENUE (R)	16,380	15,120	11,340	14,000	14,000	15,000	14,000	0	(1,000)	
100-44630	KAYAK/PADDLEBOARD RENTAL FEES (R)	16,445	13,597	7,270	3,642	10,000	15,000	10,805	805	(4,195)	Increased \$805. Rack \$126 to \$140 and Ramp \$315 to \$350. Rack
	GEN FUND - CHARGES FOR SERVICES:	385,374	422,670	377,506	256,626	364,659	424,350	496,555	131,896	72,205	
100-45001	COURT FINE REVENUE (R)	33,452	32,215	33,048	5,533	6,500	26,000	7,500	1,000	(18,500)	
100-45002	PARKING TICKET REVENUE (R)	6,056	10,077	4,581	2,171	4,000	8,000	4,000	0	(4,000)	
	GEN FUND - FINES & FORFEITURES:	39,508	42,291	37,629	7,704	10,500	34,000	11,500	1,000	(22,500)	

10/1/2025	REVENUES	2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
Account	10/10/2025 Title	Prior Year 3 Actual Audited	Prior Year 2 Actual Audited	Prior Year 1 Actual Audited	Current Year Actual 6 Months	Current Year Estimates	Current Year Budget	Future Year Budget	2025 Estimates \$ DIFF	2025 Budget \$ DIFF	
100-46000	WEED AND NUISANCE CONTROL (R)	1,050	750	0	750	750	750	750	0	0	
100-48003	EMS BILLABLE AR										
100-48004	INTEREST ON INVESTMENTS - RESERVES (R)	84,754	338,676	272,323	127,376	254,752	48,680	80,827	(173,925)	32,147	2026 Interest based upon 2024 audit reserves 2,694,238 @3.0% interest rate.
100-48007	LEGAL A/R	NA	NA	NA	81,875	120,000	0	40,000	(80,000)	40,000	Offset by Expenditures 100-51630-000
100-48008	ENGINEERING A/R	NA	NA	NA	NA	0	0	40,000	40,000	40,000	
100-48009	PLANNING A/R	NA	NA	NA	NA	0	0	20,000	20,000	20,000	
100-48010	METER REPAIR/REPLACEMENT AR	NA	NA	NA	NA	NA	0	0	0	0	
100-48011	MISC. A/R	NA	NA	NA	NA	NA	0	0	0	0	
100-48013	BOAT SLIP RENTAL (R)	248,138	253,715	260,386	290,679	293,335	286,000	309,750	16,415	23,750	5% increase 2026
100-48014	MISCELLANEOUS DONATIONS (R)				0	0	0	0	0	0	
100-48015	GENEVA LK LAW ENFORCEMENT AGCY (R)	36,071	31,653	24,663	23,150	32,000	32,000	32,000	0	0	
100-48016	MUNICIPAL BUSINESS LEASE PYMT (R)	1,184	994	857	0	0	1,000	1,000	1,000	0	
100-48017	TOWER LEASE	0	0	2,500	0	0	0	0	0	0	
100-48020	GLEA CBCW GRANT	0	2,400	2,400	0	0	2,400	2,400	2,400	0	
	VH SITE CELLULAR ANTENNA ONE TIME FEE	0	0	0	0	19,750	0	0	(19,750)	0	2025 one time payment for lease
	VH SITE CELLULAR ANTENNA ANNUAL LEASES	0	0	0	0	8,000	0	48,000	40,000	48,000	4th Qtr 2025 (\$2K mo) and Full Year 2026 (\$4K mo) and beyond
	GEN FUND - COMMERCIAL:	371,198	628,188	563,129	523,830	728,587	370,830	574,727	(153,860)	203,897	
100-49001	AURORA DONATION (R)	3,250	3,250	3,250	0	0	0	0	0	0	
100-49002	INSURANCE PAYMENTS/REBATE (R)	75,138	3,478	29,549	14,370	14,370	2,500	3,000	(11,370)	500	
100-49003	SALE OF VGE ASSET (R)	26,812	0	7,793	0	5,000	1,000	1,000	(4,000)	0	
100-49009	GENERAL MISC UNCLASS (R)	(1,014)	0	10,412	337	500	500	500	0	0	
110-42004	POLICE DONATIONS (R)	3,119	6,015	157	220	300	0	0	(300)	0	
	GEN FUND - MISCELLANEOUS:	107,305	12,743	51,161	14,927	20,170	4,000	12,000	(8,170)	8,000	
	GENERAL FUND - REVENUES:	3,459,664	3,750,963	3,976,242	2,399,632	3,941,319	3,622,334	4,037,238	120,769	464,604	
	GENERAL FUND - EXPENDITURES:	3,715,742	3,525,809	3,722,807	2,075,611	3,558,152	3,713,774	4,101,255	493,104	337,481	
	GENERAL FUND - TOTAL:	(256,078)	225,154	253,436	324,020	383,167	(91,440)	(64,018)	(372,335)	127,122	

10/1/2025	REVENUES	2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
10/10/2025	10/10/2025	Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual Audited	Actual 6 Months	Estimates	Budget	Budget	\$ DIFF	\$ DIFF	
120-41100	EMS TAX LEVY	NA	928,077	928,077	616,854	928,077	928,077	928,077	0	0	
120-42004	EMS IGA FUNDS (R)	NA	0	0					0	0	
120-49200	OPERATING TRANSFER IN (R)	NA	0	0	0	0	121,923	119,567	119,567	(2,356)	
	IGA EMS FUND - REVENUES:	NA	928,077	928,077	616,854	928,077	1,050,000	1,047,644	119,567	(2,356)	
	IGA EMS FUND - EXPENSES:	NA	762,756	796,657	379,596	838,445	1,050,000	1,047,644	209,200	(2,356)	
	IGA EMS FUND - TOTAL:	NA	165,321	131,420	237,258	89,633	0	0	(89,633)	0	
130-42004	POLICE DEPARTMENT 2025 REFERENDUM (R)	NA	NA	NA	0	0	0	399,980	399,980	399,980	
130-49200	PD 2025 REFERENDUM - REVENUES:	NA	NA	NA	0	0	0	399,980	399,980	399,980	
	OPERATING TRANSFER GEN FUND 2025 LOAN TO P	NA	NA	NA	0	24,850	49,707	0	(24,850)	(49,707)	
	PD 2025 REFERENDUM - EXPENDITURES:	NA	NA	NA	0	24,850	49,707	327,336	302,486	277,629	
	PD F2025 REFERENDUM - TOTAL:	NA	NA	NA	0	0	0	72,644	72,644	72,644	
215-42004	2% FIRE DUES (R)	28,897	35,067	43,050	0	50,972	35,000	45,000	(5,972)	10,000	
215-49200	OPERATING TRANSFER IN (R)	0	0	0	0	0	0	0	0	0	
	2% FIRE DUES - REVENUES:	28,897	35,067	43,050	0	50,972	35,000	45,000	(5,972)	10,000	
	2% FIRE DUES - EXPENDITURES:	71,063	15,078	65,288	4,009	30,019	16,560	44,092	14,073	27,532	
	2% FIRE DUES - TOTAL:	(42,166)	19,989	(22,238)	(4,009)	20,953	18,440	908	(20,045)	(17,532)	
220-42004	ACT 102 GRANT (R)	12,745	44,503	0	0	0	0	0	0	0	
220-42006	ACT 102 - ARPA SUPPLEMENT	12,195	12,195	0	0	0	0	0	0	0	
220-42100	EMS FLEX GRANT	0	44,503	0	0	0	0	0	0	0	
	ACT 102 GRANT - REVENUES:	24,940	101,200	0	0	0	0	0	0	0	
	ACT 102 GRANT - EXPENDITURES:	43,392	203,185	9,091	0	0	8,000	0	0	(8,000)	
