



**317AI-00\_\_Post-Development Model - EIS SITE 3**

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**Summary for Subcatchment S-1:**

Runoff = 2.70 cfs @ 11.97 hrs, Volume= 0.131 af, Depth= 1.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
Type II 24-hr 1-year Rainfall=2.21"

	Area (sf)	CN	Description
*	33,977	98	Impervious Area, HSG D
	11,326	80	>75% Grass cover, Good, HSG D
	45,303	93	Weighted Average
	11,326	80	25.00% Pervious Area
	33,977	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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317AI.00 Site 3 Postdvlp

Type II 24-hr 1-year Rainfall=2.21"

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**Summary for Subcatchment S-2:**

Runoff = 3.79 cfs @ 11.97 hrs, Volume= 0.186 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
Type II 24-hr 1-year Rainfall=2.21"

	Area (sf)	CN	Description
*	45,640	98	Impervious Area, HSG D
	15,213	80	>75% Grass cover, Good, HSG D
	60,853	94	Weighted Average
	15,213	80	25.00% Pervious Area
	45,640	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
Type II 24-hr 1-year Rainfall=2.21"

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**Summary for Subcatchment S-3:**

Runoff = 22.26 cfs @ 11.97 hrs, Volume= 1.091 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
Type II 24-hr 1-year Rainfall=2.21"

	Area (sf)	CN	Description
*	268,384	98	Impervious Area, HSG D
	89,461	80	>75% Grass cover, Good, HSG D
	357,845	94	Weighted Average
	89,461	80	25.00% Pervious Area
	268,384	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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317AI.00 Site 3 Postdvlp

*Type II 24-hr 1-year Rainfall=2.21"*

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**Summary for Pond DP-1: Western Avenue**

Inflow Area = 2.437 ac, 75.00% Impervious, Inflow Depth = 0.00" for 1-year event  
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

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Type II 24-hr 1-year Rainfall=2.21"

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**Summary for Pond DP-2: Crossgates Mall Rd**

Inflow Area = 8.215 ac, 75.00% Impervious, Inflow Depth = 0.00" for 1-year event  
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

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317AI.00 Site 3 Postdvlp  
*Type II 24-hr 1-year Rainfall=2.21"*

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**Summary for Pond SMP-1:**

Inflow Area = 1.040 ac, 75.00% Impervious, Inflow Depth = 1.51" for 1-year event  
 Inflow = 2.70 cfs @ 11.97 hrs, Volume= 0.131 af  
 Outflow = 0.03 cfs @ 20.23 hrs, Volume= 0.117 af, Atten= 99%, Lag= 495.5 min  
 Discarded = 0.03 cfs @ 20.23 hrs, Volume= 0.117 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 2.47' @ 20.23 hrs Surf.Area= 2,390 sf Storage= 4,286 cf  
 Flood Elev= 5.00' Surf.Area= 4,096 sf Storage= 12,410 cf

Plug-Flow detention time= 1,506.1 min calculated for 0.117 af (90% of inflow)  
 Center-of-Mass det. time= 1,454.8 min ( 2,257.9 - 803.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	12,410 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,156	0	0
1.00	1,600	1,378	1,378
2.00	2,116	1,858	3,236
3.00	2,704	2,410	5,646
4.00	3,364	3,034	8,680
5.00	4,096	3,730	12,410

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.50'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.03 cfs @ 20.23 hrs HW=2.47' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir( Controls 0.00 cfs)

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**Summary for Pond SMP-2:**

Inflow Area = 1.397 ac, 75.00% Impervious, Inflow Depth = 1.59" for 1-year event  
 Inflow = 3.79 cfs @ 11.97 hrs, Volume= 0.186 af  
 Outflow = 0.04 cfs @ 21.38 hrs, Volume= 0.159 af, Atten= 99%, Lag= 564.4 min  
 Discarded = 0.04 cfs @ 21.38 hrs, Volume= 0.159 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 2.65' @ 21.38 hrs Surf.Area= 3,132 sf Storage= 6,158 cf  
 Flood Elev= 5.00' Surf.Area= 4,900 sf Storage= 15,530 cf

