

2002-0105

114-B-1
Winslow / Surrenden Sts.
Parking Lot
USM

on Spreadsheet

20339401-PostDevelopment

Prepared by Woodard & Curran, Inc.

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Type III 24-hr Rainfall=3.00"

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Runoff Area = 5.590 ac Volume = 0.857 af Average Depth = 1.84"

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Type III 24-hr Rainfall=3.00"

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Subcatchment 1P: Surrenden-post

Runoff = 0.37 cfs @ 12.04 hrs, Volume= 0.027 af

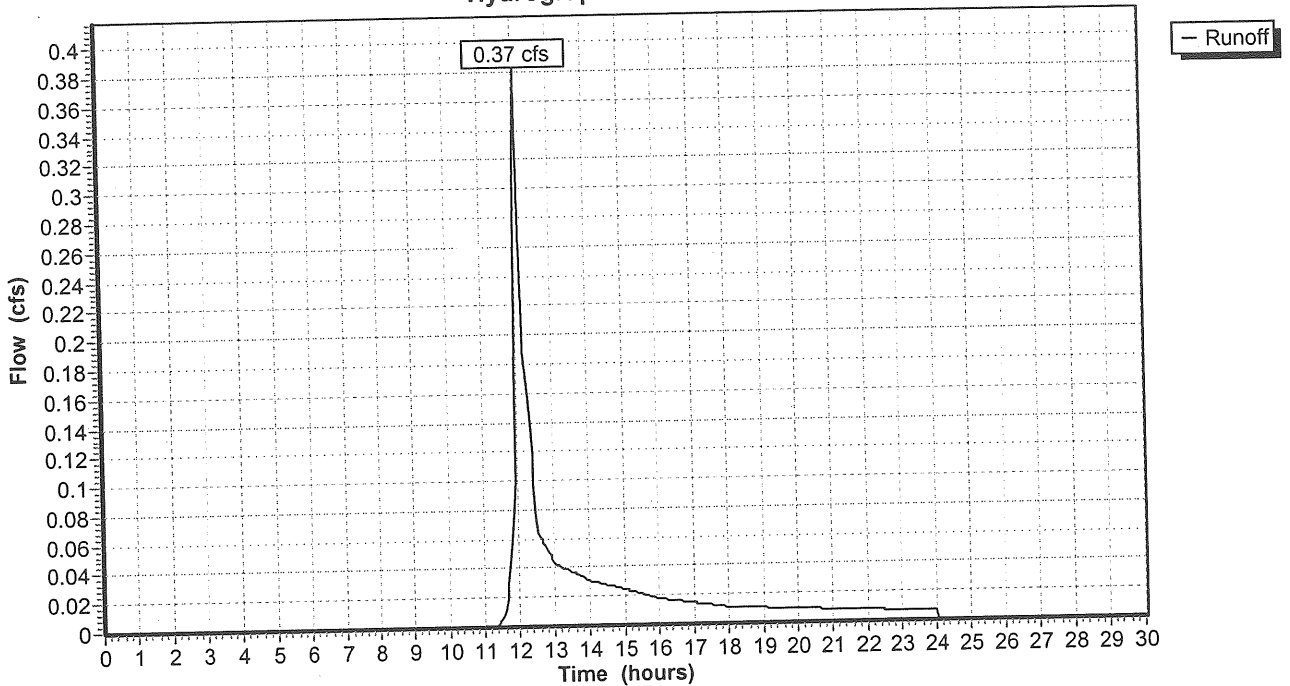
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
10,042	98	Paved roads w/curbs & sewers
4,924	39	>75% Grass cover, Good, HSG A
3,445	39	>75% Grass cover, Good, HSG A
18,411	71	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	82	0.0460	1.8		Sheet Flow, AB Smooth surfaces n= 0.011 P2= 3.00"
0.7	179	0.0450	4.3		Shallow Concentrated Flow, BC Paved Kv= 20.3 fps
1.5	261	Total			