	ACT 102 GRANT - TOTAL:	(18,451)	(101,985)	(9,091)	0	0	(8,000)	0	0	8,000	
225-41100	TAX LEVY-RECYCLING (R)	111,335	84,464	97,725	50,514	76,000	76,000	100,500	24,500	24,500	Was \$87,500
225-42500	STATE RECYCLING GRANTS (R)	8,152	8,157	0	8,162	8,162	8,000	8,000	(162)	0	
225-49200	OPERATING TRANSFER IN (R)	0	12,800	0	0	8,000	8,000	0	(8,000)	(8,000)	
	RECYCLING FUND - REVENUES	119,487	105,421	97,725	58,676	92,162	92,000	108,500	16,338	16,500	
	RECYCLING FUND - EXPENDITURES	98,936	126,177	78,458	61,122	103,500	92,000	108,500	5,000	16,500	
	RECYCING FUND - TOTAL	20,552	(20,756)	19,267	(2,445)	(11,338)	0	0	11,338	0	

10/1/2025	REVENUES	2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
	10/10/2025	Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual Audited	Actual 6 Months	Estimates	Budget	Budget	\$ DIFF	\$ DIFF	
400-41100	TAX LEVY-LIBRARY FUND (R)	191,044	222,112	242,877	166,373	332,747	250,314	240,000	(92,747)	(10,314)	
400-48004	INTEREST ON BANK ACCOUNT (R)	3,578	8,913	10,823	3,775	7,550	7,602	7,600	50	(2)	
400-48905	COUNTY REIMBURSEMENT (R)	134,892	119,536	113,847	54,967	109,934	108,912	107,434	(2,500)	(1,478)	
400-48970	MISC REVENUE	0	609	0	0	0	0	0	0	0	
	LIBRARY FUND - REVENUES:	329,514	351,170	367,547	225,116	450,231	366,828	355,034	(95,197)	(11,794)	
	LIBRARY FUND - EXPENDITURES:	335,785	329,480	330,657	178,999	355,578	350,078	375,043	19,465	24,965	
	LIBRARY FUND - TOTAL	(6,271)	21,690	36,890	46,117	94,653	16,750	(20,009)	(114,662)	(36,759)	
410-48004	INTEREST ON INVESTMENTS (R)	0	2,077	0	0	0	0	0	0	0	
410-48925	FRIENDS REVENUE (R)	21,085	4,948	205	2,759	4,000	4,000	4,000	0	0	
410-48940	LIBRARY CHAPIN REVENUE (R)	4,000	4,000	4,000	0	4,000	4,000	4,000	0	0	
410-48955	DONOR DESIGNATED FUNDS (R)	4,164	12,471	7,652	0	5,000	3,000	4,450	(550)	1,450	
410-48960	MISC REV FOR BOARD COMMITTMENT	0	0	0	160	4,000	5,350	39,834	35,834	34,484	
	LIBRARY MISC - REVENUES:	29,249	21,418	11,857	2,919	17,000	16,350	52,284	35,284	35,934	
	LIBRARY MISC - EXPENDITURES:	35,683	39,478	28,054	15,610	31,220	33,100	32,675	1,455	(425)	
	LIBRARY MISC - TOTAL	(6,434)	(18,059)	(16,196)	(12,691)	(14,220)	(16,750)	19,609	33,829	36,359	
415-42004	FIREWORKS DONATION (R)	27,703	28,439	30,923	20,794	27,000	25,000	25,000	(2,000)	0	Annual Audit Estimate
415-49200	OPERATING TRANSFER IN (R)	0	0	0	0	0	4,580	4,580	4,580	0	
	FIREWORKS FUND - REVENUES:	27,703	28,439	30,923	20,794	27,000	29,580	29,580	2,580	0	
	FIREWORKS FUND - EXPENDITURES:	25,985	25,697	25,686	25,697	25,697	25,000	25,000	(697)	0	
	FIREWORKS FUND - TOTAL:	1,718	2,742	5,237	(4,904)	1,303	4,580	4,580	3,277	0	
420-42004	TD #1 REVENUES:	NA	NA	NA	12,500	12,500	0	0	(12,500)	0	
	TID #1 EXPENDITURES:	NA	NA	NA	12,500	12,500	0	10,000	(2,500)	10,000	
	TID #1 FUND - TOTAL:	NA	NA	NA	0	0	0	(10,000)	(10,000)	(10,000)	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-51110-110	VILLAGE BOARD WAGES (E)	21,596	22,100	22,146	11,025	22,050	22,100	22,100	50	0	
100-51110-121	VILLAGE BOARD FICA (E)	1,687	1,691	1,746	843	1,687	1,700	1,700	13	0	
100-51110-130	VILLAGE BOARD OTHER EXPENSE (E)	632	0	0	606	1,211	1,000	1,000	(211)	0	
	VILLAGE BOARD	23,915	23,791	23,893	12,474	24,948	24,800	24,800	(148)	0	
100-51210-110	MUNICIPAL COURT WAGES (E)	31,741	32,745	37,891	12,825	12,825	9,300	4,200	(8,625)	(5,100)	Unemployment
100-51210-121	MUNICIPAL COURT FICA (E)	2,435	2,599	2,904	981	981	770	0	(981)	(770)	
100-51210-130	MUNICIPAL COURT OTHER EXPENSE (E)	0	0	0	3,000	3,000	0	1,000	(2,000)	1,000	
100-51210-150	MUNICIPAL COURT IT FEES (E)	4,644	4,407	4,544	4,500	4,500	1,500	0	(4,500)	(1,500)	
100-51210-160	MUNICIPAL COURT SUPPLIES (E)	143	12	296	46	135	0	0	(135)	0	
100-51210-161	MUNICIPAL COURT POSTAGE (E)	500	500	0	0	0	0	0	0	0	
100-51210-190	MUNICIPAL COURT TRAINING (E)	1,326	700	1,297	0	0	0	0	0	0	
	MUNICIPAL COURT	40,789	40,962	46,933	21,352	21,441	11,570	5,200	(16,241)	(6,370)	
100-51400-00	RECRUITING FEES	0	72,010	2,657	2,150	2,150	0	0	(2,150)	0	
100-51405-000	BILLABLE SERVICES (E)	70,327	124,305	170,916	16,409	32,818	109,000	0	(32,818)	(109,000)	Moved to Legal/Eng/Planning AR
100-51410-110	GEN ADMIN WAGES (E)	146,832	135,354	165,511	84,823	169,646	170,346	175,916	6,270	5,570	3% COLA Placeholder
100-51410-112	GEN ADMIN OT WAGES	0	0	0	89	178	0	200	22	200	3% COLA Placeholder
100-51410-115	GEN ADMIN UNEMPLOYMENT	0	50	0	0	0	0	0	0	0	
100-51410-121	GEN ADMIN FICA (E)	9,512	9,323	12,272	6,126	12,252	13,091	13,458	1,206	367	3% COLA Placeholder
100-51410-122	GEN ADMIN RETIREMENT (E)	9,468	8,563	11,734	5,904	11,807	11,938	12,666	859	728	3% COLA Placeholder
100-51410-123	GEN ADMIN HEALTH & DENTAL & DENTAL INSURANCE (E)	47,478	16,790	31,652	17,921	35,843	34,976	40,003	4,160	5,027	Employer Reduction from 88% to 86%
100-51410-124	GEN ADMIN LIFE INSURANCE (E)	460	674	730	392	785	750	1,064	280	314	
100-51410-127	GEN ADMIN HSA FUNDING (E)	7,771	5,859	7,655	3,625	7,250	7,250	7,250	0	0	
100-51410-130	GEN ADMIN IT EXPENSE (E)	1,401	1,142	4,060	3,735	5,000	4,000	5,000	0	1,000	
100-51410-150	GEN ADMIN OFFICE EQUIPMENT (E)	0	1,142	1,120	3,735	7,470	4,000	4,000	(3,470)	0	