Plug-Flow detention time= 1,535.9 min calculated for 0.159 af (86% of inflow)  
 Center-of-Mass det. time= 1,470.5 min ( 2,267.3 - 796.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	15,530 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,600	0	0
1.00	2,116	1,858	1,858
2.00	2,704	2,410	4,268
3.00	3,364	3,034	7,302
4.00	4,096	3,730	11,032
5.00	4,900	4,498	15,530

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.75'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.04 cfs @ 21.38 hrs HW=2.65' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir( Controls 0.00 cfs)

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**Summary for Pond SMP-3:**

Inflow Area = 8.215 ac, 75.00% Impervious, Inflow Depth = 1.59" for 1-year event  
 Inflow = 22.26 cfs @ 11.97 hrs, Volume= 1.091 af  
 Outflow = 0.22 cfs @ 20.80 hrs, Volume= 1.080 af, Atten= 99%, Lag= 529.6 min  
 Discarded = 0.22 cfs @ 20.80 hrs, Volume= 1.080 af  
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 2.04' @ 20.80 hrs Surf.Area= 18,829 sf Storage= 35,027 cf  
 Flood Elev= 5.00' Surf.Area= 24,025 sf Storage= 98,405 cf

Plug-Flow detention time= 1,540.7 min calculated for 1.080 af (99% of inflow)  
 Center-of-Mass det. time= 1,534.3 min ( 2,331.1 - 796.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	98,405 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	15,625	0	0
1.00	17,161	16,393	16,393
2.00	18,769	17,965	34,358
3.00	20,449	19,609	53,967
4.00	22,201	21,325	75,292
5.00	24,025	23,113	98,405

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.05'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.22 cfs @ 20.80 hrs HW=2.04' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.22 cfs)

**Primary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir( Controls 0.00 cfs)

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**Summary for Subcatchment S-1:**

Runoff = 5.10 cfs @ 11.97 hrs, Volume= 0.257 af, Depth= 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
Type II 24-hr 10-year Rainfall=3.74"

	Area (sf)	CN	Description
*	33,977	98	Impervious Area, HSG D
	11,326	80	>75% Grass cover, Good, HSG D
	45,303	93	Weighted Average
	11,326	80	25.00% Pervious Area
	33,977	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
*Type II 24-hr 10-year Rainfall=3.74"*

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**Summary for Subcatchment S-2:**

Runoff = 6.99 cfs @ 11.97 hrs, Volume= 0.357 af, Depth= 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 10-year Rainfall=3.74"

	Area (sf)	CN	Description
*	45,640	98	Impervious Area, HSG D
	15,213	80	>75% Grass cover, Good, HSG D
	60,853	94	Weighted Average
	15,213	80	25.00% Pervious Area
	45,640	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
*Type II 24-hr 10-year Rainfall=3.74"*

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**Summary for Subcatchment S-3:**

Runoff = 41.09 cfs @ 11.97 hrs, Volume= 2.102 af, Depth= 3.07"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 10-year Rainfall=3.74"

	Area (sf)	CN	Description
*	268,384	98	Impervious Area, HSG D
	89,461	80	>75% Grass cover, Good, HSG D
	357,845	94	Weighted Average
	89,461	80	25.00% Pervious Area
	268,384	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

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317AI.00 Site 3 Postdvlp

Type II 24-hr 10-year Rainfall=3.74"

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**Summary for Pond DP-1: Western Avenue**

Inflow Area = 2.437 ac, 75.00% Impervious, Inflow Depth = 1.32" for 10-year event  
Inflow = 2.35 cfs @ 12.13 hrs, Volume= 0.268 af  
Primary = 2.35 cfs @ 12.13 hrs, Volume= 0.268 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

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Type II 24-hr 10-year Rainfall=3.74"

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**Summary for Pond DP-2: Crossgates Mall Rd**

Inflow Area = 8.215 ac, 75.00% Impervious, Inflow Depth = 1.28" for 10-year event  
Inflow = 2.41 cfs @ 12.60 hrs, Volume= 0.876 af  
Primary = 2.41 cfs @ 12.60 hrs, Volume= 0.876 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
 Type II 24-hr 10-year Rainfall=3.74"