Subcatchment 1P: Surrenden-post

Hydrograph Plot



Subcatchment 2P: CEC&PG West Area-post

Runoff = 0.36 cfs @ 12.04 hrs, Volume= 0.025 af

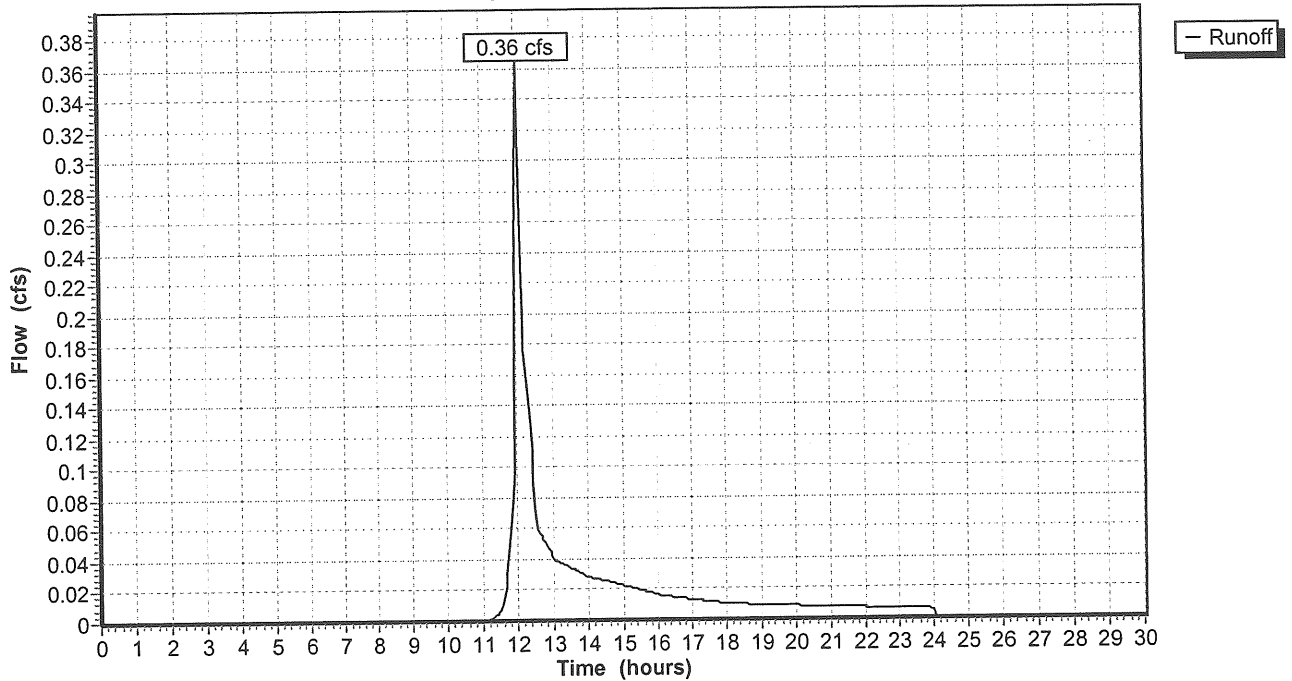
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
9,294	98	Paved parking & roofs
5,556	39	>75% Grass cover, Good, HSG A
1,338	32	Woods/grass comb., Good, HSG A
16,188	72	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	97	0.0460	1.8		Sheet Flow, AB Smooth surfaces n= 0.011 P2= 3.00"
0.9	239	0.0520	4.6		Shallow Concentrated Flow, BC Paved Kv= 20.3 fps
1.8	336	Total			

Subcatchment 2P: CEC&PG West Area-post

Hydrograph Plot



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Type III 24-hr Rainfall=3.00"

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Subcatchment 3P: Southwest Corner