100-51410-160	GEN ADMIN SUPPLIES (E)	8,971	7,398	9,895	4,592	9,184	10,000	10,000	816	0	
100-51410-161	GEN ADMIN POSTAGE (E)	4,259	11,889	12,068	6,311	10,000	6,500	8,900	(1,100)	2,400	
100-51410-162	GEN ADMIN COPIER EXPENSE (E)	1,200	4,379	3,138	2,225	4,451	3,600	3,600	(851)	0	
100-51410-190	GEN ADMIN TRAINING (E)	4,242	7,723	3,368	3,075	6,149	7,000	10,600	4,451	3,600	Administrator Annual ICMA Conference Fall 2026
100-51410-200	GEN ADMIN TELEPHONE (E)	10,156	8,080	4,018	2,772	5,544	4,000	4,000	(1,544)	0	Hotel 1200, Sessions 2,000, airfare 400
100-51410-210	GEN ADMIN PUBLICATIONS (E)	4,459	3,944	4,455	1,437	2,875	3,500	3,500	625	0	
100-51410-300	GEN ADMIN CODIFICATION (E)	7,362	4,210	3,580	1,728	3,456	6,200	6,100	2,644	(100)	
	GEN ADMIN	333,898	422,835	448,828	167,050	326,858	396,151	306,256	(20,602)	(89,895)	
100-51412-000	ELECTION EXPENSE (E)	3,268	3,810	3,214	2,952	3,000	3,000	18,495	15,495	15,495	
100-51412-110	ELECTION WAGES (E)	7,056	5,669	11,309	5,109	5,500	7,000	14,000	8,500	7,000	
100-51412-121	ELECTION FICA (E)	10	9	9	5	10	30	60	50	30	
	ELECTION	10,334	9,487	14,531	8,066	8,510	10,030	32,555	24,045	22,525	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-51412-130	WEC SECURITY.GOV SUBGRANT EXP	85	0	0		0	0	0	0	0	
100-51414-000	SOFTWARE LICENSE & IT SUPPORT (E)	34,631	28,970	24,019	24,520	30,000	30,000	30,000	0	0	Includes Community Connect \$2,000
100-51414-100	LASERFICHE EXPENSE (E)	0	3,642	0	0	3,100	3,100	3,100	0	0	
100-51415-000	LEAGUE EXPENSES/DUES (E)	2,878	3,161	0	0	3,000	3,000	3,000	0	0	
100-51510-000	INSURANCE EXPENSE (E)	52,138	58,934	66,376	66,219	66,219	66,000	66,000	(219)	0	
100-51520-000	ASSESSOR CONTRACT (E)	19,577	21,441	18,027	15,000	30,000	30,000	30,000	0	0	
100-51521-000	PROPERTY ASSESSMENT	48,527	2,207	2,316	0	0	0	0	0	0	
100-51560-000	CONTINGENCY (E)	390	24,219	4,476	0	20,000	34,326	50,000	30,000	15,674	\$50K Annual Contingency
100-51570-000	AUDIT	22,459	29,781	62,096	43,081	45,000	28,150	28,150	(16,850)	0	
100-51575-000	FINANCIAL MGT PLAN EXPENSE	0	0	18,534	150	300	0	0	(300)	0	
100-51610-000	LEGAL	43,040	66,422	49,944	12,287	24,573	35,000	30,000	5,427	(5,000)	
100-51630-000	LEGAL/ENGINEER/PLANNING AR	0	0	0	81,875	120,000	0	100,000	(20,000)	100,000	100% revenues offset - Revenue 100-48007
100-51670-000	MISC MUNI SERVICES COST RECOV	0	0	0	1,219	2,438	0	1,000	(1,438)	1,000	
	CONTRACTED SERVICES	223,724	238,778	245,788	244,350	344,630	229,576	341,250	(3,380)	111,674	
100-51670-000	MISC	0	0	0	592	1,184	2,000	1,200	16	(800)	
100-51720-150	LIONS FIELD HOUSE REPAIR/MAINT (E)	0	0	0	592	1,184	2,000	1,200	16	(800)	
100-51720-160	LIONS FIELD HOUSE SUPPLIES (E)	823	1,721	884	54	108	700	500	392	(200)	
100-51720-170	LIONS FIELD HOUSE GAS (E)	1,427	667	694	1,560	2,000	1,800	2,000	0	200	
100-51720-171	LIONS FIELD HOUSE ELECTRIC (E)	1,663	1,681	1,188	928	1,856	1,800	1,800	(56)	0	
100-51720-173	LIONS FIELD HOUSE W&S (E)	1,603	1,732	1,776	337	675	1,000	1,000	325	0	
100-51720-175	JANITORIAL SERVICES (E)	827	886	703	2,614	5,229	5,800	5,800	571	0	
100-51720-200	LIONS FIELD HOUSE TELEPHONE (E)	5,229	5,229	5,229	0	0	0	0	0	0	
	LIONS FIELD HOUSE	11,571	11,916	10,474	6,678	12,237	15,100	13,500	1,263	(1,600)	
100-51730-150	VH BLDG REPAIRS/MAINT (E)	0	0	10	720	1,440	5,000	2,500	1,060	(2,500)	Includes Reimbused OT by State and County
100-51730-160	VH BLDG SUPPLIES (E)	19,873	12,572	2,439	498	995	2,000	1,500	505	(500)	
100-51730-170	VH BLDG GAS (E)	2,986	1,870	1,126	1,909	2,400	2,500	2,500	100	0	
100-51730-171	VH BLDG ELECTRIC (E)	1,883	2,338	1,655	4,344	8,689	8,000	8,000	(689)	0	
100-51730-173	VH BLDG WATER & SEWER (E)	8,442	7,779	7,429	866	1,733	2,000	2,000	267	0	
100-51730-175	JANITORIAL SERVICES (E)	1,640	1,712	1,712	3,427	6,854	8,000	8,000	1,146	0	
100-51920-000	LEAGUE EXPENSES/DUES (E)	8,100	7,866	4,522	4,522	4,522	0	5,249	727	5,249	
100-51965-000	WMS BAY BUSINESS ASSOC (E)	76,776	58,821	65,255	27,596	55,192	52,500	55,000	(192)	2,500	
100-51970-000	SHORT TERM RENTAL ADMIN (E)	0	6,565	7,516	0	0	6,600	6,600	6,600	0	
100-51990-000	EMPLOYEE RECOGNITION	3,325	3,743	375	375	375	375	375	0	0	
	VH OPERATIONS AND MEMBERSHIPS	123,026	103,266	92,039	44,257	82,200	86,975	91,724	9,524	4,749	
	GENERAL FUND - ADMINISTRATION:	767,256	851,034	882,485	504,227	820,823	774,202	815,286	(5,538)	41,084	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-52120-110	POLICE WAGES (E)	571,773	593,209	682,758	428,191	726,500	726,500	760,025	33,525	33,525	5% Union Agreement
100-52120-111	POLICE PT SHIFT PREMIUM (E)	150	600	254	0	0	500	500	500	0	
100-52120-112	POLICE OT WAGES (E)	57,427	48,478	58,321	28,091	56,183	60,000	45,000	(11,183)	(15,000)	\$5,000 To be reimbursed by County
100-52120-113	POLICE DBL OT WAGES (E)	0	0	0	0	0	0	0	0	0	
100-52120-118	EDUCATION INCENTIVE	0	0	0	0	0	8,500	9,000	9,000	500	
100-52120-120	POLICE CONSULTANT WAGES	0	0	21,678	0	0	0	0	0	0	
100-52120-121	POLICE FICA (E)	47,396	49,896	54,531	36,107	61,000	61,000	63,780	2,780	2,780	5% COLA
100-52120-122	POLICE RETIREMENT (E)	63,738	86,321	99,460	64,321	116,000	116,000	118,603	2,603	2,603	5% COLA