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**Summary for Pond SMP-1:**

Inflow Area = 1.040 ac, 75.00% Impervious, Inflow Depth = 2.97" for 10-year event  
 Inflow = 5.10 cfs @ 11.97 hrs, Volume= 0.257 af  
 Outflow = 1.20 cfs @ 12.11 hrs, Volume= 0.241 af, Atten= 77%, Lag= 8.8 min  
 Discarded = 0.03 cfs @ 12.11 hrs, Volume= 0.125 af  
 Primary = 1.16 cfs @ 12.11 hrs, Volume= 0.116 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 3.06' @ 12.11 hrs Surf.Area= 2,746 sf Storage= 5,818 cf  
 Flood Elev= 5.00' Surf.Area= 4,096 sf Storage= 12,410 cf

Plug-Flow detention time= 805.4 min calculated for 0.241 af (94% of inflow)  
 Center-of-Mass det. time= 769.6 min ( 1,553.8 - 784.1 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	12,410 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,156	0	0
1.00	1,600	1,378	1,378
2.00	2,116	1,858	3,236
3.00	2,704	2,410	5,646
4.00	3,364	3,034	8,680
5.00	4,096	3,730	12,410

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.50'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.03 cfs @ 12.11 hrs HW=3.06' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=1.16 cfs @ 12.11 hrs HW=3.06' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate (Orifice Controls 1.16 cfs @ 2.55 fps)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**317AI-00\_\_Post-Development Model - EIS SITE 3**

Prepared by {enter your company name here}

**Summary for Pond SMP-2:**

Inflow Area = 1.397 ac, 75.00% Impervious, Inflow Depth = 3.07" for 10-year event  
 Inflow = 6.99 cfs @ 11.97 hrs, Volume= 0.357 af  
 Outflow = 1.24 cfs @ 12.15 hrs, Volume= 0.324 af, Atten= 82%, Lag= 10.8 min  
 Discarded = 0.04 cfs @ 12.15 hrs, Volume= 0.171 af  
 Primary = 1.19 cfs @ 12.15 hrs, Volume= 0.152 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 3.32' @ 12.15 hrs Surf.Area= 3,599 sf Storage= 8,421 cf  
 Flood Elev= 5.00' Surf.Area= 4,900 sf Storage= 15,530 cf

Plug-Flow detention time= 850.6 min calculated for 0.323 af (91% of inflow)  
 Center-of-Mass det. time= 801.6 min ( 1,580.3 - 778.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	15,530 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,600	0	0
1.00	2,116	1,858	1,858
2.00	2,704	2,410	4,268
3.00	3,364	3,034	7,302
4.00	4,096	3,730	11,032
5.00	4,900	4,498	15,530

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.75'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.04 cfs @ 12.15 hrs HW=3.32' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=1.19 cfs @ 12.15 hrs HW=3.32' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate (Orifice Controls 1.19 cfs @ 2.57 fps)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
 Type II 24-hr 10-year Rainfall=3.74"

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**Summary for Pond SMP-3:**

Inflow Area = 8.215 ac, 75.00% Impervious, Inflow Depth = 3.07" for 10-year event  
 Inflow = 41.09 cfs @ 11.97 hrs, Volume= 2.102 af  
 Outflow = 2.64 cfs @ 12.60 hrs, Volume= 2.021 af, Atten= 94%, Lag= 38.1 min  
 Discarded = 0.24 cfs @ 12.60 hrs, Volume= 1.145 af  
 Primary = 2.41 cfs @ 12.60 hrs, Volume= 0.876 af  
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 2.95' @ 12.60 hrs Surf.Area= 20,367 sf Storage= 52,971 cf  
 Flood Elev= 5.00' Surf.Area= 24,025 sf Storage= 98,405 cf

Plug-Flow detention time= 929.9 min calculated for 2.021 af (96% of inflow)  
 Center-of-Mass det. time= 906.6 min ( 1,685.4 - 778.8 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	98,405 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	15,625	0	0
1.00	17,161	16,393	16,393
2.00	18,769	17,965	34,358
3.00	20,449	19,609	53,967
4.00	22,201	21,325	75,292
5.00	24,025	23,113	98,405

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.05'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.24 cfs @ 12.60 hrs HW=2.95' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.24 cfs)

**Primary OutFlow** Max=2.41 cfs @ 12.60 hrs HW=2.95' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate (Orifice Controls 2.41 cfs @ 3.23 fps)

**Secondary OutFlow** Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
*Type II 24-hr 100-year Rainfall=6.34"*

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**Summary for Subcatchment S-1:**