Runoff = 0.00 cfs @ 15.54 hrs, Volume= 0.001 af

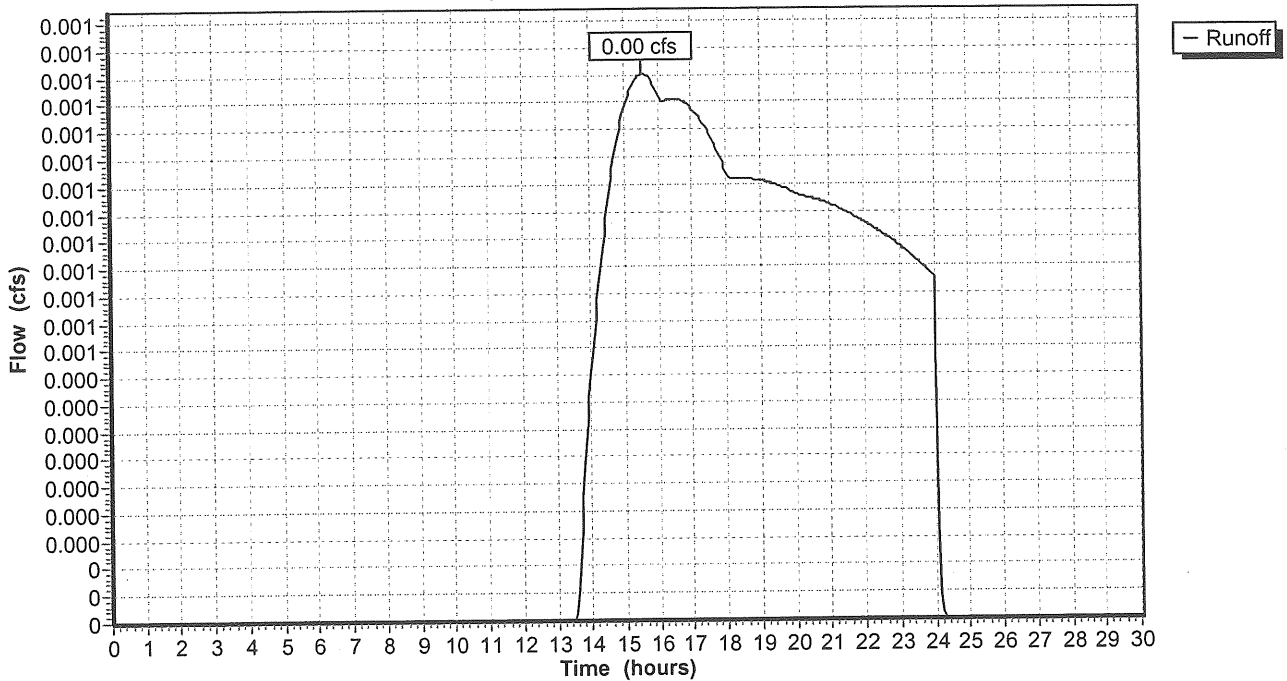
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
2,218	98	Paved parking & roofs
8,120	32	Woods/grass comb., Good, HSG A
10,338	46	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	70	0.0570	0.2		Sheet Flow, AB Grass: Short n= 0.150 P2= 3.00"
0.3	75	0.0600	3.9		Shallow Concentrated Flow, BC Unpaved Kv= 16.1 fps
5.3	145	Total			

Subcatchment 3P: Southwest Corner

Hydrograph Plot



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Type III 24-hr Rainfall=3.00"

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Subcatchment 4P: Plaza Area-post

Runoff = 0.86 cfs @ 12.03 hrs, Volume= 0.063 af

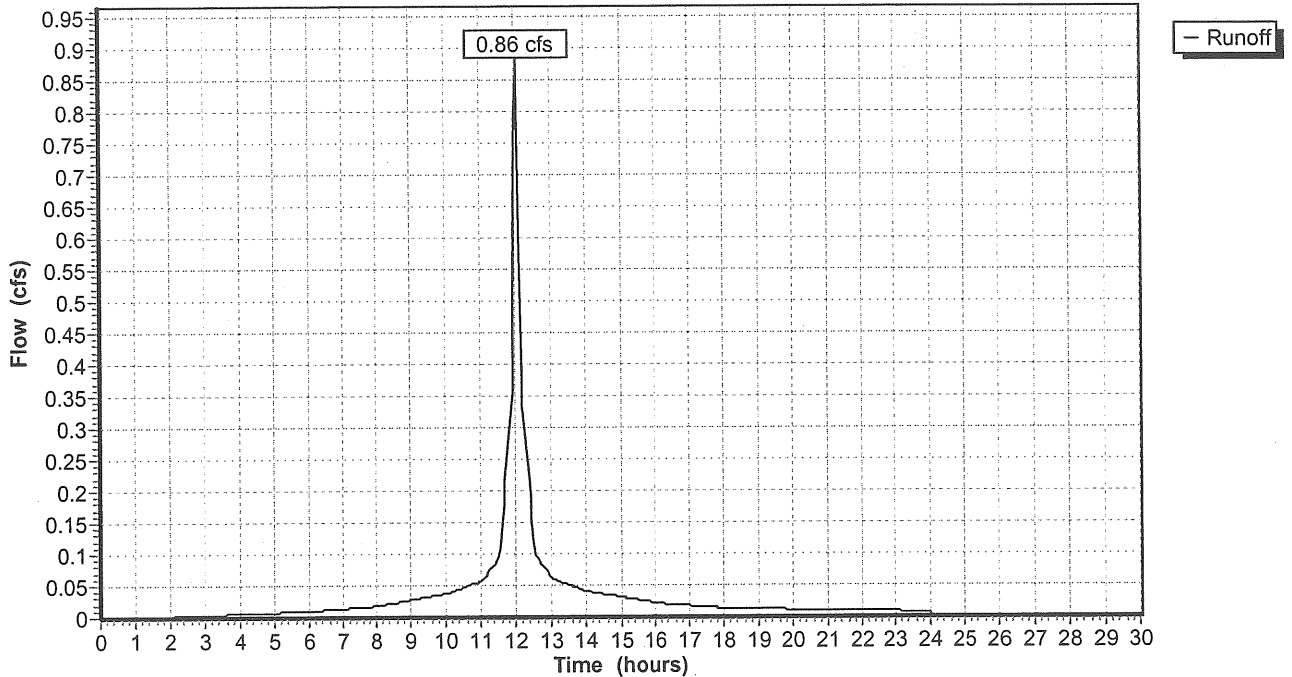
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
 Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
11,887	98	Paved areas