100-52120-123	POLICE HEALTH & DENTAL INSURANCE (E)	98,571	90,496	118,048	93,018	164,000	164,000	190,124	26,124	26,124	Employer Reduction from 88% to 86%
100-52120-124	POLICE LIFE INSURANCE (E)	667	772	1,064	736	1,000	1,000	1,355	355	355	
100-52120-125	POLICE UNIFORMS (E)	8,982	7,354	9,716	9,335	10,000	10,000	10,000	0	0	
100-52120-127	POLICE HSA FUNDING (E)	26,903	34,282	34,791	21,875	35,000	35,000	37,500	2,500	2,500	
100-52120-130	POLICE IT EXPENSE (E)	32,978	33,780	35,169	31,469	58,766	58,766	55,000	(3,766)	(3,766)	
100-52120-150	POLICE REPAIRS/MAINT (E)	8,975	12,845	7,870	8,621	17,243	11,665	10,500	(6,743)	(1,165)	
100-52120-160	POLICE SUPPLIES (E)	2,788	4,014	7,177	1,894	3,788	5,300	5,300	1,512	0	
100-52120-161	POLICE POSTAGE/CONFINEMENT (E)	609	216	355	28	55	650	350	295	(300)	
100-52120-180	POLICE FUEL (E)	18,428	21,767	15,701	7,928	15,855	21,000	20,000	4,145	(1,000)	
100-52120-190	POLICE TRAINING (E)	18,170	19,023	19,579	8,120	16,240	23,451	27,181	10,941	3,730	
100-52120-200	POLICE TELEPHONE (E)	6,254	6,467	5,685	2,314	4,629	6,500	6,500	1,871	0	
100-52120-210	POLICE COMMUNITY PROGRAMS (E)	1,523	2,328	475	1,005	2,011	3,000	3,000	989	0	
100-52120-215	POLICE GRANT EXPENDITURES (E)	0	0	0	0	0	0	0	0	0	
100-52120-220	POLICE LICENSE SUPSESSION FEE (E)	0	45	21	6	12	0	0	(12)	0	
100-52120-300	STUDENT RESOURCE OFFICER (E)	88,606	89,937	71,648	0	0	0	0	0	0	
100-52120-400	POLICE ACADEMY EXPENSES (E)	4,903	3,385	0	0	0	0	0	0	0	
110-52320-165	POLICE DONATION EXPENDITURES	9,819	67	0	0	0	0	0	0	0	
	POLICE	1,068,660	1,105,280	1,244,301	743,058	1,288,281	1,312,832	1,363,718	75,437	50,886	
100-52130-110	WATER SAFETY PATROL (E)	28,285	29,431	30,317	0	0	33,000	31,720	31,720	(1,280)	
100-52130-120	GENEVA LAKE ENVIRONMENTAL AGCY (E)	35,000	35,000	40,000	22,500	45,000	45,000	45,000	0	0	
100-52130-130	GENEVA LAKE LAW ENFORCEMENT (E)	63,000	73,000	73,000	75,000	75,000	75,000	75,000	0	0	Add \$25K to cover Lake Geneva Leaving
100-52130-140	SIREN MAINTENANCE (E)	0	0	0	0	0	0	0	0	0	
100-52130-150	EMERGENCY MANAGEMENT (E)	2,075	2,066	2,029	182	364	1,200	1,200	836	0	
	GENEVA LAKE	128,360	139,497	145,346	97,682	120,364	154,200	152,920	32,556	(1,280)	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-52320-106	FIRE DEPT OFFICER PAY (E)	23,221	17,979	22,585	14,702	29,404	25,700	22,699	(6,705)	(3,001)	3% COLA Placeholder
100-52320-107	FIRE DEPT MEETING PAY (E)	2,961	2,367	3,206	1,875	3,749	3,700	1,938	(1,811)	(1,762)	3% COLA Placeholder
100-52320-108	FIRE DEPT DRILL PAY (E)	9,400	13,466	8,835	5,013	10,026	10,260	6,691	(3,335)	(3,569)	3% COLA Placeholder
100-52320-109	FIRE DEPT CALLS PAY (E)	16,472	13,302	15,136	7,228	14,455	16,000	7,470	(6,986)	(8,530)	3% COLA Placeholder
100-52320-110	FIRE/RESCUE UNEMPLOYMENT (E)	0	100	0	0	0	100	100	100	0	
100-52320-120	FIRE DEPT TRAINING PAY (E)	3,876	2,592	596	205	409	1,250	500	91	(750)	
100-52320-121	FIRE DEPT FICA (E)	4,025	3,818	3,708	2,476	4,952	4,350	2,968	(1,983)	(1,382)	3% COLA Placeholder
100-52320-122	FIRE DEPT RETIREMENT (E)	1,016	869	818	577	1,154	850	1,400	246	550	3% COLA Placeholder
100-52320-130	FIRE DEPT IT (E)	1,413	1,891	991	1,063	2,126	1,200	1,500	(626)	300	
100-52320-150	FIRE DEPT REPAIRS/MAINT (E)	13,337	13,559	15,028	5,387	19,000	16,000	16,000	(3,000)	0	
100-52320-160	FIRE DEPT SUPPLIES (E)	4,784	6,114	6,151	7,026	7,500	6,500	6,500	(1,000)	0	
100-52320-170	FIRE DEPT GAS (E)	5,263	5,188	1,260	0	2,500	5,300	5,300	2,800	0	
100-52320-171	FIRE DEPT ELECTRIC (E)	1,873	2,220	2,447	1,078	2,156	2,000	2,000	(156)	0	
100-52320-173	FIRE DEPT WATER & SEWER (E)	587	628	621	322	644	800	800	156	0	
100-52320-180	FIRE DEPT FUEL (E)	1,871	1,349	1,428	272	544	1,000	1,000	457	0	
100-52320-190	FIRE DEPT TRAINING/CONFERENCES (E)	734	209	759	280	560	1,000	1,000	441	0	
100-52320-200	FIRE DEPT TELEPHONE (E)	11,151	8,952	4,093	2,091	4,181	3,500	3,500	(681)	0	
	FIRE DEPARTMENT	101,984	94,602	87,661	49,594	103,361	99,510	81,366	(21,994)	(18,144)	
100-52340-106	DIVE TEAM OFFICER PAY (E)	900	600	0	160	320	960	989	669	29	3% COLA Placeholder
100-52340-107	DIVE TEAM MEETING PAY (E)	36	0	28	29	57	640	659	602	19	3% COLA Placeholder
100-52340-108	DIVE TEAM DRILL PAY (E)	285	0	155	423	846	0	0	(846)	0	3% COLA Placeholder
100-52340-121	DIVE TEAM FICA (E)	76	52	5	48	95	130	134	39	4	3% COLA Placeholder
100-52340-145	DIVE TEAM TANK MAINTENANCE (E)	853	2,997	1,206	165	330	4,260	4,260	3,930	0	
100-52340-146	DIVE SUIT EXPENSE (E)	0	0	0	0	0	0	0	0	0	
100-52340-150	DIVE TEAM REPAIRS/MAINT (E)	1,076	30	166	0	0	300	150	150	(150)	
100-52340-190	DIVE TEAM TRAINING (E)	890	1,250	0	0	0	800	2,000	2,000	1,200	
	DIVE TEAM	4,116	4,929	1,559	824	1,649	7,090	8,192	6,543	1,102	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-52360-106	RESCUE DEPT OFFICER PAY (E)	6,838	7,478	3,709	4,015	8,030	5,400	5,900	(2,130)	500	3% COLA
100-52360-107	RESCUE DEPT MEETING PAY (E)	711	738	465	362	724	700	700	(24)	0	3% COLA
100-52360-108	RESCUE DEPT TRAINING PAY (E)	2,529	3,340	1,575	1,042	2,084	1,000	1,700	(384)	700	3% COLA
100-52360-109	RESCUE DEPT CALLS PAY (E)	5,139	3,740	4,751	1,600	3,000	4,000	2,000	(1,000)	(2,000)	Captain Gluth added \$1,000