Runoff = 9.09 cfs @ 11.97 hrs, Volume= 0.478 af, Depth= 5.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 100-year Rainfall=6.34"

	Area (sf)	CN	Description
*	33,977	98	Impervious Area, HSG D
	11,326	80	>75% Grass cover, Good, HSG D
	45,303	93	Weighted Average
	11,326	80	25.00% Pervious Area
	33,977	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**Summary for Subcatchment S-2:**

Runoff = 12.33 cfs @ 11.97 hrs, Volume= 0.656 af, Depth= 5.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Type II 24-hr 100-year Rainfall=6.34"

	Area (sf)	CN	Description
*	45,640	98	Impervious Area, HSG D
	15,213	80	>75% Grass cover, Good, HSG D
	60,853	94	Weighted Average
	15,213	80	25.00% Pervious Area
	45,640	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
Type II 24-hr 100-year Rainfall=6.34"

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**Summary for Subcatchment S-3:**

Runoff = 72.50 cfs @ 11.97 hrs, Volume= 3.857 af, Depth= 5.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
Type II 24-hr 100-year Rainfall=6.34"

	Area (sf)	CN	Description
*	268,384	98	Impervious Area, HSG D
	89,461	80	>75% Grass cover, Good, HSG D
	357,845	94	Weighted Average
	89,461	80	25.00% Pervious Area
	268,384	98	75.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					<b>Direct Entry,</b>

### Summary for Pond DP-1: Western Avenue

Inflow Area =        2.437 ac, 75.00% Impervious, Inflow Depth = 3.81" for 100-year event  
Inflow        =        13.37 cfs @ 12.04 hrs, Volume=        0.775 af  
Primary       =        13.37 cfs @ 12.04 hrs, Volume=        0.775 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

**Summary for Pond DP-2: Crossgates Mall Rd**

Inflow Area =        8.215 ac, 75.00% Impervious, Inflow Depth = 3.75" for 100-year event  
Inflow        =        19.04 cfs @ 12.10 hrs, Volume=        2.567 af  
Primary       =        19.04 cfs @ 12.10 hrs, Volume=        2.567 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
 Type II 24-hr 100-year Rainfall=6.34"

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**Summary for Pond SMP-1:**

Inflow Area = 1.040 ac, 75.00% Impervious, Inflow Depth = 5.52" for 100-year event  
 Inflow = 9.09 cfs @ 11.97 hrs, Volume= 0.478 af  
 Outflow = 4.87 cfs @ 12.05 hrs, Volume= 0.461 af, Atten= 46%, Lag= 5.1 min  
 Discarded = 0.04 cfs @ 12.05 hrs, Volume= 0.130 af  
 Primary = 3.98 cfs @ 12.05 hrs, Volume= 0.326 af  
 Secondary = 0.85 cfs @ 12.05 hrs, Volume= 0.005 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 4.11' @ 12.05 hrs Surf.Area= 3,444 sf Storage= 9,053 cf  
 Flood Elev= 5.00' Surf.Area= 4,096 sf Storage= 12,410 cf

Plug-Flow detention time= 450.8 min calculated for 0.461 af (96% of inflow)  
 Center-of-Mass det. time= 429.3 min ( 1,197.2 - 767.9 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	12,410 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,156	0	0
1.00	1,600	1,378	1,378
2.00	2,116	1,858	3,236
3.00	2,704	2,410	5,646
4.00	3,364	3,034	8,680
5.00	4,096	3,730	12,410

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.50'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.04 cfs @ 12.05 hrs HW=4.11' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.04 cfs)

**Primary OutFlow** Max=3.98 cfs @ 12.05 hrs HW=4.11' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate (Orifice Controls 3.98 cfs @ 5.07 fps)

**Secondary OutFlow** Max=0.84 cfs @ 12.05 hrs HW=4.11' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir (Weir Controls 0.84 cfs @ 0.77 fps)

**317AI-00\_\_Post-Development Model - EIS SITE 3**

Type II 24-hr 100-year Rainfall=6.34"