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	181	0.0460	2.1		Sheet Flow, AB Smooth surfaces n= 0.011 P2= 3.00"
0.6	150	0.0500	4.5		Shallow Concentrated Flow, BC Paved Kv= 20.3 fps
2.0	331	Total			

Subcatchment 4P: Plaza Area-post

Hydrograph Plot



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Type III 24-hr Rainfall=3.00"

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Subcatchment 5P: East Side-post

Runoff = 0.92 cfs @ 12.21 hrs, Volume= 0.089 af

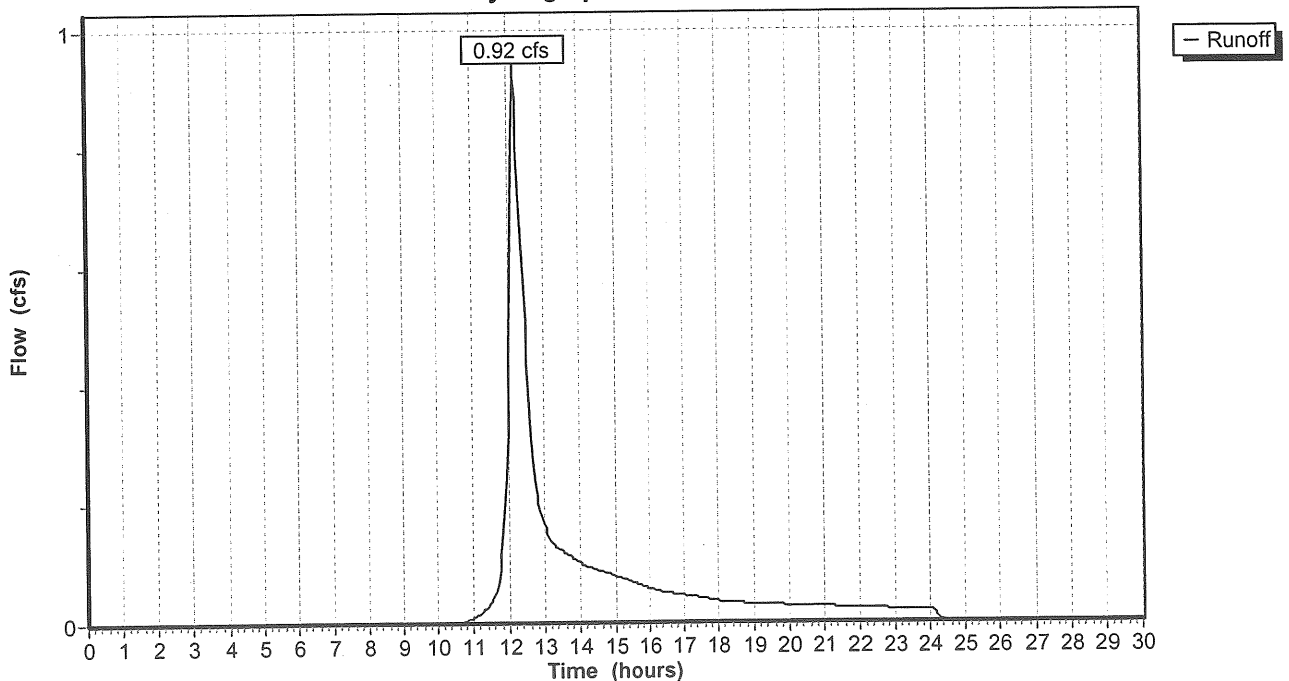
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
30,317	98	Paved parking & roofs
6,500	39	>75% Grass cover, Good, HSG A
9,230	32	Woods/grass comb., Good, HSG A
46,047	76	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.4	85	0.0700	0.3		Sheet Flow, AB Grass: Short n= 0.150 P2= 3.00"
6.2	50	0.1200	0.1		Sheet Flow, BC Woods: Light underbrush n= 0.400 P2= 3.00"
1.4	100	0.0550	1.2		Shallow Concentrated Flow, CD Woodland Kv= 5.0 fps
0.7	90	0.0170	2.1		Shallow Concentrated Flow, DE Unpaved Kv= 16.1 fps
0.5	90	0.0220	3.0		Shallow Concentrated Flow, EF Paved Kv= 20.3 fps
14.2	415	Total			