100-52360-110	RESCUE DEPT UNEMPLOYMENT (E)	0	577	276	1	2	0	0	(2)	0	
100-52360-120	RESCUE DEPT STIPEND PAY	384	960	0	0	0	0	0	0	0	
100-52360-121	RESCUE DEPT FICA (E)	1,271	1,343	522	471	942	900	800	(142)	(100)	3% COLA
100-52360-122	RESCUE DEPT RETIREMENT (E)	12	160	9	4	9	100	100	91	0	
100-52360-130	RESCUE DEPT IT EXPENSE (E)	266	77	274	288	576	300	350	(226)	50	
100-52360-150	RESCUE DEPT REPAIRS/MAINT (E)	1,129	176	0	313	625	0	0	(625)	0	
100-52360-160	RESCUE DEPT SUPPLIES (E)	6,057	6,273	706	1,416	2,832	200	800	(2,032)	600	
100-52360-170	RESCUE DEPT INTERGOVT AGMNT	232,378	0	0	0	0	0	0	0	0	
100-52360-180	RESCUE DEPT FUEL (E)	1,355	859	807	45	91	300	0	(91)	(300)	
100-52360-190	RESCUE DEPT TRAINING (E)	450	600	0	0	0	500	1,500	1,500	1,000	
100-52360-200	RESCUE DEPT TELEPHONE (E)	623	1,948	1,040	582	1,165	600	1,200	36	600	
	RESCUE DEPARTMENT QUARTERS	NA	NA	NA	0	0	0	50,000	50,000	50,000	President Jaramillo added
	RESCUE DEPT	259,140	28,269	14,134	10,140	20,079	14,000	65,050	(5,029)	1,050	
100-53100-160	BLDG INSP SUPPLIES (E)	1,772	342	716	488	975	500	500	(475)	0	
100-53100-210	ZONING INSPECTION CONTRACT (E)	24,053	23,747	18,497	9,650	19,300	25,000	22,000	2,700	(3,000)	
100-53100-211	BLDG INSPECTION CONTRACT (E)	95,789	153,523	168,888	45,022	90,044	93,600	249,000	158,956	155,400	75% of 2026 budgeted revenues
100-53100-215	CODE ENFORCEMENT CONTRACT (E)	31,944	31,198	48,540	26,941	53,881	33,000	70,000	16,119	37,000	
100-53100-220	STR ENFORCEMENT CONTRACT (E)	372	6,778	5,145	0	0	7,000	9,100	9,100	2,100	
	BUILDING, ZONING	153,931	215,587	241,786	82,101	164,201	159,100	350,600	186,399	191,500	
	GEN FUND - PUBLIC SAFETY TOTAL:	1,716,192	1,588,163	1,734,787	983,399	1,697,935	1,746,732	2,021,846	273,911	225,114	
100-54100-110	DPW ADMIN WAGES (E)	38,279	39,796	45,335	26,541	53,082	47,500	47,740	(5,342)	240	3% COLA
100-54100-121	DPW ADMIN FICA (E)	2,587	2,592	2,929	1,801	3,603	3,600	3,652	49	52	3% COLA
100-54100-122	DPW ADMIN RETIREMENT (E)	2,844	2,951	3,106	1,610	3,220	3,300	3,437	217	137	3% COLA
100-54100-123	DPW ADMIN HEALTH & DENTAL INSURANCE (E)	9,137	9,534	10,285	6,279	12,559	12,600	13,267	708	667	Employer Reduction from 88% to 86%
100-54100-124	DPW ADMIN LIFE INSURANCE (E)	0	0	0	0	90	100	91	1	(9)	
100-54100-127	DPW HSA FUNDING (E)	2,500	3,125	2,500	1,250	2,500	2,500	2,500	0	0	
100-54100-300	ENGINEERING (E)	9,371	7,476	1,098	0	0	6,000	9,000	9,000	3,000	
	ADMIN & ENGINEERING	64,717	65,473	65,252	37,482	75,054	75,600	79,688	4,634	4,088	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-54310-110	STREETS WAGES (E)	87,510	95,843	97,909	48,778	97,556	89,500	90,755	(6,801)	1,255	3% COLA
100-54310-112	STREETS OT WAGES (E)	2,215	3,317	2,772	892	1,784	1,700	2,000	216	300	
100-54310-113	STREETS DBL OT WAGES (E)	1,355	2,832	1,770	425	850	3,700	2,000	1,150	(1,700)	
100-54310-121	STREETS FICA (E)	6,655	7,471	7,574	3,698	7,396	7,000	7,064	(332)	64	3% COLA
100-54310-122	STREETS RETIREMENT (E)	6,250	6,606	6,415	3,265	6,530	6,400	6,418	(113)	18	3% COLA
100-54310-123	STREETS HEALTH & DENTAL INSURANCE (E)	19,503	17,453	15,658	9,577	19,153	19,400	21,333	2,180	1,933	Employer Reduction from 88% to 86%
100-54310-124	STREETS LIFE INSURANCE (E)	255	272	232	116	232	250	341	109	91	
100-54310-125	STREETS UNIFORMS (E)	2,446	1,146	974	371	742	2,500	1,500	758	(1,000)	
100-54310-127	STREETS HSA FUNDING (E)	5,019	5,901	3,504	1,746	3,492	4,200	4,167	675	(34)	
100-54310-150	STREETS EQUIP REPAIRS/MAINT (E)	26,560	24,965	31,720	14,568	29,136	25,000	25,000	(4,136)	0	
100-54310-160	STREETS SUPPLIES (E)	3,510	5,441	6,375	3,095	6,190	6,500	6,500	310	0	
100-54310-170	STREETS GAS (E)	3,603	3,906	3,106	3,058	6,116	4,000	4,000	(2,116)	0	
100-54310-171	STREETS ELECTRIC (E)	6,209	5,372	5,418	2,980	5,959	6,000	6,000	41	0	
100-54310-173	STREETS WATER & SEWER (E)	676	718	710	369	738	900	900	162	0	
100-54310-175	STREETS ROAD MAINTENANCE (E)	24,244	4,052	25,265	4,437	8,874	25,000	30,000	21,126	5,000	
100-54310-180	STREETS FUEL (E)	13,285	11,230	11,966	3,017	6,033	9,500	9,500	3,467	0	
100-54310-190	STREETS TRAINING (E)	336	860	1,740	28	56	1,500	1,500	1,444	0	
100-54310-200	STREETS TELEPHONE (E)	579	1,281	455	271	542	500	600	58	100	
100-54310-280	SNOW/ICE CONTROL MATERIALS (E)	16,892	15,547	7,625	7,802	15,605	17,500	17,500	1,895	0	
100-54310-281	TRAFFIC SIGNS/MARKINGS (E)	2,363	1,938	1,503	147	293	2,000	2,000	1,707	0	
100-54310-282	HIGHWAY STRIPING/MARKING (E)	0	2,010	0	330	660	1,000	1,000	340	0	
100-54420-000	STREET LIGHTING (E)	34,918	41,817	37,592	19,620	39,240	37,000	40,000	760	3,000	
	STREETS	264,380	259,976	270,284	128,588	257,177	271,050	280,077	22,900	9,027	
100-54710-000	REFUSE COLLECTIONS (E)	163,891	154,715	144,750	78,860	157,721	167,600	172,628	14,907	5,028	
	GEN FUND - PUBLIC WORKS:	492,988	480,164	480,286	244,931	489,951	514,250	532,392	42,441	18,142	

10/1/2025											
EXPENDITURES		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
Account	Title	Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
		Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-55210-110	REC DEPT WAGES (E)	77,839	99,664	90,067	59,202	118,404	122,000	129,500	11,096	7,500	3% COLA Placeholder + shift from Rec Athletics to Wages
100-55210-121	REC DEPT FICA (E)	6,022	7,603	6,738	4,668	9,336	9,300	9,486	150	186	3% COLA Placeholder
100-55210-122	REC DEPT RETIREMENT (E)	4,085	4,239	4,205	3,054	5,300	5,300	5,500	200	200	3% COLA Placeholder
100-55210-123	REC DEPT HEALTH & DENTAL INSURANCE (E)	7,087	6,752	7,137	5,040	10,080	10,000	11,200	1,120	1,200	Employer Reduction from 88% to 86%
100-55210-124	REC DEPT LIFE INSURANCE (E)	54	46	54	42	85	80	80	(5)	0	
100-55210-127	REC DEPT HSA FUNDING (E)	2,500	2,917	2,292	1,458	2,917	2,500	2,500	(417)	0	
100-55210-130	REC DEPT TECHNOLOGY/IT (E)	2,032	846	1,220	1,765	3,529	2,200	2,100	(1,429)	(100)	
100-55210-143	FACILITY MAINTENANC/EQUIPMENT (E)	5,000	275	1,251	2,486	4,971	6,000	8,500	3,529	2,500	
100-55210-150	REC DEPT REPAIRS/MAINTENANCE	0	2,351	230	0	0	0	0	0	0	
100-55210-160	REC DEPT SUPPLIES/MATERIALS (E)	1,833	3,110	1,523	1,037	2,074	2,500	2,500	426	0	
100-55210-161	REC DEPT MARKETING/PROMOTION (E)	0	0	0	0	0	4,000	3,000	3,000	(1,000)	
100-55210-190	REC DEPT TRAINING (E)	1,282	507	110	175	350	1,750	1,200	850	(550)	
100-55210-200	REC DEPT TELEPHONE	1,079	1,034	1,668	0	0	0	0	0	0	
100-55210-210	REC DEPT PUBLICATIONS	0	3,113	3,033	0	0	0	0	0	0	
100-55210-220	REC DEPT SOFTWARE/SUBSCRIPTION (E)	0	0	0	1,506	3,012	1,500	2,000	(1,012)	500	
100-55210-270	REC DEPT ATHLETIC PROGRAM EXP (E)	3,000	2,840	3,444	10,308	11,000	20,000	9,200	(1,800)	(10,800)	
100-55210-271	REC DEPT BASEBALL EXPENSES	8,169	6,788	7,892	0	0	0	0	0	0	
100-55210-273	REC DEPT ADULT FITNESS	1,430	416	57	0	0	0	0	0	0	
100-55210-275	REC DEPT PROGRAM EXPENSES (E)	8,609	9,084	13,290	9,208	18,417	16,000	16,000	(2,417)	0	
100-55210-278	EVENT EXPENSES (E)	968	569	472	2,100	4,200	2,000	3,750	(450)	1,750	
100-55210-279	REC DEPT DONATION/SPONSORSHIP (E)	4,968	745	999	1,000	2,000	0	1,000	(1,000)	1,000	
100-55210-280	KAYAK/PADDLEBOARD EXPENSE (E)	789	837	496	2,171	4,341	2,000	1,600	(2,741)	(400)	
100-55210-281	RECREATION MISC EXPENSE (E)	0	0	0	0	0	1,000	0	0	(1,000)	
	GEN FUND - RECREATION	136,747	153,736	146,178	105,220	200,016	208,130	209,116	9,100	986	
100-55410-110	PARKS WAGES (E)	42,273	47,041	53,286	26,661	53,321	64,000	65,219	11,898	1,219	3% COLA Placeholder
100-55410-112	PARKS OT WAGES (E)	749	1,755	986	520	550	550	700	150	150	3% COLA Placeholder
100-55410-113	PARKS DBL OT WAGES (E)	328	1,782	593	380	760	0	550	(210)	550	3% COLA Placeholder
100-55410-115	PARKS CONTRACT LABOR (E)	10,414	6,353	10,802	1,225	2,450	10,000	10,000	7,550	0	
100-55410-120	PARKS UNEMPLOYMENT (E)	480	288	0	0	0	0	0	0	0	
100-55410-121	PARKS FICA (E)	3,232	3,878	4,061	2,226	4,452	4,900	5,030	578	130	3% COLA Placeholder
100-55410-122	PARKS RETIREMENT (E)	2,414	2,717	2,428	1,439	2,878	2,500	2,496	(382)	(4)	
100-55410-123	PARKS HEALTH & DENTAL INSURANCE (E)	9,121	8,612	10,206	6,239	12,477	12,500	13,788	1,311	1,288	Employer Reduction from 88% to 86%
100-55410-124	PARKS LIFE INSURANCE (E)	85	22	160	113	226	170	282	55	112	
100-55410-125	PARKS UNIFORMS (E)	2,077	686	598	115	229	2,000	1,500	1,271	(500)	
100-55410-127	PARKS HSA FUNDING (E)	3,314	3,404	3,163	1,860	3,720	2,500	2,500	(1,220)	0	
100-55410-148	TENNIS COURT MAINTENANCE (E)	579	0	0	0	0	2,000	2,000	2,000	0	
100-55410-150	PARKS REPAIRS/MAINT (E)	17,388	14,033	20,472	7,595	15,191	19,000	19,000	3,809	0	
100-55410-160	PARKS SUPPLIES (E)	1,667	926	1,764	2,242	4,484	1,500	1,800	(2,684)	300	
100-55410-170	PARKS GAS (E)	3,993	4,328	833	1,664	3,328	4,500	3,500	172	(1,000)	
100-55410-171	PARKS ELECTRIC (E)	6,998	8,736	7,765	5,875	11,749	8,000	8,000	(3,749)	0	
100-55410-173	PARKS WATER & SEWER (E)	3,235	4,044	3,371	1,338	2,677	3,740	3,500	823	(240)	
100-55410-180	PARKS FUEL (E)	12,391	7,970	9,215	2,240	4,481	7,500	6,000	1,519	(1,500)	
	PARKS	120,737	116,572	129,705	61,731	122,972	145,360	145,864	22,892	503	
100-55411-110	LAKEFRONT WAGES (E)	113,648	104,162	107,320	51,597	86,000	86,000	81,819	(4,181)	(4,181)	3% COLA Placeholder

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
100-55411-112	LAKEFRONT OT WAGES (E)	5,083	6,813	68	2,437	4,875	0	0	(4,875)	0	3% COLA Placeholder
100-55411-121	LAKEFRONT FICA (E)	9,083	8,565	8,221	4,912	9,825	6,800	6,183	(3,642)	(617)	3% COLA Placeholder
100-55411-125	LAKEFRONT UNIFORMS (E)	0	0	0	0	0	500	500	500	0	
100-55411-130	LAKEFRONT IT (E)	1,559	475	269	32	65	600	2,500	2,436	1,900	
100-55411-150	LAKEFRONT REPAIRS/MAINT (E)	9,414	5,803	5,199	11,278	13,000	8,000	8,000	(5,000)	0	
100-55411-153	LAKEFRONT PIER REPAIRS (E)	78,902	63,826	80,142	89,594	92,000	70,000	85,000	(7,000)	15,000	
100-55411-154	LAKEFRONT PIER INSTALLATION (E)	98,044	105,640	124,133	0	0	125,000	136,000	136,000	11,000	
	LAKEFRONT PIER REPLACEMENT FUND TRANSFER OUT	0	0	0	0	0	0	25,000	25,000	25,000	Need new account #
100-55411-160	LAKEFRONT SUPPLIES (E)	13,636	11,877	12,333	12,407	13,000	11,000	14,500	1,500	3,500	
100-55411-171	LAKEFRONT ELECTRIC (E)	0	0	0	0	0	0	0	0	0	
100-55411-200	LAKEFRONT TELEPHONE (E)	911	919	926	613	1,225	1,000	1,000	(225)	0	