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**Summary for Pond SMP-2:**

Inflow Area = 1.397 ac, 75.00% Impervious, Inflow Depth = 5.63" for 100-year event  
 Inflow = 12.33 cfs @ 11.97 hrs, Volume= 0.656 af  
 Outflow = 8.76 cfs @ 12.03 hrs, Volume= 0.621 af, Atten= 29%, Lag= 3.8 min  
 Discarded = 0.05 cfs @ 12.03 hrs, Volume= 0.178 af  
 Primary = 3.94 cfs @ 12.03 hrs, Volume= 0.394 af  
 Secondary = 4.77 cfs @ 12.03 hrs, Volume= 0.049 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 4.34' @ 12.03 hrs Surf.Area= 4,366 sf Storage= 12,453 cf  
 Flood Elev= 5.00' Surf.Area= 4,900 sf Storage= 15,530 cf

Plug-Flow detention time= 478.2 min calculated for 0.621 af (95% of inflow)  
 Center-of-Mass det. time= 447.0 min ( 1,210.5 - 763.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	15,530 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	1,600	0	0
1.00	2,116	1,858	1,858
2.00	2,704	2,410	4,268
3.00	3,364	3,034	7,302
4.00	4,096	3,730	11,032
5.00	4,900	4,498	15,530

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.75'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.05 cfs @ 12.03 hrs HW=4.34' (Free Discharge)

↑1=Exfiltration (Exfiltration Controls 0.05 cfs)

**Primary OutFlow** Max=3.94 cfs @ 12.03 hrs HW=4.34' TW=0.00' (Dynamic Tailwater)

↑3=Orifice/Grate (Orifice Controls 3.94 cfs @ 5.02 fps)

**Secondary OutFlow** Max=4.77 cfs @ 12.03 hrs HW=4.34' TW=0.00' (Dynamic Tailwater)

↑2=Broad-Crested Rectangular Weir (Weir Controls 4.77 cfs @ 1.42 fps)

**317AI-00\_\_Post-Development Model - EIS SITE 3**

317AI.00 Site 3 Postdvlp  
Type II 24-hr 100-year Rainfall=6.34"

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**Summary for Pond SMP-3:**

Inflow Area = 8.215 ac, 75.00% Impervious, Inflow Depth = 5.63" for 100-year event  
 Inflow = 72.50 cfs @ 11.97 hrs, Volume= 3.857 af  
 Outflow = 19.31 cfs @ 12.10 hrs, Volume= 3.757 af, Atten= 73%, Lag= 8.1 min  
 Discarded = 0.27 cfs @ 12.10 hrs, Volume= 1.191 af  
 Primary = 5.46 cfs @ 12.10 hrs, Volume= 2.117 af  
 Secondary = 13.58 cfs @ 12.10 hrs, Volume= 0.450 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-72.00 hrs, dt= 0.01 hrs  
 Peak Elev= 4.63' @ 12.10 hrs Surf.Area= 23,356 sf Storage= 89,711 cf  
 Flood Elev= 5.00' Surf.Area= 24,025 sf Storage= 98,405 cf

Plug-Flow detention time= 562.9 min calculated for 3.757 af (97% of inflow)  
 Center-of-Mass det. time= 546.9 min ( 1,310.3 - 763.4 )

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	98,405 cf	<b>Custom Stage Data (Prismatic)</b> Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
0.00	15,625	0	0
1.00	17,161	16,393	16,393
2.00	18,769	17,965	34,358
3.00	20,449	19,609	53,967
4.00	22,201	21,325	75,292
5.00	24,025	23,113	98,405

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	<b>0.500 in/hr Exfiltration over Surface area</b>
#2	Secondary	4.00'	<b>10.0' long x 5.0' breadth Broad-Crested Rectangular Weir</b> 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) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88
#3	Primary	2.05'	<b>12.0" Vert. Orifice/Grate</b> C= 0.600

**Discarded OutFlow** Max=0.27 cfs @ 12.10 hrs HW=4.63' (Free Discharge)  
 ↑1=Exfiltration (Exfiltration Controls 0.27 cfs)

**Primary OutFlow** Max=5.46 cfs @ 12.10 hrs HW=4.63' TW=0.00' (Dynamic Tailwater)  
 ↑3=Orifice/Grate (Orifice Controls 5.46 cfs @ 6.95 fps)

**Secondary OutFlow** Max=13.57 cfs @ 12.10 hrs HW=4.63' TW=0.00' (Dynamic Tailwater)  
 ↑2=Broad-Crested Rectangular Weir (Weir Controls 13.57 cfs @ 2.14 fps)