Subcatchment 5P: East Side-post

Hydrograph Plot



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Type III 24-hr Rainfall=3.00"

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Subcatchment 6P: Fire Lane

Runoff = 0.49 cfs @ 12.05 hrs, Volume= 0.033 af

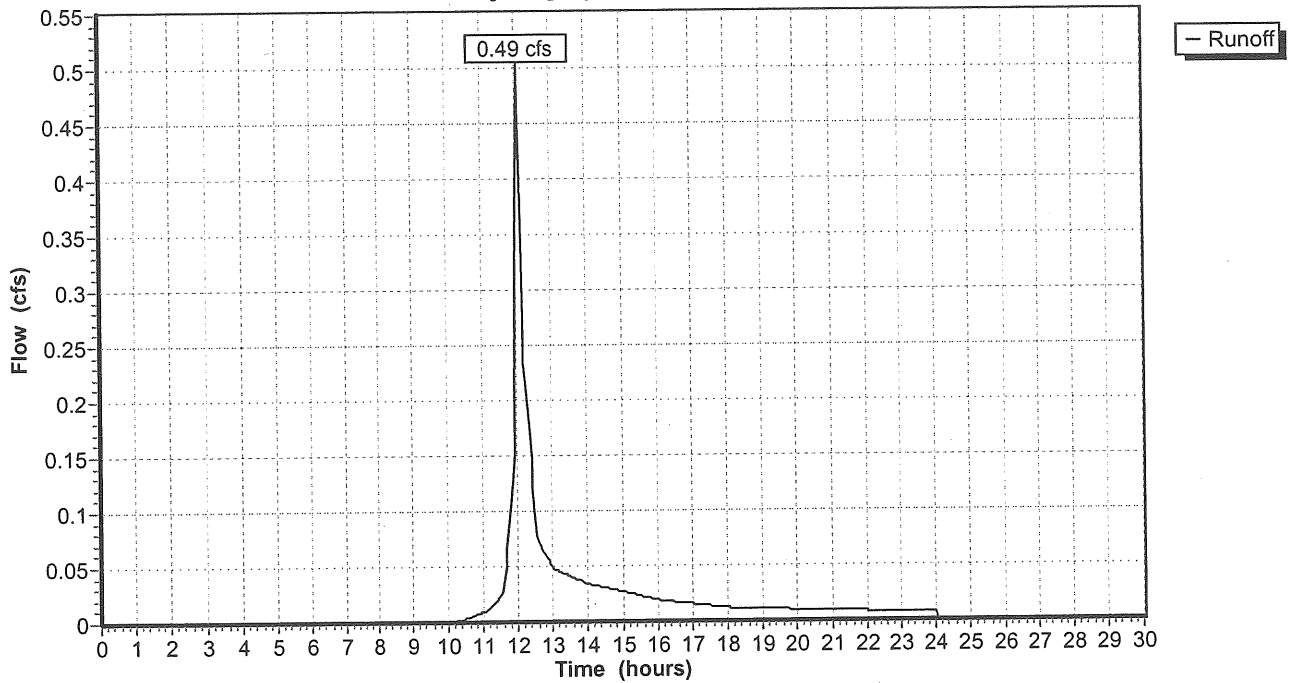
Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=3.00"

Area (sf)	CN	Description
10,000	98	Paved parking & roofs
5,208	39	>75% Grass cover, Good, HSG A
15,208	78	Weighted Average

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.3	120	0.0063	0.9		Sheet Flow, AB Smooth surfaces n= 0.011 P2= 3.00"
0.5	50	0.0100	1.6		Shallow Concentrated Flow, BC Unpaved Kv= 16.1 fps
2.8	170	Total			

Subcatchment 6P: Fire Lane

Hydrograph Plot



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Type III 24-hr Rainfall=5.50"

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Subcatchment 4P: Plaza Area-post

Runoff = 1.60 cfs @ 12.03 hrs, Volume= 0.120 af

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr Rainfall=5.50"

Area (sf)	CN	Description
11,887	98	Paved areas

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	181	0.0460	2.1		Sheet Flow, AB Smooth surfaces n= 0.011 P2= 3.00"
0.6	150	0.0500	4.5		Shallow Concentrated Flow, BC Paved Kv= 20.3 fps
2.0	331	Total			

Subcatchment 4P: Plaza Area-post

Hydrograph Plot