100-55412-000	GENEVA LK LEVEL CORP (E)	0	3,000	0	0	0	4,400	4,400	4,400	0	
100-55412-000	ENHANCEMENT COMMITTEE (E)	427	355	555	0	0	800	500	500	(300)	
100-56120-000	HOLIDAY DECORATION SUPPLIES (E)	1,112	723	388	999	1,997	1,500	1,500	(497)	0	
100-56130-000	TREE ENHANCEMENT (E)	6,590	9,933	9,558	1,566	3,133	8,500	8,500	5,367	0	
100-56420-190	HORVATH PROPERTY EXPENSE (E)	716	1,059	163	444	889	1,000	1,000	111	0	
	LAKEFRONT	339,125	323,149	349,274	175,881	226,008	325,100	376,402	150,393	51,302	
100-57000-000	OPERATING TRANSFER OUT	142,697	0	0	0	0	0	0	0	0	
100-57921-142	BANK SERVICE CHARGES AND FEES	0	0	50	172	344	0	300	(44)	300	
100-57921-150	LATE FEES, PENALTIES, INTEREST	0	191	40	51	101	0	50	(51)	50	
100-59000-000	OPERATING TRANSFER	0	12,800	0	0	0	0	0	0	0	
	MISC	142,697	12,991	90	223	445	0	350	(95)	350	
	GEN FUND - PARKS, BEACH, LAUNCH:	602,559	452,712	479,069	237,834	349,425	470,460	522,615	173,190	52,155	
	GENERAL FUND - REVENUES:	3,459,664	3,750,963	3,976,242	2,399,632	3,941,319	3,622,334	4,037,238	95,919	414,904	
	GENERAL FUND - EXPENSES:	3,715,742	3,525,809	3,722,807	2,075,611	3,558,152	3,713,774	4,101,255	493,104	337,481	
	GENERAL FUND - TOTAL:	(256,078)	225,154	253,436	324,020	383,167	(91,440)	(64,018)	(397,185)	77,422	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
	ARPA LOCAL RECOV REVENUES	NA	NA	280,220	0	231,730	231,730	NA	NA	NA	
115-52320-165	ARPA LOCAL RECOV EXPENDITURES (E)	NA	NA	48,490	4,104	231,730	231,730	NA	NA	NA	
	ARPA LOCAL RECOV TOTAL	NA	NA	231,730	(4,104)	0	0	NA	NA	NA	
	IGA EMS - REVENUES:	NA	928,077	928,077	616,854	928,077	928,077	928,077	0	0	
	IGA EMS - FROM EMS RESERVES	NA	0	0	0	0	121,923	119,567	121,923	(2,356)	
	IGA EMS - REIMBURSEMENTS	NA	0	0	0	0	0	0	0	0	
115-52320-165	EMS IGA EXPENDITURES (E)	NA	762,756	796,657	379,596	838,445	1,050,000	1,047,644	209,200	(2,356)	
	IGA EMS - TOTAL:	NA	165,321	131,420	237,258	89,633	0	0	(87,277)	0	
125-52320-165	TREE ENHANCEMENT EXPENDITURES			3,539							
	POLICE REFERENDUM 2025 FUND										
130-52120-110	POLICE REFERENDUM WAGES 1	NA	NA	NA	NA	24,850	49,707	88,417	63,567	38,710	5% Union Increase
130-52120-110	POLICE REFERENDUM WAGES 2	NA	NA	NA	NA	0	0	88,150	88,150	88,150	3% COLA
130-52120-121	FICA	NA	NA	NA	NA	0	0	14,277	14,277	14,277	
130-52120-122	WRS	NA	NA	NA	NA	0	0	30,967	30,967	30,967	
130-52120-123	INSURANCE	NA	NA	NA	NA	0	0	55,680	55,680	55,680	Employer Reduction from 88% to 86%
130-52120-124	POLICE REFERENDUM LIFE INSURANCE	NA	NA	NA	NA	0	0	176	176	176	Added
130-52120-125	UNIFORM	NA	NA	NA	NA	0	0	1,800	1,800	1,800	
130-52120-127	HSA	NA	NA	NA	NA	0	0	10,000	10,000	10,000	
130-52120-130	IT	NA	NA	NA	NA	0	0	12,019	12,019	12,019	AXON Taser ProPhoenix
130-52120-200	PHONES	NA	NA	NA	NA	0	0	1,000	1,000	1,000	
	POLICE REFERENDUM GEN FUND REPAYMENT	NA	NA	NA	NA	0	0	24,850	24,850	24,850	Removed from Police Referendum Wages 1
	PD 2025 REFERENDUM REVENUES	NA	NA	NA	NA	24,850	49,707	399,980	375,130	350,273	
	PD 2025 REFERENDUM - EXPENDITURES:	NA	NA	NA	NA	24,850	49,707	327,336	302,486	277,629	
	PD 2025 REFERENDUM - TOTAL:	NA	NA	NA	NA	0	0	72,644	72,644	72,644	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
2% FUND											
215-52320-106	FIRE INSPECTOR OFFICER WAGES (E)	4,750	6,000	5,193	3,700	7,400	6,000	6,588	(812)	588	3% COLA
215-52320-121	FIRE INSPECTOR FICA (E)	561	623	505	309	618	560	504	(114)	(56)	3% COLA
215-52320-165	FIRE DUES 2% EXPENDITURES (E)	65,752	8,455	59,591	0	22,000	10,000	37,000	15,000	27,000	
	2% DUES FUND - REVENUES:	28,897	35,067	43,050	0	50,972	35,000	45,000	(5,972)	10,000	
	2% DUES FUND - EXPENDITURES:	71,063	15,078	65,288	4,009	30,019	16,560	44,092	14,073	27,532	
	2% DUES FUND - TOTAL:	(42,166)	19,989	(22,238)	(4,009)	20,953	18,440	908	(20,045)	(17,532)	
EMS GRANTS											
220-42004	ACT 102 GRANT	12,745	44,503	0	0	0	0	0	0	0	
220-42006	ACT 102 - ARPA SUPPLEMENT	12,195	12,195	0	0	0	0	0	0	0	
220-42100	EMS FLEX GRANT	0	44,503	0	0	0	0	0	0	0	
220-49200	OPERATING TRANSFER IN	0	0	0	0	0	0	0	0	0	
220-52320-165	ACT 102 EXPENDITURES (E)	7,373	7,373	8,805	0	0	8,000	0	0	(8,000)	
220-52320-170	ACT 102 ARPA EXPENDITURES	11,079	5,607	0	0	0	0	0	0	0	
220-52320-200	EMS FLEX GRANT EXPENDITURES	0	89,005	286	0	0	0	0	0	0	
	EMS GRANTS - REVENUES:	24,940	101,200	0	0	0	8,000	0	0	(8,000)	
	EMS GRANTS - EXPENDITURES:	43,392	203,185	9,091	0	0	8,000	0	0	(8,000)	
	EMS GRANTS - TOTAL:	(18,451)	(101,985)	(9,091)	0	0	0	0	0	0	
225-54635-130	RECYCLING OTHER EXPENSE (E)	10,840	13,044	0	18,872	19,000	2,000	15,000	(4,000)	13,000	Was \$16,000
225-54635-131	RECYCLING FEES (E)	79,770	81,669	75,852	41,750	83,500	84,000	90,000	6,500	6,000	Was \$84,000
225-54635-150	RECYCLING REPAIRS/MAINT (E)	4,021	3,384	1,943	0	0	3,000	3,000	3,000	0	
225-54635-160	RECYCLING PROGRAM SUPPLIES (E)	500	500	664	500	1,000	500	500	(500)	0	
225-54635-165	RECYCLING TIPPING FEES (E)	3,804	27,581	0	0	0	2,500	0	0	(2,500)	
	RECYCLING- REVENUES, INCL TRANSFER IN:	119,487	105,421	97,725	58,676	108,500	92,000	108,500	0	16,500	
	RECYCLING- EXPENDITURES:	98,936	126,177	78,458	61,122	103,500	92,000	108,500	5,000	16,500	
	RECYCLING GRANTS - TOTAL:	20,552	(20,756)	19,267	(2,445)	5,000	0	0	(5,000)	0	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
LIBRARY FUND											
400-51990-000	EMPLOYEE RECOGNITION	0	750	900	1,350	1,350	1,350	1,400	50	50	
400-58100-110	LIBRARY WAGES (E)	193,731	196,898	194,703	104,179	208,358	209,377	224,867	16,509	15,490	3% COLA
400-58100-121	LIBRARY FICA (E)	13,191	13,345	13,404	7,018	14,035	16,733	17,019	2,984	286	
400-58100-122	LIBRARY RETIREMENT (E)	10,117	9,815	10,665	5,499	10,997	11,515	7,998	(2,999)	(3,517)	
400-58100-123	LIBRARY HEALTH & DENTAL INSURANCE (E)	27,757	28,118	35,750	23,721	47,441	41,178	49,134	1,693	7,956	Employer Reduction from 88% to 86%
400-58100-124	LIFE INSURANCE	0	0	0	199	398	0	400	2	400	
400-58100-127	LIBRARY HSA FUNDING (E)	8,281	11,562	9,698	4,687	9,375	10,000	10,000	625	0	
400-58100-130	LIBRARY EQUIPMENT (E)	3,209	2,902	3,214	1,431	2,861	1,200	4,500	1,639	3,300	
400-58100-160	LIBRARY SUPPLIES (E)	6,079	4,343	5,030	1,780	3,560	3,500	3,500	(60)	0	
400-58100-161	LIBRARY POSTAGE (E)	121	81	82	73	146	125	125	(21)	0	
400-58200-000	ADULT PRINT (E)	10,186	11,808	10,604	3,669	7,338	10,000	10,000	2,662	0	
400-58200-100	ADULT DIGITAL (E)	2,206	1,893	2,510	538	1,075	2,000	1,000	(75)	(1,000)	
400-58201-000	CHILDREN PRINT (E)	4,314	4,630	4,764	958	1,917	3,500	3,500	1,583	0	
400-58201-100	CHILDREN DIGITAL (E)	1,747	346	(58)	0	0	2,000	1,000	1,000	(1,000)	
400-58210-000	LIBRARY TRAINING & CONFERENCES (E)	247	1,000	1,843	97	194	2,000	2,000	1,806	0	
400-58210-100	TRAINING - GRANT RELATED	0	0	0	1,069	1,069	0	0	(1,069)	0	
400-58220-000	LIBRARY MILEAGE EXPENSE (E)	294	215	458	0	0	400	400	400	0	
400-58230-000	PROGRAMS FOR CHILDREN & ADULTS (E)	2,022	3,495	2,524	1,043	2,085	3,000	3,000	915	0	
400-58232-000	LIBRARY CRAFTS (E)	596	602	674	301	603	500	500	(103)	0	
400-58240-000	LIBRARY MEDIA (E)	3,262	2,339	2,005	1,215	2,429	3,500	3,500	1,071	0	
400-58280-000	LIBRARY PERIODICALS (E)	3,110	2,495	1,984	2,019	4,038	2,100	2,200	(1,838)	100	
400-58310-000	IT/LICENSES/CONTRACTED SERVICE	15,016	13,966	12,463	10,056	20,113	12,600	13,450	(6,663)	850	
410-58200-101	BOOKS, BOARD COMMITTED (E)	499	152	0	0	0	200	200	200	0	
410-58200-102	BOOKS, DONOR DESIGNATED (E)	1,326	908	180	382	763	100	100	(663)	0	
410-58240-101	MEDIA, DONOR DESIGNATED (E)	0	366	0	0	0	200	200	200	0	
410-58250-000	LIBRARY CHAPIN EXPENDITURES (E)	2,564	3,830	3,955	3,034	6,068	4,000	4,000	(2,068)	0	
410-58255-000	LIB FRIENDS EXPENDITURE (E)	21,220	4,541	3,398	1,795	3,589	4,000	4,000	411	0	
410-58320-000	CAPITAL, BOARD DESIGNATED	0	0	0	25	50	0	0	(50)	0	
410-58330-000	DONOR DESIGNATED EXPENDITURES (E)	690	4,980	1,787	1,393	2,786	2,500	4,450	1,664	1,950	
410-58340-000	BOARD COMMITTED EXPENDITURES (E)	3,998	4,098	8,120	1,469	2,938	2,500	2,600	(338)	100	
	LIBRARY FUND - REVENUES:	329,514	351,170	367,547	225,116	450,231	366,828	355,034	(95,197)	(11,794)	
	LIBRARY FUND - EXPENDITURES:	335,785	329,480	330,657	178,999	355,578	350,078	375,043	19,465	24,965	
	LIBRARY FUND - TOTAL:	(6,271)	21,690	36,890	46,117	94,653	16,750	(20,009)	(114,662)	(36,759)	
400-58100-135	LIBRARY ADMINISTRATION COSTS (E)	7,998	10,513	457	746	1,492	9,400	9,400	7,908	0	
400-58100-150	LIBRARY BLDG REPAIRS & MAINT (E)	4,184	7,851	3,340	628	1,255	2,000	2,000	745	0	
400-58100-155	LIBRARY BLDG SUPPLIES (E)	635	1,110	568	585	1,169	1,000	771	(398)	(229)	
400-58100-170	LIBRARY BLDG GAS (E)	2,937	3,016	2,224	2,508	5,017	2,700	2,700	(2,317)	0	
400-58100-171	LIBRARY BLDG ELECTRIC (E)	6,594	7,132	7,655	3,427	6,853	6,800	7,127	274	327	
400-58100-173	LIBRARY BLDG WATER & SEWER (E)	1,154	763	512	346	691	900	810	119	(90)	
400-58100-175	JANITORIAL SERVICES (E)	8,100	6,115	8,100	4,050	8,100	6,800	8,100	0	1,300	
400-58100-200	LIBRARY TELEPHONE (E)	4,081	2,978	5,198	3,321	6,642	3,500	1,767	(4,875)	(1,733)	
	LIBRARY FUND MISC - REVENUES:	29,249	21,418	11,857	2,919	17,000	16,350	52,284	35,284	35,934	
	LIBRARY FUND MISC - EXPENDITURES:	35,683	39,478	28,054	15,610	31,220	33,100	32,675	1,455	(425)	
	LIBRARY FUND - TOTAL:	(6,434)	(18,059)	(16,196)	(12,691)	(14,220)	(16,750)	19,609	33,829	36,359	

10/1/2025											
		2022	2023	2024	2025	2025	2025	2026	2026 Budget vs	2026 Budget vs	
EXPENDITURES		Prior Year 3	Prior Year 2	Prior Year 1	Current Year	Current Year	Current Year	Future Year	2025 Estimates	2025 Budget	
Account	Title	Actual Audited	Actual Audited	Actual	Actual 6 Mo	Estimates	Budget	Budget	\$ Diff	\$ Diff	
FIREWORKS FUND											
415-52320-165	FIREWORKS EXPENDITURE (E)	25,985	25,697	25,686	25,697	25,697	25,000	25,000	(697)	0	
	FIREWORKS FUND - REVENUES:	27,703	28,439	30,923	20,794	27,000	29,580	29,580	2,580	0	
	FIREWORKS FUND - EXPENDITURES:	25,985	25,697	25,686	25,697	25,697	25,000	25,000	(697)	0	
	FIREWORKS FUND - TOTAL:	1,718	2,742	5,237	(4,904)	1,303	4,580	4,580	3,277	0	
TID #1 FUND											
420-52320-165	TIF #1 EXPENDITURE (E)	0	0	0	12,500	12,500	0	10,000	(2,500)	10,000	500-50000-140
	TID #1 - REVENUES:	NA	NA	NA	12,500	12,500	0	0	(12,500)	0	
	TID #1 - EXPENDITURES:	NA	NA	NA	12,500	12,500	0	10,000	(2,500)	10,000	
	TID #1 FUND - TOTAL:	NA	NA	NA	0	0	0	(10,000)	(10,000)	(10,000)	